

Followers' experiences and expectations of leadership behaviours in a safety-critical commercial environment: The case of the Air Traffic and Navigation Services Company

by

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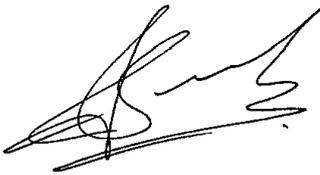
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JULY 2014

Declaration

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I, Christiaan Gerhardus Joubert hereby declare that FOLLOWER EXPERIENCES AND EXPECTATIONS OF LEADERSHIP BEHAVIOURS IN A SAFETY-CRITICAL COMMERCIAL ENVIRONMENT: THE CASE OF THE AIR TRAFFIC AND NAVIGATION SERVICES COMPANY is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references. I hereby declare that this thesis, submitted for the my Doctor of Business Leadership Degree at the University of South Africa, is my own independent work and has not been previously submitted by me at another university or faculty.



Signature

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26 June 2014
Date

Abstract

The Civil Air Navigation Services Organisation, the International Federation of Air Traffic Control Associations, the International Air Transport Association and the Civil Air Navigation Services Organisation agree that professionals in the Air Navigation Services Provider Sector require successful organisational leadership to facilitate and manage transformation within the highly regulated Air Navigation Services Provider Sector. Detailed organisational leadership requirements and associated leadership training and development needs are, however, not specified by the Civil Air Navigation Services Organisation. An opportunity therefore existed to investigate leadership traits and behaviours within a specific context. This research project is contextualised within a safety-conscious, highly regulated and technology-driven industry (the South African Aviation Industry), a safety-critical sector (Air Navigation Services) and specifically the Air Traffic and Navigation Services Company. It was found that little academic research has been done to address the role of followers in the leadership process and to determine what followers expect and require from their leaders. The research problem statement, in response to this research necessity, is: “How can follower experiences and expectations of leadership behaviours in a safety-critical commercial environment be collected, analysed, understood, structured and utilised to aid leadership development?”

An ethnographic research case study approach allowed the researcher to investigate the multifarious phenomena that constitute the current views (experiences and expectations) held by followers with regard to leadership behaviour qualities. A mixed methods approach was followed. Data collection was facilitated by means of individual interviews, focus group interviews, field notes and a structured questionnaire. Qualitative data were inductively analysed to identify the recurring patterns and common themes and quantitative data were deductively analysed to assess the nature of existing conditions and relevance. Data and method triangulation was implemented to determine whether multiple sources of data agreed, and to obtain better, cross-checked insights.

Findings from this research study provided academic, industry, process and methodology insights into views held by followers regarding leadership and followership constructs. Definitions and perspectives held and reported by followers regarding leaders and leadership, characteristics of preferred and undesired leadership styles, relational and emotional bonds between followers and their leaders acknowledged the presence, value and influence of follower mental models. In this case followers contextualised leadership roles and responsibilities and suggested a transformational leadership style as a desired state.

Findings also emphasised a need to appreciate the importance of the social exchange and social contingency theories of leadership in order to create a better understanding of leadership by emphasising the importance of context when studying leaders and leadership from a follower perspective. Obtained follower insights resulted in a structured leadership training and development needs analysis process framed within the specific context.

Future research efforts in this regard may be aimed at determining the necessity to educate followers to critically appreciate and evaluate leadership performance and creating a better understanding of how followers' mental models internally represent complex, dynamic systems and how these representations change over time.

Keywords: Air Navigation Service Provider, Air Traffic Management, follower experiences, follower expectations, follower mental model, leader traits and behaviours, leadership training and development needs analysis, safety-critical commercial environment

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List of Abbreviations

AFI	Africa and Indian Ocean Region
AIMO	Aeronautical Information Management Officer
ANOVA	Analysis of variance
ANSP	Air Navigation Service Provider/s
Asymp. Sig.	Significance level
ATCO	Air Traffic Control Officer
ATM	Air Traffic Management
ATNS	Air Traffic and Navigation Service Company
ATSO	Air Traffic Service Officer
CANSO	Civil Air Navigation Services Organisation
df	Degrees of freedom
EDLBI	Effective Developmental Leader Behaviour Instrument
EDLTI	Effective Developmental Leader Trait Instrument
F	F statistic for ratio of variances
FAA	The Federal Aviation Administration
IATA	International Air Transport Association
ICAO	International Civil Aviation Organisation
N	Size of the amount of responses considered
OLA	Organisational Leadership Assessment
p	Statistical significance
QUAL	Qualitative approach
quan	Quantitative approach
SACAA	South African Civil Aviation Authority
SHL	An international company that produces psychometric assessment tests for employers.
Sig.	Significance
Std.	Standard

CHAPTER 1: BACKGROUND AND ORIENTATION

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CHAPTER 1: BACKGROUND AND ORIENTATION

1.1. Introduction

1.1.1. Background and context

Safety is one of the vital issues facing Air Traffic Management (ATM). Air traffic management seeks to reduce incidents that compromise safety while accommodating an ever-increasing number of flights and improvements in airspace efficiency (CANSO, 2011). The next generation of professionals in the Air Navigation Services Sector will be facing a complex landscape, characterised by radically advanced technology and procedures in some regions and reliance on more traditional methods in others (CANSO, 2010). Air Navigation Service Providers (including the South African Air Traffic and Navigation Service Company) therefore focus on human aspects in order to better prepare the worker for the conditions that he/she will encounter in the job environment by teaching and practising the necessary physical or mental skills, while recognising individual differences across humans in every physical and mental dimension (CANSO, 2010). According to the Civil Air Navigation Services Organisation (of which the Air Traffic and Navigation Service Company is a member) this focus requires optimisation of performance by precise profiles of characteristics for the respective Air Traffic Management tasks and responsibilities (CANSO, 2010). Furthermore there is a need to ensure the establishment and use of a communicative and participative process, including an interactive approach, between management and staff members (CANSO, 2010).

Results of an international survey conducted by the Civil Air Navigation Services Organisation (CANSO, 2010) of Air Navigation Service Providers (ANSP) identified specific safety and culture barriers. It was reported that information not shared with management, due to lack of trust serves as a barrier. The existence of a punitive culture signifies another barrier as do leaders that exhibit arrogant, autocratic or dictatorial management styles. Employees that do not report hazards, safety issues or operational incidents for fear of reprisal from their peers constitute a barrier. Finally information that is not easily, readily or openly shared across departments is considered a barrier.

The Civil Air Navigation Services Organisation and International Federation of Air Traffic Control Associations agree that future aviation professionals will have to work together in order to ensure harmonisation of air traffic management systems. Defining requirements and opportunities, recognising constraints, obtaining knowledge of each other's roles,

recognising technological/institutional developments as well as environmental and economic facts will be required (CANSO, 2010). The human contribution and associated considerations will be crucial to manage the future aviation business in a safe and efficient way, since the human component is the most flexible and adaptive component in the aviation system (CANSO, 2010). It is agreed that the key drivers in the future will be Safety and Performance-based Air Traffic Management (CANSO, 2010).

It may be acknowledged that successful organisational leadership cannot be claimed without effective followership. Definitions of “followership” propose that followers perform in a dynamic manner and are committed to both organisation and altruistic goals. Furthermore followership is influenced by leadership behaviours. Definitions of “leadership behaviours” suggest that leadership behaviours are those inspirational and emotional dimensions that inspire an accepted shared vision. A consequential relationship between leaders and followers subsist. Desired behaviours of followers, leaders and the organisation are integrated, focused and mutually dependent (Daft, 2005).

It is perceived that leadership behaviours fulfil an important role within a highly regulated industry, such as the Aviation Industry. Within a highly regulated environment it is furthermore assumed that leadership behaviours should preferably promote follower actions that will ensure compliance with strict rules. Thus leadership behaviours may actually support and encourage desired rule-based conduct. A contradiction in perspective may exist, whereby current leadership behaviours may not support such strict compliance expectations and actions.

Current knowledge of the leadership-followership subject from an academic perspective suggests that research in leadership studies tend to focus on the leader as the focal point and prime element of the leader-follower relationship (Mayo & Pastor, 2007, Hollander, 1992a & 1992b, Kellerman, 2004, Lord & Brown, 2004, Yukl, 2005 and Shamir, 2007). This focus has led to the impression that leaders are considered to be more important than followers (Riggio, Chaleff, & Lipman-Blumen, 2008). In this regard a misapprehension may be present and an argument for the important role that followers play in the leader-follower relationship and organisational effectiveness may be warranted (Kelley, 1992, Chaleff, 1995, Boccialetti, 1995 and Kellerman, 2008).

Allen and Cherrey (2000) noted that society has shifted to a knowledge-based, networked world. Rapid advancements in technology, increasing globalisation, complexity and interconnectedness reveal the new post-industrial paradigm of a networked world and call

for “new ways of leading, relating, learning and influencing change” (Allen & Cherrey, 2000). An industry specific example is the Civil Air Navigation Service Organisation (CANSO). The Civil Air Navigation Services Organisation is recognised as the global association of Air Navigation Service Providers and provides a global platform for the exchange and promotion of best practices in Air Traffic Management with a clear aim to improve air navigation service provision worldwide. The Civil Air Navigation Services Organisation’s current global vision formulated in 2007 is intended for everyone in Air Traffic Management (CANSO, 2011). The Air Traffic and Navigation Service Company (ATNS) consequently supports this vision. This global vision details intended and desired transition and transformation objectives; including safety management, regulatory measures, civil-military collaboration, business approaches, customer-focus, people management initiatives, air traffic management optimisation, environmental concerns and security issues (CANSO, 2011). Of significance to this study may be to note that organisational leadership actions required to facilitate and manage these intended changes in pursuit of the global vision are not specified in the Civil Air Navigation Services Organisation documentation (CANSO, 2010 and CANSO, 2011).

This research study is aimed at discovering leadership behaviours reported by followers as follower experiences and expectations within the Air Traffic and Navigation Services Company. Current knowledge of the leadership-followership subject from an Air Traffic and Navigation Services perspective is limited to results and outcomes of a recent organisational survey. These outcomes are presented in the literature review (Chapter 2).

The potential value of this research may be comprehended in terms of context and pragmatic outcomes. This research project is contextualised within a safety-conscious, highly regulated and technology-driven industry (the South African Aviation Industry), a safety-critical sector (Air Navigation Services) and specifically the Air Traffic and Navigation Services Company.

Enabling and impeding leadership behaviours found within the Air Traffic and Navigation Services Company, an Air Navigation Services Provider service provider functioning within the Aviation Industry, was not known to the researcher. It was perceived that current leader traits and behaviours could be investigated from amongst others an organisational perspective, a leadership perspective and/or a follower perspective. It was deemed that a deeper understanding of existing leader traits and behaviours could possibly be found in pronounced follower experiences, views and reflections. These follower views would identify and describe leadership behaviours that persuade or dissuade followership. A meaningful

follower-inspired research study was thus justified in order to appreciate apparent leadership behaviours.

An outcome of this proposed research project, as guided by its purpose, was to attain an appreciation of leadership behaviour qualities within the Air Traffic and Navigation Services Company by identifying individual (follower) current realities and emergent issues. The purpose of an inquiry of this nature was considered to be exploratory (Robson, 2002). An aim of this research project was thus to create an opportunity for followers to communicate an appreciation of leadership behaviours encountered by them in a specific organisational work setting.

1.1.2. Clarification of terms and concepts

Air Navigation Service Provider (ANSP) – Air Navigation Service Providers are described in terms of Air Traffic Management service providers that comprise all those organisations and personnel (including controllers, engineers and technicians) that are engaged in the provision of Air Traffic Management services to airspace users. Air Traffic Management service provider responsibilities include communication, navigation, surveillance and air traffic management facility planning, investment and implementation; procedure development; training; and ongoing system operation and maintenance of seamless communication, navigation, surveillance and air traffic management services (ICAO, 2005).

Air Traffic Management (ATM) - The dynamic, integrated management of air traffic and airspace (including air traffic services, airspace management and air traffic flow management) – safely, economically and efficiently – through the provision of facilities and seamless services in collaboration with all parties and involving airborne and ground-based functions (ICAO, 2005 and SACAA, 2009). An Air Traffic Management System provides air traffic management through the collaborative integration of humans, information, technology, facilities and services, supported by air and ground- and/or space-based communications, navigation and surveillance (ICAO, 2005).

Air Traffic and Navigation Services Company (ATNS) – In terms of the Air Traffic and Navigation Services Company Act Number 45 of 1993 (South Africa, 1993), the Company has as its objectives to acquire, establish, develop, provide, maintain, manage, control and operate air navigation infrastructures, air traffic services and air navigation services (ATNS Company Act Number 45 of 1993). The Air Traffic and Navigation Services (ATNS) Company is a state-owned, limited liability company regulated in terms of Act 45 of 1993

(South Africa, 1993). This legislation established ATNS as a provider of air traffic control and related services on a commercial “user pay” basis. The Air Traffic and Navigation Services Company’s business strategy is to focus on the air traffic and navigation services needs of the Air Traffic Management Community, primarily in South Africa, as well as the rest of Africa and Indian Ocean Region and ultimately in selected global markets (Air Traffic and Navigation Services Company, 2010).

Air Traffic and Navigation Services Company followers – This research project analyses leadership behaviours exhibited by existing Air Traffic and Navigation Services Company managers as reported by followers. Follower-boundaries proposed in this regard suggested that followers exclude Air Traffic and Navigation Services Company management. Followers monitor their own and others’ feelings and emotions, to discriminate among them and then use this information to guide their thinking and actions (Salovey & Mayer, 1990). Followers were identified as all temporary, contract and permanent employees that were not appointed in formal organisational management positions. These positions are operations positions and thus excluded support personnel. The Air Traffic and Navigation Services Company organisation structure and follower job descriptions served as references in this regard. According to the job descriptions and organisational structure it was found that Air Traffic Control Officers, Air Traffic Service Officers and Aeronautical Information Management Officers were representative of the follower description and population.

Air Traffic and Navigation Services Company leadership – Leadership styles, leader characteristics and behaviours deserve attention when studying leadership occurrences and trends. Leadership proposed in this context includes all organisational management levels. Leaders are identified as all temporary, contract and permanent employees that are appointed in formal organisational management positions. A leader, for the purpose of this study, was someone appointed as responsible for the performance of a group of employees/followers who reported directly to him/her and for the achievement of organisational goals through the group’s performance. Defining the competencies required for any particular job role allows managers and those responsible for their development, to grasp what is required to reach improved levels of excellence and performance by providing a common framework which articulates the skills, knowledge and attitudes relevant to successful business practice (Wilson, Lensson & Hind, 2006: 4). The Air Traffic and Navigation Services Company organisation structure and manager job descriptions served as references in this regard. It was expected that followers may elect to comment on leadership behaviour qualities of operations managers (referred to as Air Traffic Management (ATM) Managers), however, reports relating to leadership behaviour qualities

of managers performing support functions were not disregarded. World class organisations use competencies to define and drive high performance (Wilson, Lensson & Hind, 2006: 3 & 4). Managers and those responsible for management development and learning, accept that competencies comprise a mixture of three elements. These individual elements are the skills and abilities practised in everyday actions, knowledge, experience and understanding that inform decisions and personal qualities, values or attitudes espoused. These three elements complement one another and it is the combination of each which gives rise to key behaviours demonstrated by leaders and observed by followers. This research project studies leadership behaviours exhibited by existing Air Traffic and Navigation Services Company managers employed as Air Traffic Management (ATM) Managers. Those management levels considered synonymous with leadership functions and roles included Officers-in-charge, Operations Pool Managers, Operations Line Managers, Operations Centre Managers, Senior Operations Managers and Executive Managers.

Aviation Industry – Aviation provides a powerful impetus for global economic development. A healthy and growing national air transport system provides access to global markets, enables movement of goods and people and allows social and cultural exchange amongst nations. Moreover the aviation industry has a meaningful contribution to the global economy (SACAA, 2011: 7). The air transport industry plays a major role in world economic activity and remains one of the fastest growing sectors of the world economy (ICAO, 2005). Because of the continued growth in civil aviation, in many places, demand often exceeds the available capacity of the air navigation system to accommodate air traffic, resulting in significant negative consequences not only to the aviation industry, but also to general economic health (ICAO, 2005).

Civil Air Navigation Services Organisation (CANSO) – The Civil Air Navigation Services Organisation unites the world's air navigation service providers and their industry partners. CANSO is the global voice of air traffic management (ATM). The organisation serves as a platform for discussion and debate on ATM issues. CANSO members seek to exercise leadership in shaping the future of the Air Navigation Services Industry (CANSO, 2011). The Air Traffic and Navigation Service Company is a member of the Civil Air Navigation Services Organisation.

Follower expectations – These are strong beliefs held by followers that something will happen or be the case in the future. These considerations of what is likely to happen or can be anticipated for the future are based on critical assumptions. Follower expectations may favour a tendency to search for evidence that confirms expectations and previously existing

beliefs. This tendency may help to simplify social experiences, but it can also distort worldviews by causing followers to accept inconsistent information. Expected leadership behaviours and qualities influence the mental models used and held by followers to critically evaluate leadership. Follower expectations have to be confirmed by follower experiences in order to avoid stereotyping.

Follower experiences – These are the result of practical contact with and observation of facts or events that may be interpreted by followers as leadership behaviours. Followers notice what their leaders say and do. A follower's experiences can refer to the nature of events, someone, or something that he/she has undergone. The significance of follower experiences as applicable to this study may be explained and understood in terms of accepting that one's past experiences influence one's current and future views. These follower experiences involve personally significant or meaningful encounters. Reflective thought and opportunities for followers to discuss their experiences were considered valuable for this study. In terms of expressed experiences it is accepted that the whole person will be involved, meaning not just their intellect but also their senses, their feelings, their past experiences and their personalities. Experienced leadership behaviours and qualities influence the mental models used and held by followers to critically evaluate leadership. Mental models are the deeply ingrained assumptions that influence our views of and actions in the world (Marquardt, 2002: 26).

Followership – Followership can be defined as the capacity or willingness to follow a leader. Clements and Washbush (1999), Densten and Gray (2001) and Collinson (2006) acknowledge that little has been done to address the role of followers in the leadership process. Clements and Washbush (1999) continue by suggesting that failure to acknowledge the role of followers and to examine the "dark side" of leader-follower dynamics can distort efforts to understand relationships and processes in an authentic way. In this study the attributions of leaders that elicit a response, affirmative or otherwise, are explored and described by followers. Followership schemas develop through socialisation and past experiences with leaders and other followers, stored in memory and activated when followers interact with leaders or other followers (Hogg, 2001). Followership, at its core, involves deferring to the directives, decisions or desires of another, thereby affording higher status and legitimacy in determining the course of events (Hogg, 2001). Bjugstad, Thach, Thompson and Morris (2006: 304) agree that followership may be defined as the ability to effectively follow the directives and support the efforts of a leader to maximise a structured organisation. In terms of followership, the type of action elected and implemented by a

follower based on follower experiences and expectations of leadership behaviours and followership was accentuated.

Leader behaviours – The term “leader behaviours” refers to the activities engaged in by the leader, including his or her characteristic approach, that relate to his or her effectiveness (Wilson, 2004: 9).

Leader traits – “Leader traits” refers to personality factors that are observable both within and outside the context of work (Wilson, 2004: 8). These traits are the inner qualities or abilities that enable a leader to function effectively in fostering growth and organisational effectiveness (Wilson, 2004: 8).

Leadership – From a definition standpoint leadership has been described in many different ways. Northouse (2007) suggests that several different components can be identified as central to the phenomenon of leadership. Accordingly it is acknowledged by Northouse (2007) that leadership is a process. It involves influence, it occurs within a group context and it involves goal attainment. Within the ATNS case it is contended that operational leaders organise followers and resources toward the effective and efficient pursuit of organisation-specific objectives. In terms of this study leadership is viewed as a complex set of behaviours set in a specific context that guides conduct. Leadership as a group or organisational phenomenon is observed as a set of role behaviours performed by an individual. A leader’s actions can create either alienated or committed followers (Banutu-Gomez, 2004: 143). Leadership is usually contrasted with management, the latter being concerned with routines and the predictable, leadership being concerned with its opposite – the novel and the unpredictable. This research project exemplifies an approach to leader development that goes beyond a specification of techniques and strategies of developmental interventions to provide a conceptual basis for understanding leader training and development needs.

Leadership behaviours – Leadership behaviours are the activities engaged in by the leader, including his or her characteristic approach, that relate to his or her effectiveness. Leadership takes form and is identified when followers perceive the leader's behaviour in a certain way and accept or reject the leader's attempt to influence them. This research study relied upon follower reports that described leadership behaviours as a collective phenomenon. It was postulated that leadership qualities guide leadership behaviour. Due to this interrelatedness the term “leader behaviour qualities” is also used in this research study to describe leadership as a construct.

Leadership development – Development is aimed at employees serving in a leadership capacity or preparing for leadership posts within the organisation (Van Dyk, Nel, Loedolff & Haasbroek, 1997). It can be seen as a process by which managers obtain the necessary experience, skills and attitudes to become leaders in their organisation (Van Dyk, Nel, Loedolff & Haasbroek, 1997). According to Day (2000: 581) leader development is primarily based on enhancing human capital. Leadership development emphasises the creation of social capital in organisations (Day, 2000: 581). Leadership development is also considered as a process of expanding an organisation's capacity to generate leadership potential within the organisation to achieve organisational goals (Ardichvili & Manderscheid, 2008: 620). Leadership development involves interaction between individual leaders and the social-cultural environment in which they function (Ardichvili & Manderscheid, 2008: 621). Individual leadership development is important and research should seek to explore the leadership skills and knowledge required for individual and organisational change and learning, for aligning systems and structures as well as shifting corporate cultures and values (Wilson, Lensson & Hind, 2006: 5). Leadership requires that individual development be integrated and understood in the context of others, social systems and organisational strategies, missions and goals (Olivares, Peterson & Hess, 2007: 79).

Leadership qualities – In understanding responsible business behaviour, the starting point remains the leadership qualities that are in the domain of personal attitudes and beliefs. These are the deep-seated personal qualities that change and develop slowly over time (Wilson, Lensson & Hind, 2006: 2). It is postulated that leadership qualities guide leadership behaviour. Due to this interrelatedness the term leadership behaviour qualities is used in this research study to describe leadership as a construct.

Operations and Operational – Operations means "the division of an organisation that carries out the planning and operating functions that direct core business activities". Operations managers and employees/personnel refer to those members performing planning and operating functions that direct core business activities. Operational refers "to a process or series of actions for achieving a result". Both terms are used to identify the leader/management level discussed, operational activities and the leader role. Both mentioned terms are thus used interchangeably and the meaning in each case should be considered given the context presented.

Safety-critical commercial environment – Safety-critical systems are those systems whose failure could result in loss of life, significant property damage, or damage to the environment.

There are many well-known examples in application areas such as medical devices, aircraft flight control, weapons and nuclear systems (Nelson, 2003). The concern, both intuitively and formally, is thus with the consequences of failure. In situations of extreme risk, extraordinary measures are usually taken to minimise that risk. The attainment of a safe system is the highest priority in air traffic management and a comprehensive process for safety management is implemented that enables the Air Navigation Services community to achieve efficient and effective outcomes (ICAO, 2005). A system safety approach uses systems theory, systems engineering and management tools to manage risk formally, in an integrated manner, across all organisational levels, all disciplines and all system life-cycle phases (ICAO, 2005).

1.1.3. Research need

According to Jaska, Hogan and Ziegler (2011: 8) aviation organisations will be faced with a period of extraordinary change, where both the quintessence and pace of change will be different from what has been experienced before. As these organisations within which leaders have to operate, change, so the nature of leadership and the work of the leader must change as well. The rapid growth of aviation in Asia, Africa and the Middle East – each with its distinctive culture – means these regions clearly need dedicated management training programs for their aviation professionals, not least to bridge a potential skills gap.

Career and personal development is a major challenge for Air Navigation Service Providers (Eurocontrol, 2004). In terms of Air Traffic Management the manager's role provides a critical link between the employee and the Air Navigation Service Provider (Eurocontrol, 2004). Civil Air Navigation Services Organisation members seek to exercise leadership in shaping the future of the Air Navigation Services Industry (CANSO, 2011). The Civil Air Navigation Services Organisation's global vision on the future of air navigation services supports the creation of a harmonised Air Traffic Management service, much in line with the International Civil Aviation Organisation's (ICAO) global air traffic management concept (CANSO, 2011). Of importance to all Air Navigation Service Providers is that the Civil Air Navigation Services Organisation's global vision adds new thinking to the institutional and operational changes that must be accommodated by all stakeholders (CANSO, 2011). Management's commitment may be evident in terms of their unequivocal acceptance of ownership and responsibility for the success of change initiatives (Gill, 2003). A displayed eagerness by organisational leaders to be involved in change, willingness to invest in resources to allow for changes to take place and awareness of the impact of their own behaviours serve as examples of action and commitment associated with successful change

management (Gill, 2003). Successful institutional and operational changes rely on effective and efficient leadership exhibited by institutional management. In recent years many criticisms and concerns have been expressed over the nature of most leadership research (Hamlin & Sawyer, 2007: 3). Hamlin and Sawyer (2007: 3) state that, although over the past fifty years much research has been conducted on the nature of management work and what managers do, few studies have attempted to differentiate between what Hales (1986) refers to as good or bad management, or have been focused on the issue of managerial or leadership effectiveness (Barker, 2000, Cammock, Nilakant & Dakin, 1995, Martinko & Gardner, 1990 and Willcocks, 1997). Consequently there is still little agreement in the literature about what constitutes and is meant by managerial and leadership effectiveness (Hamlin & Sawyer, 2007: 3). Current knowledge regarding leadership efficiency and effectiveness within the Air Traffic Management Sector has also received limited attention.

Researchers and others interested in the field of leadership have written about the characteristics and styles of leadership. However few have written about what followers want from their leaders (Torres, 2009: 11 and Kouzes & Posner, 1993). Moreover studies of leadership have been conducted and focused in developed countries; but not much has been done in the developing world (Torres, 2009: 14). When researchers make the paradigm shift and examine leadership from the perspective of the follower they have the opportunity to see an entirely different side of leadership (Kellerman, 2008). Followers take centre stage in this study as it is their perceptions of leadership that guide further and future leadership training and development insights.

Liang, Chan, Lin and Huang (2011: 5920) assert that mechanisms and processes by which leaders exert their influence on their followers' motivation and performance have not been adequately addressed in previous literature (Bono & Judge, 2003, Lord, Brown, & Freiberg, 1999 and Yukl, 1998). An electronic search conducted on 03 May 2012 of leadership behaviours in Air Traffic Management (searched as: leadership-behaviours-in-Air-Traffic-Management) produced limited results. Likewise a further electronic search of leadership behaviours in Air Traffic Control (searched as: leadership-behaviours-in-Air-Traffic-Control) also produced limited results. This is in contrast to the well-established body of knowledge that focuses on leadership traits, behaviours and follower behaviours in other private and public sector organisations. An electronic search conducted on 03 May 2012 of leadership training and development (searched as leadership-training-in-air-traffic-management and leadership-development-in-air-traffic-management and leadership-in-air-traffic-management and leadership-training-in-air-traffic-control and leadership-development-in-air-traffic-control) did not match any articles published between 2008 and 2012. As relatively little research

has evidently been done in this sector regarding leadership development, the findings of this research study may make a valuable contribution to the body of knowledge. Research results may therefore contribute to the body of knowledge in terms of leadership behaviours, qualities and styles that are interpreted and understood by associated follower epistemological expertise reports.

According to Kokinov (1999), there are at least three mental processes that provide contextual elements in a situation, being perception, reasoning and memory. Perception-induced contextual elements may be available through perception (observation) of the environment (Kokinov, 1999). This information may also activate previously used representations from the memory (Kokinov, 1999). Memory-induced contextual elements are recalled from memory and are previously used representations which are reactivated (Kokinov, 1999). Reasoning induced contextual representations are derived from the reasoning process (Kokinov, 1999). Accordingly, follower epistemological expertise reports can be contextualised and understood within the South African Air Traffic Management/Control sector and specifically within the Air Traffic and Navigation Services Company.

The South African Civil Aviation Authority (SACAA, 2011) asserts that the African aviation industry has achieved good growth rates in the past decade (2000 to 2010). Air travel is essential for the African continent to drive economic growth, job creation and tourism (SACAA, 2011). However to exploit aviation's full potential in the region, all role players must ensure that it is secure, safe and sustainable (SACAA, 2011: 8). The African continent suffers from poor safety ratings. Africa had an accident rating of 7,41 in 2010, demonstrating a 25% improvement compared to 2009 but still more than 12 times the world average (SACAA, 2011: 9). In 2004 South Africa's Air Traffic Navigation Service signed an agreement to secure the skies of thirteen African states. The agreement will establish a network between Cameroon, Egypt, Eritrea, Ethiopia, Kenya, Libya, Saudi Arabia, Seychelles, Somalia, Sudan, Tanzania, Uganda and Yemen. This agreement should eradicate some of the uncontrolled areas of airspace in Africa and increase safety across the continent. The International Air Transport Association (IATA) asserts that South Africa is a regional leader in aviation safety (IATA, 2011). The Air Traffic and Navigation Services Company has been identified as a key partner in fostering the training of critical skills within the aviation industry in Africa (IATA, 2011). The Air Traffic and Navigation Services Company is a leading exponent of safer skies (ATNS, 2012). This is evident in its mission statement, which is to provide safe, expeditious and efficient Air Traffic Management solutions and associated services (ATNS, 2012). It may be conceded that the Air Traffic and

Navigation Services Company is in a position to serve as a best practice example within the region and African continent. No specific previous studies conducted within the region and continent were found to contradict this view. This research study conducted within the Air Traffic and Navigation Services Company provides a pragmatic perspective in terms of understanding follower experiences and expectations of leadership behaviours and may possibly benefit similar safety-critical commercial environments.

The Air Traffic and Navigation Services Company's business concept allows for amongst others five specific outcomes that encouraged this research project. The first significant outcome suggests that the Air Traffic and Navigation Services Company should develop a thorough understanding of the global Air Traffic Management Community with emphasis on product, service, technology and customer needs (Air Traffic and Navigation Services Company, 2010). The second noteworthy outcome encourages the Air Traffic and Navigation Services Company to respond to the needs of selected markets with innovative and relevant air navigation service solutions (Air Traffic and Navigation Services Company, 2010). The third important outcome requires from the Air Traffic and Navigation Services Company to source, develop, market, distribute and support a complete range of air traffic and navigation services solutions (Air Traffic and Navigation Services Company, 2010). The fourth key outcome that the Air Traffic and Navigation Services Company has set is to stabilise and enhance air navigation service provision in South Africa in order to create a platform from which to leverage strategic partnerships (Air Traffic and Navigation Services Company, 2010). The fifth essential Air Traffic and Navigation Services Company outcome is to attract, develop, retain and appropriately reward a diverse and motivated team (Air Traffic and Navigation Services Company, 2010).

A summary of business outcomes requires management processes that include, but are not limited to market management, training management, financial management, human capital management, technology management, safety management, operations management and knowledge management interventions. These interventions may all serve as potential foreshadowed research problems that are significant in developing theory, knowledge or practice. This research project did not address these mentioned management interventions.

This research project addressed leadership development and leadership development theory. Leadership is examined and understood through the lens of follower expertise and findings can be related to knowledge about leaders and leadership development. To understand the performance of leaders, it is essential to understand situations in

which they lead (Wilson, 2004: 15). Such situational understanding and associated leader traits and behaviours can be presented by followers within an organisational context. Follower perception of the leader's behaviour is worth examining because followers have certain knowledge and expectations of a leader (Vondey, 2008: 56). Accordingly leadership is understood to be domain-specific (Kotter, 1982 & 1990a). Kotter (1982 & 1990a) and Gabarro (1987) make the case that knowledge of one's industry and organisation are keys in the successful performance of leaders.

From an employer perspective the imperative to enhance leadership capability arises from the changing nature of work, especially the need to cope with increased competition and demanding increased intellectual flexibility and alertness as well as relevant skills, abilities, knowledge and self-awareness (Bolden, 2007: 2). Realisation of the Air Traffic and Navigation Services Company's business outcomes also commands successful leadership and leadership development. Leaders can and do achieve remarkable things, but within their domains (McCall & Hollenbeck, 2007). Talent management activities should be directed to producing, both through selection and development, the leaders that a specific organisation needs to meet its current and future needs (McCall & Hollenbeck, 2007: 6). Leadership may be conceptualised as a social, mutual influence process that is embodied within a system of leader-follower relationships and patterns of influence that go beyond any single individual and evolve over time (Bedeian & Hunt, 2006, Collinson, 2005a & 2005b, Gronn, 2002 and Uhl-Bien, Marion, & McKelvey, 2007). Successful leadership cannot be affirmed if the leadership-followership relationships are not supportive of business and strategic imperatives. According to Day (2001) leadership development takes a more relational view of leadership as a process involving everyone within the organisation.

The researcher accepted that opportunities exist to study leadership behaviours from leadership, organisational and/or follower perspectives. This research project explores leadership-followership relationships with specific reference to leadership behaviour insights obtained from followers. A need has been revealed to understand how and what followers pay attention to when reflecting on leadership behaviours and why. Such understanding may be beneficial to leadership development because it provides a leadership development needs analysis. Central to such a needs analysis is a shift towards more flexible, experiential and informal approaches, tailored to the requirements of individuals and organisations (Bolden, 2007: 2 and Mole, 2000). Such a shift requires the reversal of many traditional educational priorities: from theory to practice, parts to systems, states and roles to processes, knowledge to learning, individual knowledge to partnerships and detached

analysis to reflexive understanding (Bolden, 2007: 2 and Mole, 2000). An empirical investigation that relied upon data collection and analysis was subsequently proposed.

1.1.4. Research problem

Research problems are questions that indicate gaps in the scope or the certainty of prevailing knowledge. Research problems can point either to problematic phenomena, observed events that are puzzling in terms of currently accepted ideas, or to problematic theories or to current ideas that are challenged by new hypotheses.

According to Avolio, Walumbwa and Weber (2009: 432) other potential leadership areas that have yet to be explored involve certain boundary conditions, mediators and moderators that have been recommended as a focus for future research. In the current leadership landscape the context is continuously changing. According to Avolio, Walumbwa and Weber (2009: 441) researchers are now examining all angles of leadership and including in their models and studies the leader, the follower, the context, the levels and their dynamic interaction. De Rue and Ashford (2010: 628) contend that if leadership is a mutual influence process among individuals, then social interaction among those individuals and various contextual factors can cause leader and follower identities to shift over time and across situations. Kouzes and Posner (2003: 1) describe leadership as a reciprocal relationship. Thus any discussion of leadership should attend to the dynamics of this relationship (Kouzes & Posner, 2003: 1 and De Rue & Ashford, 2010: 629). According to De Rue and Ashford (2010: 629) this recognition is in contrast to much of the existing literature on leadership that focuses on an individual and the static sense of being a leader but misses how leadership came to be and how it changes over time (Collinson, 2005b).

A need to gain greater insight into followership dynamics has been identified by known research addressing leadership-followership relationships. Knowledge regarding the nature, role and impact of leadership behaviour qualities in safety-critical commercial environments (specifically Air Navigation Service Providers) is limited. Knowledge derived from a follower perspective is also limited. Wilson (2004: 24) found that the relationship aspects of leadership have been examined almost exclusively from the leader's perspective, resulting in followers being viewed as merely the objects of leadership. According to Avolio (2007) investigations of follower characteristics have not been prevalent and consequently such investigations are considered to be essential to form a comprehensive model of leader effectiveness. A book search on the Amazon.com website revealed 95220 titles devoted to leadership (Bjugstad, 2004). Bjugstad's search on followership found just 792 titles and the

majority of those books focused on either spiritual or political followership (Bjugstad, Thach, Thompson & Morris, 2006: 304). Overall the ratio of leadership to followership books was 120:1 (Bjugstad, Thach, Thompson & Morris, 2006: 304). Bjugstad, Thach, Thompson and Morris (2006: 304) state that the lack of research and emphasis on followership relative to leadership in the business world is ironic considering that the two are so intertwined. Currently accepted theories and concepts regarding leadership behaviour qualities have also not been evaluated within the mentioned aviation context. The legitimacy and soundness of currently accepted leadership development initiatives within this specific context has not been appraised in terms of success. Applied research may be warranted to allow for the advancement of knowledge with a specific practical application in view and with the expectation that the research results will be of value. Contemporary theory regarding follower experiences and expectations of leadership behaviours may be challenged due to limited applied research. A complex research problem regarding follower experiences and expectations of leadership behaviours in a safety-critical commercial environment that requires deeper understanding was identified. Allowing for insight into perspectives of leadership held by followers may effectively inform leadership development and training needs analyses.

The Aviation Industry is a safety-conscious industry. Organisations providing primary and secondary services and products within and to the aviation industry need to meet both industry and regulatory safety standards. Aviation organisations expect organisational business leaders to support all safety requirements and expectations. In turn, leaders expect followers to ensure the desired and required safety behaviours in support of safety tasks and responsibilities. It is assumed that followers and leaders attempt to meet defined safety standards and requirements. If followers do not meet safety standards then leadership may be implicated. Air traffic management is a safety-critical service provided by Air Navigation Service Providers. Air traffic management is considered to be a very safe industry, with a very small number of serious incidents and accidents (Eurocontrol, 2011: 4). However even in very safe industries, the performance of individuals, teams and organisations can “drift into danger” (Eurocontrol, 2011: 4). Organisational commitment to safety refers to the extent to which upper level management identifies safety as a core value or guiding principle of the organisation (Wiegmann, Zhang, von Thaden, Sharma & Gibbons, 2004: 126). An organisation’s commitment to safety is therefore reflected in the ability of its upper level management to demonstrate an enduring, positive attitude towards safety, even in times of fiscal austerity and to actively promote safety in a consistent manner across all levels within the organisation (Wiegmann, Zhang, von Thaden, Sharma & Gibbons, 2004: 126). When upper level management is committed to safety, it provides adequate resources

and consistently supports the development and implementation of safety activities (Wiegmann, Zhang, von Thaden, Sharma & Gibbons, 2004: 126). It is envisaged that increasing integration, automation and complexity of the Air Traffic Management system will require effective and efficient leadership. The required efficient and effective future leadership behaviour qualities as applicable to the Air Traffic Management sector are unclear. The nature and characteristics of desired leadership behaviour qualities thus require further investigation.

It is further assumed that good followership leads to safety actions. Thus leadership (“good” leadership) needs to ensure that good followership occurs/prevails. Inadequate leadership (“poor” leadership) may, amongst others, lead to undesired leadership-follower anxiety, ineffective communication and reduced performance outcomes. The complexity of this matter can be understood further by examining the nature of inquiry that signifies a need for a specific and deeper understanding. The International Air Transport Association (IATA, 2012) state that globally there is no shortage of general management courses on offer. However many aviation executives have pointed to the unique demands of aviation, with its constraining regulatory framework and idiosyncratic operating environment (IATA, 2012). According to the International Air Transport Association existing training courses are rooted in Western culture. The rapid growth of aviation in Asia, Africa and the Middle East, each with its distinctive culture, means that these regions clearly need dedicated management training programs for their aviation professionals, not least to bridge a potential skills gap (IATA, 2012). Such inquiry should emanate from a need to design, develop and implement leadership development initiatives that are beneficial to a particular aviation sector. In the case of this specific research project a shortage of specific and sector-directed research served as evidence to denote the existence of a real problem. The absence of mentioned research can be regarded by Air Navigation Service Providers as a problem. Furthermore ownership of said problem resorts with Air Navigation Service Providers.

Avolio, Walumbwa and Weber (2009: 442) found that the field of leadership has done surprisingly little to focus its energies on what contributes to or detracts from genuine leadership development. Leadership development is motivated in terms of business outcomes that command effective and efficient leadership. Changes should sustain leadership-follower relationships that are supportive of business and strategic imperatives. A deeper understanding of follower experiences and expectations of leadership behaviours may provide a leadership development needs analysis that can be used by organisations functioning within safety-critical commercial environments. The process followed to identify and examine leadership behaviour development needs, the rationale

associated with the investigation and the research findings may serve as verification of solutions as applicable to the research problem.

The practical problem is framed and understood in terms of “what leadership behaviours do followers pay attention to and why?”, “what leadership behaviours encourage followership and why?” and “what leadership behaviours discourage followership and why?” It is presumed that a lack of understanding of leadership behaviours may create tension, conflict and lead to misunderstanding within the workplace. This organisation-specific and applied research problem is contextualised by follower descriptions pertaining to the current state and current observations of leadership within the Air Traffic and Navigation Services Company. These descriptions refer to a recent organisational survey and strategic business imperatives that include leadership behaviours. A specific research problem statement was formulated considering the need for research, the complexity of the problem and the nature of the inquiry. The research problem statement is: **“How can follower experiences and expectations of leadership behaviours in a safety-critical commercial environment be collected, analysed, understood, structured and utilised to aid leadership development?”**

Researchers use formal problem statements to provide a framework for their research and to guide research activities (McMillan & Schumacher, 2001). The research problem applicable to this study signified an uncertainty regarding an understanding of the nature of influences shaping the mental models of followers pertaining to leadership behaviours. Followership has been an understudied topic in the academic literature and an underappreciated topic amongst practitioners (Bjugstad, Thach, Thompson & Morris, 2006: 304). Although it has always been important, the study of followership has become even more crucial with the advent of the information age and dramatic changes in the workplace (Bjugstad, Thach, Thompson & Morris, 2006: 304). Gaining further insight into factors and influences that shape followers’ opinions may contribute to the understanding of mental models and reflective practices. Follower responses may also provide content-specific information that can be used for organisational leadership development enterprises. Thus, leadership can be inculcated by training and development initiatives (Hodgson & Binney, 2007). Leadership concepts have been developed from simple and predetermined attributes of leaders to the description of leadership activities and factors that can influence them (Slavik, 2008: 2). The concepts have reached the level of examining the quality of relations between leaders and followers (Slavik, 2008: 2). Current thought promotes the conception that leadership abilities can be identified and that skills to lead can be developed.

1.1.5. Research questions

The research problem and associated practical problem culminated in the primary research question: **What are the experiences and expectations of followers with regard to leadership behaviour qualities within the Air Traffic and Navigation Services Company in terms of inspirational and discouraging leadership styles?**

General focus research questions follows. These are more detailed questions that directed the research objectives (Saunders, Lewis & Thornhill, 2007). General focus research questions are:

- **How do followers within the Air Traffic and Navigation Services Company delineate leadership behaviour qualities in terms of significance of these behaviour qualities?** Of significance while discovering answers to this question was finding and understanding the perspectives, cognitive frames and logic (collectively referred to as mental models) followers held and how these served to define the truth to them about leadership, leadership performance, how one measures success in the leadership activity and how followership is experienced. Senge (1990a: 9) stresses that the discipline of working with mental models starts by turning the “mirror” inward, learning how to unearth internal pictures or images of the world and then bringing them to the surface and holding them up for rigorous scrutiny (Marquardt, 2002: 53).
- **How do observed current leadership behaviour qualities inspire followership within the Air Traffic and Navigation Services Company?** Of significance while discovering answers to this question was finding and understanding leadership behaviours, styles and qualities that enthused, motivated and promoted followership. According to Hunter, Bedell-Avers and Mumford (2007) and Andert (2011: 68) most leadership studies explore the positive relationships and outcomes of leader actions.
- **How do observed current leadership behaviour qualities discourage followership within the Air Traffic and Navigation Services Company?** Of significance while discovering answers to this question was finding and understanding leadership behaviours, styles and qualities that depressed, diminished and discouraged followership. According to Hunter, Bedell-Avers and Mumford (2007) and Andert (2011: 68) most leadership studies have explored only the positive relationships and outcomes of leader actions, ignoring those behaviours that may be harmful to subordinates and organisations. Accordingly little investigation has

occurred concerning leader errors and how those errors impact on organisational success or failure (Hunter, Bedell-Avers & Mumford, 2007 and Andert, 2011: 68).

- **How can followers' experiences and expectations of leadership behaviours within the Air Traffic and Navigation Services Company inform leadership training and development needs analyses?** Of significance while discovering answers to this question was finding and understanding the value and impact of follower derived information as a component of leadership training and development needs analyses. Leading leadership academics such as Boyett and Boyett (1998), Clark and Clark (1996), Holton and Naquin (2000: 8) and McCauley, Moxley and Van Velsor (1998) agree that there is a deficiency of scholarly knowledge about leadership education, training and development in spite of an increasing drive for and investment in leadership development in organisations.

According to the constructivist paradigm, an understanding of one's world is intimately linked to the relationship between the individual and her or his experiences in the world (Arceiero & Guidano, 2000). Yin (2006: 41) suggests that research can be strengthened if both the quantitative and qualitative methods each address some aspect of both process and outcome questions. This implies that the stated research questions integrate two methods and do not discriminate between specific qualitative focused questions and specific quantitative focused questions. Truth and knowledge are constructed in an ongoing process as the cognisant being encounters its environment (Arceiero & Guidano, 2000). This process of construction also takes place during identity development, where the individual constantly affirms one's identity by organising events into a coherent story (Ganzevoort, 1993). The constructivist perspective was important to this study because it asserted that one can gain insight into the meaning formation processes of an individual through narratives. "Narrative" is the realm of experience in which participants lay out how they, as individuals, experience certain events and confer their subjective meaning onto these experiences (in the case of this study research *with* narrative is presented). "Meaning" refers to the individual's sustained understanding of the past and present and expectations about the future. The above research questions allowed for inferences to be drawn from collected data (Saunders, Lewis & Thornhill, 2007) and consequently permitted research questions to be answered credibly and honestly (Cohen, Manion & Morrision, 2000). These answers may provide valuable insight into leadership and followership dynamics. These answers may encourage pragmatic understanding and also contribute to the body of scientific knowledge applicable to leadership and followership theory, as well as leadership development theory.

1.1.6. Aim of the study

The researcher aimed to understand the effectiveness of leadership behaviours as reported by followers within the Air Traffic and Navigation Service Company. Multiple and non-generalised perspectives communicated by followers provided insight into leadership success. This insight highlighted dynamics and influencing forces that assisted with amongst others broad relationship management actions, leadership performance evaluations, team resource management strategies and leadership training and development initiatives. However the explicit focal point of this study was an appreciation of leadership behaviours discovered within the Air Traffic and Navigation Service Company which, in turn, might contribute towards this organisation's leadership development endeavours and such similar endeavours undertaken by other organisations functioning within safety-critical commercial environments. Leader-follower relationships and patterns of influence are considered to go beyond any single individual and mentioned relationships change over time (Bedeian & Hunt, 2006, Collinson, 2005a & 2005b and Uhl-Bien, Marion & McKelvey, 2007). In this sense and for purposes of this study, leadership development is not about simply building the capacity of an individual, but that of a collective to exhibit leadership through a relational network of mutual influence (Day, 2000).

Most scholars have focused primarily on the leader and the leader's role in motivating followers and neglected the significance of followers (Vondey, 2008: 52). In support Bernal (2009: 1) states that whilst much research has been completed in the field of leadership and management disciplines, little has been done on leadership development. Avolio and Chan (2008) in a meta-analysis of leadership development research looking at the past 80 years, found that only 200 studies out of 12500 focused on leadership development (Bernal, 2009: 1). Leadership development theory and research has focused on changing the leader, with much less attention given to the interaction between leaders, followers and context (Avolio, 2007 and Day, 2000). Leadership development should be viewed and understood as an investment in social capital to develop interpersonal networks and cooperation within organisations and other social systems (Bolden, 2007: 5 and Day, 2001). The aim of this research study can be comprehended by considering the value of research results. Benefits likely to stem from this research study may be found in its contribution to contextualised leadership training and development theory and practice. Research findings may assist future leadership training design activities and specifically support learning needs analysis processes by considering the follower aspect. Methods employed to determine the leadership learning and development needs can therefore possibly be enriched and enhanced by considering and including follower inputs.

Furthermore the processes followed by organisations to collect, analyse and interpret these follower experiences and expectations can mimic the data collection, analysis and interpretive processes introduced in this research study. Research findings may assist to identify and describe leadership qualities and behaviours that need to be included as part of learning and training experiences as well as those that need to be excluded and/or be unlearned. An understanding of leadership qualities and styles may also allow support for motivations in terms of organisational leadership style preferences. Research findings may assist with the identification of training entry requirements that are considered valid for an organisation and may provide insight into and support to organisational leadership coaching and mentoring design, development, implementation and evaluation actions. Research findings may provide for a further dimension (with reference to follower assessments) to be considered during training management system evaluations.

1.1.7. Rationale for the research

Burmeister (2012: 24) states that leadership challenges include building a high performance culture, fostering innovation, mastering multiple geographies and nurturing cultural diversity. Porter (1996) suggests that too little attention has been afforded to the internal organisation environment affecting behaviour (Porter: 1996: 264). In this regard Osborn, Hunt and Jauch (2002: 832) state that context is the neglected side of leadership research. Therefore it is apparent that the impact of organisational context, especially in leadership and management development, is an under researched area. Furthermore the impact of space and time on leadership leads to the idea that evolving organisational demands determine leadership requirements.

Business and management research projects can be described according to their purpose and context (Saunders, Lewis & Thornhill, 2007). Known purpose and context presents the rationale for the research. The purpose of this research project is to analyse experiences and expectations of followers in order to construct understanding of multiple realities that are restricted to a specific phenomenon within a specific business organisation. The rationale for a research project can be described as a continuum that differentiates between pure research and applied research (Saunders, Lewis & Thornhill, 2007). The researcher accepted that rigour, discipline and process specifications synonymous with pure research needed to be upheld with the intention of ensuring acceptance of the research by the academic community. However a need to improve understanding and to discover new knowledge of a particular business problem may also favour applied research (Easterby-

Smith, Thorpe & Lowe, 2002). The rationale for this research project was therefore not limited to any one of the extremes of the mentioned continuum. The rationale for this research project compelled compliance with a combination of both pure and applied research considerations. Mentioned compliance is described and illustrated as research objectives.

1.1.8. Objectives of the research

Research objectives provide evidence of purpose and direction (Saunders, Lewis & Thornhill, 2007). McMillan and Schumacher (2001: 305) recommend that these objectives need to be clear-cut and unambiguous. The general research questions served as a base for the research objectives. Four research objectives were proposed in order to create a clear sense of purpose and direction in support of this research study.

Four key research objectives were formulated. The first research objective was to gain insight and create an understanding of leadership behaviour qualities that was delineated by followers within the Air Traffic and Navigation Services Company in terms of significance. Such insight and understanding was the outcome of an investigation of mental models held, used, described and reported by followers. The second research objective was to determine leadership behaviour qualities that inspired followership within the Air Traffic and Navigation Services Company. Identifying and understanding desired leadership behaviours relied upon testimonies and structured responses presented by followers. The third research objective was to determine leadership behaviour qualities that discouraged followership within the Air Traffic and Navigation Services Company. Identifying and understanding undesired leadership behaviours relied upon testimonies and structured responses presented by followers. Finally the fourth research objective was to determine how follower experiences and expectations of leadership behaviours within the Air Traffic and Navigation Services Company can inform leadership training and development needs analyses. Identifying and understanding desired leadership behaviours relied upon testimonies and structured responses presented by followers.

These four research objectives suggested a need to discover current views held by followers with regard to leadership behaviour qualities within the Air Traffic and Navigation Services Company. Identifying and exploring follower views that are synonymous with inspirational and discouraging leadership behaviours relied upon an analysis of factors shaping mental models of followers, an analysis of questionnaire responses and testimonies from followers regarding leadership behaviours. Follower accounts, descriptions, comments, structured

responses and perceptions therefore served as data required for this study. Data collection subsequently needed to be dependent on interviewing techniques that facilitated purposeful discussions and responses from a Leader Trait and Behaviour Questionnaire. Discussions/interviews and questionnaire responses allowed for the collection of valid and reliable data that were relevant to the research questions and stated objectives. It follows that data analysis required an initiative aimed at categorising data that generated or used both numerical and non-numerical data aimed at creating deep understanding. Researchers that aim to gather in-depth understanding of human behaviour and the reasons for such behaviour are inclined to select an appropriate research design. A mixed methods research design was consequently identified.

The research rationale and stated research objectives resulted in specificity and were considered to be explicit, achievable, realistic and possible. Internal processes required in pursuit of these four objectives dictated a need for a firm theoretical comprehension and underpinning in terms of a complete and informative literature review. Literature review results guided the structure and content of data-gathering strategies and methodologies. Data analysis and reporting of findings afforded the researcher an opportunity to unravel the identified practical and research problems mentioned earlier. In conclusion meeting these objectives empowered the researcher to respond to the primary and secondary research questions.

1.1.9. Significance and contribution of the study

Avolio, Walumbwa and Weber (2009: 434) suggest that one of the most interesting omissions in theory and research on leadership is the absence of discussions of followership and its impact on leadership. According to Mardanov, Heischmidt and Henson (2008), employee behaviour depends on the relationship between an employee and the leader, as experienced by the employee (Mendes & Stander, 2011: 2). Leadership researchers treat follower attributes as outcomes of the leadership process as opposed to inputs, even though there have been a number of calls over the years to examine the role that followers play in the leadership process (Avolio, Walumbwa & Weber, 2009: 434). Given this understanding, the researcher relied upon follower insights to understand followers' epistemological and ontological views of leadership and leadership development initiatives.

Leadership has been studied more extensively than any other aspect of human behaviour (Higgs, 2003: 27). The motivation for this ongoing interest is a belief that effective leadership has a profound influence on business performance, competitive advantage and

long-term survivability, especially in a globalised economy (Thompson, 1995, Oakland, 1999 and Buus, 2005). The phenomenon of leadership has been explored in great depth, but there is still a significant shortage of empirical research on the way in which the context of leadership shapes its practice (Barker, 2001 and Berry & Cartwright, 2000). In the past fifteen years, increasing attention has been given in the literature to the role of organisational context in the development of leaders (Black & Earnest, 2009). In a review of twenty-one major journals taken from the leadership literature between 1990 and 2005, Porter and McLaughlin (2006) found that empirical research on the significance of context was lacking. Andrews and Field (1998) call for a re-grounding of the concept of leadership through an empirical analysis of the importance of context. As leadership theory has evolved and become increasingly complex the notion of context has become more significant, despite this factor being given a lack of attention. Research is now also recognising context as a primary area of focus (Jepson, 2009: 37). What impact does context have when studying leadership within the South African Aviation Industry?

The South African Aviation Industry has increasingly established itself within the international arena as an emerging industry that focuses on technology, specialisation, competitiveness, profitability and competition. Air travel in South Africa has grown by more than 10% per year since 2005, largely due to the proliferation of low-cost airlines following the deregulation of the industry in the early 1990s (South Africa Department of Transport, 2008: 132). In 1993 fewer than 12 international airlines flew to South Africa. However this number had increased to 20 by 1995 and more than 70 international airlines flew to the country by 2009 (South Africa Department of Transport, 2008: 132). An emerging and technology dependent industry is synonymous with continued change. Effective and true changes rely on an influenced relationship among leaders and followers that highlight shared purposes (Daft, 2005).

Business leaders can expect perpetual turbulence and continued change in the business environment of the future (Osbaldeston, 2010). Successful leadership is viewed as an integral part of any industry and organisation. This is also true for highly competitive industries like the aviation industry. The Air Traffic and Navigation Services Company also serves as an example in this regard. Leadership summits and leadership development actions are two examples of initiatives introduced by the Air Traffic and Navigation Services Company to ensure leadership and organisational success. Successful leaders create substantial vision, inspiration and momentum for their followers (Landsberg, 2000: 22). A key to leadership success and greatness is to develop follower potential (Drucker, 2006) enhance leader-follower relationships (Daft, 2005) and encourage followers to embrace

change (Covey, 1990). Leader-follower relationships dictate follower performances (Daft, 2005 and Kelley, 1992). Leadership behaviours place demands on effective followership (Daft, 2005). Organisations may consequently wish to understand leadership behaviours, recognise leadership dynamics and develop leaders to ensure continuous organisational development in pursuit of the corporate strategy. The importance of this research is therefore evident in terms of the desired outcomes.

For a research study to be considered as research, it must clearly present the potential for creating identifiable new knowledge (Ellis & Levy, 2008: 23). Research must collect and analyse new information and/or data that will enhance the body of knowledge (Leedy & Ormrod, 2005, Creswell, 2005 and Ellis & Levy, 2008: 23). This study contributes to the existing body of knowledge by facilitating further understanding on the subject of current leadership dynamics, concerns and/or best practices (albeit from a follower perspective within a specific context). This study provides valuable information and guidance concerning desired leadership behaviours and leadership training and development. Furthermore this study considers leader position and influence, as well as the congruence between leader and followers concerning goals and values and enablers and disablers associated with leadership. A theoretical contribution can be found in terms of new contextualised knowledge that highlights attributes that are synonymous with the social contingency theory of leadership. Finally this study provides insight into the character, nature and dynamics found within a leader-follower relationship from a follower perspective. A theoretical contribution can therefore be found in terms of new contextualised knowledge that highlights relationship attributes that are synonymous with the social exchange theory of leadership.

An original research contribution can be asserted if causal relationships result due to a causal-comparative study that was conducted to address a documented problem (Ellis & Levy, 2008: 23). An understanding of follower rationale (mental models/epistemological expertise) employed when reflecting upon and communicating personal experiences and expectations with regard to leadership behaviour qualities should identify descriptive casual relationships. Avolio (2007), Grint (2000 & 2005), Lord, Brown and Freiberg (1999) described the field of leadership studies as being theoretically inadequate from its inception because it primarily excluded followers when explaining what constituted leadership. Follower testimonies (experiences and expectations) should identify leadership behaviour qualities associated with inspirational leadership within a defined context. It also follows that follower testimonies (experiences and expectations) and structured responses should identify those leadership behaviour qualities associated with discouraging leadership within a

defined context. In the case of this study a causal relationship between follower cognisance and leadership styles within a defined context serves as an original research contribution.

An original research contribution can also be contended if the positive and negative aspects of an approach to address a documented problem are explored in depth in a descriptive study (Ellis & Levy, 2008: 23). In the case of this study encouraging and discouraging leadership styles were explored in depth by relying on follower testimonies (follower experiences and expectations of leadership behaviours). Riessman (1993), Clandinin and Connelly (2000) and Law, Meijers and Wijers (2002) confirm that one of the most compelling purposes for using testimonies as a way of structuring experience is to understand how individuals assign meaning to their lived experiences and what insights those meanings can portray. This study provides an in-depth understanding of the specific data collection process and associated data analyses and interpretations that were employed. An analysis of follower reports and testimonies provided descriptive information that can be utilised to aid leadership development in a safety-critical commercial environment. In the case of this study an in-depth exploration of follower cognisance and leadership styles within a defined context serves as an original research contribution.

When studying leadership behaviours it should be noted that context is important (Hollander, 1992b: 71). Context affecting leadership includes and is shaped by the nature of the task or activity, its history and actors, the availability of human and material resources and the affective tone of leader-follower relationships (Hollander, 1992b: 71). This sector-specific research can make a contribution to the body of knowledge in the field of leadership development in a sphere where such work is limited. A purpose of this research was to ascertain whether this body of knowledge can be used to inform an understanding of leadership behaviours and follower epistemological expertise (epistemological expertise is the capacity to provide strong justifications for a range of propositions in a domain) within the Aviation Industry; specifically within the Air Traffic Management/Control sector. An electronic search of epistemological expertise by followers (searched as: epistemological-expertise-of-followers) on 09 April 2012 produced limited results. It was thus postulated that this research study can make a unique contribution to the body of knowledge regarding leadership behaviours and follower preferences because of the sector/organisation specific composition of the sample drawn. This is an important contribution to the body of knowledge in this defined and specific field and in South Africa in particular, being one of the pioneer studies in this area in South Africa. In this regard a specific case study offers the potential to make a substantial contribution to the body of knowledge in a specific area of practice. Clear

implications for practice and recommendations for future research can be regarded as essentially based on a strong educational message conveyed throughout this report.

In the case of this research project an original research contribution is made to the body of knowledge by an in-depth exploration of the positive and negative aspects of contextualised leadership behaviours as guided by follower epistemological expertise to address the documented problem in a descriptive study. The “significance” (McMillan & Schumacher, 2001) of this research study is found in its theoretical contribution and practical contribution to leadership development theory. Leadership development is often cited as one of the most important priorities for human resource and talent management in organisations and it is becoming a strategic priority at all levels of the organisation (O’Leonard, 2009 and Hernez-Broome & Hughes, 2004). Leskiw and Singh (2007: 444) agree that leadership development is becoming an increasingly vital and strategic imperative for organisations in the private and public sectors. In developing the future leaders, Burmeister (2012: 24) suggests that “we must recognise leadership potential as demonstrated by curiosity, eagerness to lead, emotional balance, social understanding, mental agility, mastery of complexity and a balance of values and results”. Bernal (2009: 7) however, affirms that current leadership development literature fails to answer the question of how leadership development programmes, aimed at enhancing leadership competency, have to be designed to affect long-lasting change in individuals and organisations.

This study follows an approach in which a follower-inspired leadership development needs analysis was investigated. Of significance is that a process that facilitates data collection from followers is described and followed. This process reveals deeper understanding of follower mental models and leadership behaviour qualities. Of further significance is that this study was conducted within a specific Air Navigation Service Provider (the Air Traffic and Navigation Service Company). This allows for a critical insight into the “unknown” leadership behaviour qualities found within a safety-critical commercial environment. The potential value of this study can thus be found in terms of the research process followed. Further value may also be apparent in the research findings. These findings provide insight and understanding of follower experiences and expectations of leadership behaviours in a safety-critical commercial environment. Research findings can potentially contribute to knowledge of leadership development theory as applicable to a safety-critical commercial environment. An outcome of this study is an addition to knowledge by providing detailed descriptions of phenomena that have not been fully described in literature. This study presents concepts/theoretical explanations guided by an emerging understanding of phenomena.

1.1.10. Format of the study

This study includes components suggested by Cooper and Schindler (2001). These components are incorporated and served as the framework for this study. Included are the following listed items:

- A problem statement that constitutes a clear, succinct statement of the research problem (McMillan & Schumacher, 2001).
- Research objectives that clearly and specifically identify what the researcher wishes to accomplish as a result of doing this research (Saunders, Lewis & Thornhill, 2007).
- A literature review that provides detailed and justified analysis and current commentary of literature within identified areas (Saunders, Lewis & Thornhill, 2007).
- Descriptions and motivations that signify the importance/benefits of this study, including practical and theoretical contributions.
- A research design that includes sampling, data collection and data analysis decisions.
- The selected site, in this case the Air Traffic and Navigation Services Company.
- Data display and analysis activities that include processes of data reduction, data display and drawing and verifying conclusions (Saunders, Lewis & Thornhill, 2007).
- Research results that illustrate these conclusions are logically consistent with the findings (McMillan & Schumacher, 2001).

1.2. Literature review

A literature review provides a summary and synthesis of relevant material on a research problem (McMillan & Schumacher, 2001). Literature review focus areas are identified by segmentation of the research questions. Segmentation relies upon a word-by-word appraisal of the research questions in order to draw attention to key focal points.

A literature review provides opportunities to study present pertinent material, critically evaluate previous studies and findings, identify possible deficiencies or alternative explanations, support the need to study the problem and establish a theoretical framework for the research problem (McMillan & Schumacher, 2001).

The detailed literature review (Chapter 2) includes the subject matter listed and briefly described below.

South African Aviation Industry – A contemporary business overview of the South African Aviation Industry serves as an orientation for this research project. An industry analysis (Lynch, 2006) that facilitated conceptualisation of the present burdens, challenges and prospects found within this specific industry was necessary. Industry analysis outcomes elucidated significant issues that characterise leadership and followership outlooks. Furthermore this analysis surmises leadership and followership trends and demands that exist within this industry. Knowledge and understanding of these industry-specific current leadership and followership dynamics guided the interpretation of data collected.

This component of the literature review considered information forthcoming from strategic management theories, including inter alia external environmental analyses, internal analyses, long-term objectives and related strategies (Lynch, 2006 and Pearce & Robinson, 2007) and realities for today's organisations (Daft, 2005). Content-specific information available from the Air Traffic and Navigation Services Company was included.

Leadership behaviours – Academic insights and explanations of organisational leadership behaviours served as a specific point of departure for this research project. Leadership behaviours considered relevant to the features of the Air Traffic and Navigation Services Company were included. Both inspirational and discouraging leadership behaviours were explored in order to respond to the research questions. In this regard organisational theories, organisation behaviours and leadership behaviour research findings served as valuable references during this research project. Knowledge and understanding of context-specific leadership behaviours directed interpretation of data collected.

This component of the literature review considered theories and perspectives of organisational behaviour (Cummings & Worley, 2005 and Werner, 2007) in order to learn about leadership behaviours. Relevant theories regarding leadership traits, behaviours, relationships, exchange and contingency approaches and leadership techniques and methods (Daft, 2005 and Landsberg, 2000) were explored. Theories concerning emotional intelligence (Goleman, 2004 and Yong, 2007) and effective leadership (Darling & Heller, 2009 and Covey, 1990, Collins, 2001 and Collins & Porras, 1994) were regarded as beneficial to this research project in order to understand human behaviours.

Followership demeanour – Followership information served as the centre of attention and focal point of this research project. Followership regarded as relevant to the characteristics of the Air Traffic and Navigation Services Company and its leadership had to be integrated. A definition and conceptualisation of followership within a workplace setting highlighted behaviour and performance details that assisted with orientation and comprehension of this phenomenon. Influences that promote and discourage followership also encouraged further insight into perceived realities held by followers regarding leadership. Knowledge and understanding of followership dynamics promoted interpretation of data collected.

This component of the literature review considered theories of followership. Theories and perspectives of organisational behaviour (Cummings & Worley, 2005 and Werner, 2007) contributed to an understanding of the concept “followership”. Leadership theories emphasising followership dependence such as inter alia servant-leadership and transformational leadership were investigated in order to determine emerging followership and associated leadership practices (Allen, 2009; Glaser, 2005; Daft, 2005 and Covey, 1990).

An integration of the various segments of the literature review was completed. This activity created possibilities to classify, compare and contrast evidence in terms of the way they contribute or fail to contribute to knowledge of the research problem (McMillan & Schumacher, 2001 and Gill & Johnson, 2002).

Work already done in this field by other researchers includes research on followers and followership within an organisational context (Kelley, 1992, Chaleff, 1995, Boccialetti, 1995, Shamir, Pillai, Bligh, & Uhl-Bien, 2007, Kellerman, 2008, Riggio, Chaleff, & Lipman-Blumen, 2008, Hollander, 1992a & 1992b, Kellerman, 2004, Lord & Brown, 2004 and Yukl, 2005). Findings suggested that followers are active participants in the leadership-followership relationship. Furthermore very good followers add value to the leader, leadership and the organisation because they tend to focus on goals and take initiative to increase their value to the organisation (Kelley, 1992).

Leadership development – The agenda for theory and research in the field of leadership studies has evolved over the last 100 years from focuses on the internal dispositions associated with effective leaders to broader inquiries that include emphases on the cognitions, attributes, behaviours and contexts in which leaders and followers are dynamically embedded and interact with one another over time (Avolio, 2007: 25). Leskiw and Signh (2007: 444) assert that even though there is an apparent need to increase the

number of leaders being developed today, few organisations are aggressively developing organisational leaders as part of their long-term organisation strategy. Avolio and Chan (2008) conclude the field of leadership development is starving for empirical research for advancing the science of leadership development, particularly studies that provide understanding in terms of the permanence of leadership effects and studies that can begin to show the possible benefits of leadership development for individuals and organisations (Bernal, 2009: 1). Leadership development involves interaction between individual leaders and the social-cultural environment in which they function (Day, 2001). Leadership development and practice have traditionally been quite narrow, with a decided focus on the analytical realm of leadership (Quatro, Waldman & Galvin, 2007: 427). However the contemporary climate of corporate scandal and resultant loss of societal confidence, coupled with the evolving demands, needs and expectations of employees, point to the potential need for a more holistic approach to leadership (Quatro, Waldman & Galvin, 2007: 427). Bernal (2009: 5) suggests that leadership development theory be classified in two ways – (1) theories and constructs that focus on developing the leader and (2) theories and constructs that focus on the development of the leadership process.

Leaders have become effective due to permanent learning and they constantly analyse and explore everything (Hodgson & Binney, 2007 and Slavik, 2008: 5). If it is necessary they change their skills and abilities to all kinds of impulses in order to move forward (Hodgson & Binney, 2007 and Slavik, 2008: 5). Their education is individually and practically oriented. This education should help at the right moment when it is needed to react to real and urgent appeals (Hodgson & Binney, 2007 and Slavik, 2008: 5). In competencies for leadership development, the focus is primarily on the individual and the behaviours, skills and other qualities they need to perform effectively in leadership roles. Daft (2002), Zaccaro and Klimoski (2001: 12) noted that most theories of organisational leadership in the psychological literature are largely context-free (Avolio, 2007: 25). For example, leadership is typically considered without adequate regard for the structural contingencies that affect and moderate its conduct (Daft, 2002 and Avolio, 2007: 25). Zaccaro and Klimoski (2001: 12) maintain, however, that organisational leadership cannot be modelled effectively without attending to such considerations (Avolio, 2007: 25).

In this study a leadership development needs analysis process was used to determine the difference between current leadership conditions (critical descriptions of current leadership behaviour, qualities and performances) and leadership criteria (a description of the ideal/sought-after leadership behaviours, qualities and performances ascertained by followers).

This component of the literature review considered two themes. The first being information from training design theories, especially training needs analyses, learning, unlearning, training entry requirements, learning techniques and training evaluation (Rothwell & Kazanas, 1998, Schwandt & Marquardt, 2000, Marquardt, 2002 and Van Dyk, Nel, Loedolff & Haasbroek, 1997). The second theme investigated literature dealing with leadership development, emphasising training needs, learning content, training delivery and training successes (Prochaska & Norcross, 2006, Komives, Longenbeam, Owen, Mainella & Osteen, 2006, Quatro, Waldman & Galvin, 2007 and Bernal, 2009).

1.3. Research design and methodology

The following list serves as an overview of the research design:

- Research design – A mixed methods research design.
- Research strategy – An ethnographic research case study strategy.
- Target population – Employees from the Air Traffic and Navigation Services Company, excluding management.
- Data collection method – Data collection by means of the Leader Trait and Behaviour Questionnaire, individual interviews, focus group interviews and field notes.
- Data collection instrument – Leader Trait and Behaviour Questionnaire, structured open-ended interviews and researcher field notes.
- Data analysis technique – An inductive analysis, inclusive of triangulation, was performed in order to analyse and create meaning from data collected.

1.3.1. Research design

The purpose of this research project was not only to statistically deduce, describe and examine relationships and trends within collected data. The research approach did not rely on laws of natural sciences, did not sanction anticipation of phenomena, did not demand generalisation and did not entail control of variables. A quantitative only research design (Collins & Hussey, 2003) was thus not desired for this research project.

The purpose of this research project was to discover multiple realities that were noted and reported by followers. Such an approach allowed the researcher to seek an understanding of emergent reality (Swanson, Watkins & Marsick, 1997 and Denzin & Lincoln, 2003).

Qualitative researchers stress the socially constructed nature of reality within a value-free framework (Denzin & Lincoln, 2003). The researcher acknowledged that qualitative research can be enriched and supported by quantitative data that includes closed-ended information such as that found on attitudes and behaviours. Mixed methods research is characterised as research that contains elements of both qualitative and quantitative approaches. A mixed methods research design was accordingly favoured for this research project because mixed methods involved collecting and analysing qualitative and quantitative data within a single study.

The aim of this research was to discover multiple realities assumed to be present in a specific organisation. The researcher acknowledged that research findings and contextualising of results will only be relevant to this study. Generalisation outside the ambience of this specific project was therefore not a research objective and not intended.

1.3.1.1. Validity

Validity claims required evidence that interview questions provide adequate coverage of the phenomenon being studied. A judgement of adequate coverage depends on the researcher's efforts aimed at ensuring that careful definition of the research through the literature reviewed is achieved (Saunders, Lewis & Thornhill, 2007: 366). Content validity in this regard was thus subject to the quality and sufficiency of the literature review.

Quantitative design validity had to be confirmed by means of content and construct validity associated with and in support of the Leader Trait and Behaviour Questionnaire. The questionnaire utilised is a standardised questionnaire that allowed each respondent to be exposed to the same questions and the same system of coding responses. Qualitative design validity can be confirmed when interpretations and concepts have mutual meanings between the participants and the researcher (McMillan & Schumacher, 2001). The researcher and participants had to agree on the description of events and associated meaning thereof. A method inclusive of participant review and member checking (McMillan & Schumacher, 2001: 408) was also required in this regard.

Validity associated with the research process cannot be claimed if a clear explanation regarding sampling justification and the techniques used to collect and analyse the data are absent. Such explanations and motivations are presented in Chapter 4.

Validity is also reliant upon the source, authority and reputation of the data. This research study relied upon data collected from the Leader Trait and Behaviour Questionnaire and data during interviews with employees that are representative of the population. Literal statements of participants were collected as part of the individual and focus group interviews. Negative cases or discrepant data that are an exception to patterns or that modify patterns found in the data were included (McMillan & Schumacher, 2001).

1.3.1.2. Reliability

Reliability without validity is useless (Adams & Cox, 2008). Reliability is described as the extent to which results are consistent over time and are an accurate representation of the total population under study (Adams & Cox, 2008). If the results of a study can be reproduced under a similar methodology, then the quantitative research instrument is considered to be reliable. Reliability from a qualitative perspective was dependent on the robustness of the interviews and, in particular, consistency in terms of process and application. Measures implemented to ensure reliability are presented in Chapter 4.

1.3.1.3. Trustworthiness

In support of these traditional validity and reliability concerns the researcher had to ensure trustworthiness (as applicable to a qualitative study) by addressing four critical aspects (Krefting, 1991). Criteria that ensure credibility, applicability, consistency and neutrality (Krefting, 1991) of the research process were embedded in and observed as part of the entire research process.

1.3.2. Research paradigm

A research philosophy (Saunders, Lewis & Thornhill, 2007) presents important assumptions pertaining to the nature of knowledge, views on reality and knowledge development. A preferred epistemological (Saunders, Lewis & Thornhill, 2007 and Cohen, Manion & Morrison, 2000) stance relies upon personal experiences that result in individual cognition. These experiences reported and noted by followers and associated interpretive emphasis required a deeper qualitative approach supported by a specific quantitative approach in order to discover the personal, subjective and unique nature of translated interactions and intra-actions. Such desired deeper understanding of existing leadership behaviours were found in multiple realities, offered as unique and individual experiences, views and reflections as part of a mixed methods study. Accordingly this research project relied upon

ontological assumptions that favour a subjective view whereby reality is socially constructed by followers. Data collection and analysis therefore favoured an emergent reality by uncovering complex and multivariate deeper meanings that were synonymous with this inquiry. According to Denzin and Lincoln (2003: 3) an emergent inquiry suggested a complex, interconnected set of terms, concepts and assumptions that were indicative of interpretive studies. Interpretive research conducted as a situated activity empowers researchers to study phenomena in their natural settings and it signifies a qualitative research preference (Denzin & Lincoln, 2003: 4). Although a qualitative research design crosscuts disciplines, fields and subject matters (Denzin & Lincoln, 2003: 3) it can be successfully and valuably supported by quantitative research methods. In the case of this research project a need was identified to extend the breadth and range of results by using different methods. The samples for the quantitative and qualitative components were thus parallel. This expansion also relied upon concurrent mixed method data collection strategies whereby methods employed had to address different aspects of the phenomenon. This approach allowed for different types of data to be collected, analysed and synthesised. This approach had to provide strengths that offset the weaknesses of both quantitative and qualitative research. The data analyses from the two methods had to be juxtaposed in order to generate complementary insights that together created a bigger picture. A mixed methods research design was thus motivated for this research project.

1.3.3. Research strategy

Descriptions and analyses of patterns of leadership behaviour forthcoming from followers' reports were needed. The selected research method had to promote these descriptions and analyses by means of data collection, in-depth analysis, discovery of relations and use of relations to explain findings. In this instance an appropriate research style or inquiry within the mixed methods paradigm allowed for judgements, multiple perspectives and subjectivity. An ethnographic case study research style entailed data, transformed as patterns or themes that were summarised and presented as a specific production of meaning within a particular context (Wolcott, 1994). An ethnographic case study research style that facilitated a comprehensive, holistic narrative description and interpretation (McMillan & Schumacher, 2001) was considered appropriate for this research project.

The selected research strategy had to adequately and comprehensively meet quality dimensions synonymous with a research project. Quality indicators considered were rigour, trustworthiness, integrity, originality and relevance measures. Methodological rigour was ensured by means of strict compliance with the research process and ethical demands, thus

confirming that the research results can be submitted with confidence. Reliability, validity and generalisation requirements stated as an integral element of the research process were observed, illustrated and presented in support of the trustworthiness of the research results. Research integrity was assured by demonstrating accomplishment of methodological and ethical rigour conditions as well as evidence of a high standard of research. A structured approach applicable to data collection, analysis and interpretation is presented. Mentioned approach ensured that findings were presented in terms of originality (originality refers to efforts aimed at viewing issues with “new” eyes). The relevance of this research project can be found in the envisaged context-specific recommendations and conclusions that may be valuable from both pragmatic and academic perspectives.

1.3.4. Population and sampling

In terms of determining the type and size of the sample, the researcher considered that the aim of this study is to collect exploratory data. The population is defined as all non-management operations employees employed by the Air Traffic and Navigation Services Company (defined and described as “followers”). A subgroup of the accessible population was investigated by the researcher, which in turn influenced the type of sample drawn – being a non-probability convenient sample.

Data collection methods comprised of individual face-to-face interviews and field notes, focus group interviews and field notes and the Leader Trait and Behaviour Questionnaire (formulated from Wilson’s (2004) Effective Developmental Leader Trait Instrument and the Effective Developmental Leader Behaviour Instrument). A non-probability convenient sample was drawn to aid qualitative data collection. Mentioned resulted in fifteen individual interviews and three focus group interviews. A non-probability convenient sample was drawn to facilitate quantitative data collection (using the Leader Trait and Behaviour Questionnaire) from 145 participants.

1.3.5. Data collection instruments

Data collection had to permit information-gathering from a purposeful sample in a defined context. Purpose and objectives of an exploratory study (Robson, 2002) are conducted by interviewing the “experts” in the subject (Saunders, Lewis & Thornhill, 2007). Understanding relies upon descriptions, understanding, explanations and reflective practices (Cohen, Manion & Morrision, 2000) stemming from planned interviews. Questionnaire completion,

individual interviews and focus group interviews consequently served as means to execute data collection.

Appropriate behaviour by the researcher reduced possible bias during interviews (Saunders, Lewis & Thornhill, 2007: 325). The researcher accepted that attentive listening skills, testing of understanding, note-keeping and recording of interviews needed to be ensured. Interviewer competence needed to be displayed in terms of the opening of the interview, language use, questioning, listening, testing and summarising understanding, recognising and dealing with difficult participants and recording of data (Saunders, Lewis & Thornhill, 2007: 329).

Despite the researcher's extensive interview experience (obtained during previous successful research projects) compliance with these criteria had to be motivated in response to reliability, trustworthiness (Krefting, 1991), credibility (Janesick, 2003) and validity concerns.

1.3.6. Data analysis

Data analysis had to ensure that categories and patterns emerge and are interpreted from the data collected and recorded. It was presumed that theory would follow data and that the research approach needed to subscribe to primarily an inductive analysis (Saunders, Lewis & Thornhill, 2007) supported and guided by triangulation.

Quantitative and qualitative data analysis strategies selected, ensured adherence to the mixed method research design. Content analysis was selected to aid qualitative data analysis. Interview data (inclusive of face-to-face individual interviews and focus group interviews) were analysed on two levels. The first level of analysis consisted of a descriptive account of the data followed by interpretative analysis. Quantitative data analysis (data collected from the Leader Trait and Behaviour Questionnaire) was performed by means of descriptive statistics and factor analysis. Data and method triangulation were implemented as a methodological approach. The reason being that triangulation contributes to the validity of research results when multiple methods, sources, theories and/or investigators are employed.

The researcher maintained a presence, paid attention to detail and ensured powerful use of his own mind during analysis and interpretation of the data, as suggested by Janesick (2003: 63). Data were explored and systematically grouped in order to comprehend, integrate and

identify clusters of meaning. Data analysed needed to allow for the emergence of categories, themes and patterns. An expectation was that key categories would emerge that would create new and structured insight while also highlighting probable connections between categories. Denzin (1989) and Janesick (2003: 65) recommend the following five listed steps:

- Locate within the personal experience, or self-story, key phrases and statements that relate to the phenomenon being studied.
- Interpret the meanings of mentioned phrases (informed by the literature review).
- Obtain the respondent's interpretation of findings.
- Inspect derived meanings in order to reveal essential and recurring features that relate to the phenomenon being studied.
- Offer a tentative statement or definition of the phenomenon in terms of essential recurring features identified above.

Following this methodical approach ensured trustworthiness (Krefting, 1991) and credibility (Janesick, 2003) of the data analysis process.

1.4. Expected outcome and results

Findings are reported in a factual, structured and accurate manner, while also ensuring a logical flow (Saunders, Lewis & Thornhill, 2007). This research project presents, as an outcome, followers' expectations and experiences of leadership behaviours. These expectations and experiences serve as a leadership development needs analysis, framed within a defined context. In this regard the researcher dissected data and clarified the nature of the component parts while also showing evidence and succeeding results of actual synthesis (Saunders, Lewis & Thornhill, 2007).

1.5. Scope and site of the research

This research project relied upon data collected from a defined group of Air Traffic and Navigation Services Company employees. This arrangement allowed the researcher to use participants who happen to be available, accessible and representative of the population. This decision supported the motivation to use a non-probability convenient sample.

1.6. Limitations of this research

Research limitation categories considered are twofold. The first limitation category expresses general limitations of qualitative research. The second limitation category describes research project-specific limitations. These demanded meticulous attention and were dealt with during the research project proposal and ensuing thesis.

General limitations – General limitations of qualitative research deemed to be appropriate to this research project include researcher subjectivity, validity of the qualitative design, compliance with research ethics and generalisation concerns. Generalisation of findings is limited to characteristics of the participants and the defined organisational context.

Specific limitations – Specific limitations of this qualitative research inquiry believed to be appropriate are offered. Researcher subjectivity was addressed by use of a field journal and ensuring continuous self-monitoring (McMillan & Schumacher, 2001). Strategies implemented to enhance validity comprised prolonged and persistent data collection periods, use of participant language and verbatim accounts, use of mechanically recorded data and introducing member-checking actions (McMillan & Schumacher, 2001). Obtaining informed consent, ensuring confidentiality and promised anonymity served as measures to uphold research ethical standards and requirements (McMillan & Schumacher, 2001). Reliability concerns were controlled by ensuring that the same format and sequence of words and questions for each respondent were used (Silverman, 1993). It should further be noted that unconditional and undefined generalisation is not inferred and was not an aim of this study. A further specific limitation may be that the focus of this research was restricted to one organisation. The availability of participants and their willingness to participate were considered as additional limitations. The availability of enough time for questionnaire completion, individual and focus group interviews and/or opportunity for follow-up interviews were also noted as limitations.

Mentioned concerns and associated strategies planned provided assurance that initial identified limitations of this research project were dealt with in a responsible, ethical and amicable manner.

1.7. Ethical considerations

Ethics generally are considered to deal with beliefs about what is right or wrong, proper or improper, good or bad (McMillan & Schumacher, 1989). The researcher had to ensure

compliance with defined ethical requirements. The researcher agreed to restrict the focus to the research questions and the specific context. The researcher had to ensure the integrity of data and the study as a whole. The researcher acknowledged and respected the fact that subject participation was voluntary and that he needed to obtain informed consent from participants. The researcher ensured that the aim, objectives, nature and future use of findings were communicated to participants prior to commencement of data collection activities. The researcher agreed to protect the rights of human participants by not causing any emotional harm by not infringing their right to maintain self-respect and human dignity. The researcher took care to provide all the facts without distortion or misrepresentation. The researcher avoided being biased in the interpretation and presentation of data. He ensured that conflicting evidence and any flaws or limitations in the research were reported. The researcher ensured confidence by not disclosing the identity of participants. The researcher obtained consent from corporate and centre management prior to data collection. Finally the researcher ensured that the results of this study were communicated by means of internal organisational processes.

1.8. Chapter organisation

The following chapters are described as follows:

- Chapter 1 – Chapter 1 offers an introduction to the study and the rationale for this research.
- Chapter 2 – In Chapter 2 a theoretical framework is presented as a platform for this study.
- Chapter 3 – Chapter 3 offers a discussion of theoretical paradigms that is deemed appropriate for this study.
- Chapter 4 – Chapter 4 offers an in-depth research design and methodology discussion and explanation.
- Chapter 5 – In Chapter 5 the results obtained are analysed.
- Chapter 6 – Chapter 6 presents a discussion of findings and contextualising of results of this study with information from the literature review.
- Chapter 7 – Chapter 7 presents a final overview of this research study with reference to the entire research process.

CHAPTER 2: LITERATURE REVIEW

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CHAPTER 2: LITERATURE REVIEW

2.1. Review of related literature

Krathwohl (1998), Bogdan and Biklen (1998) suggest that a researcher may elect to review the literature prior to entering the field as a mark of respect to the participant hosts and to allow the researcher to enter the field with an open mind, not an empty head (Castellan, 2010: 6). An understanding of relevant literature is essential to develop a conceptual framework for a study (Cone & Foster, 2003 and Saunders, Lewis & Thornhill, 2007). A review of literature needs to provide evidence that the literature has been adequately surveyed, review present pertinent information, support the need to study the identified problem, provide a theoretical framework for the problem, relate to previous studies and assist with a research design decision (McMillan & Schumacher, 2001: 54 & 109).

This literature review provides a summary of previous research studies and research results that are related to the research problem. The aim of this literature review is to show how this study is related to relevant literature. Five objectives were set for this literature review. The first objective was to communicate the broad focus of the literature found and linked to the research questions. A second objective was to expand on past and current discourse applicable to and motivating this research study. A third objective was to critically evaluate the information collected. A fourth objective was to formulate further insights and prepare conclusions. The final objective was to explore and describe literature findings that informed the focus areas of data collection. This literature review is purposefully organised by four sections: an introduction, a critical review, key constructs and a summary.

2.2. Introduction

Poor management affects the ability of an organisation to perform, to meet customer needs and to remain competitive (Hill & Lineback, 2011: 9). An organisation's competitive success is achieved through people (Pfeffer, 1994). Good organisational performance requires good leadership (Banutu-Gomez, 2004). Good leaders require good followers (Banutu-Gomez, 2004). Leadership effectiveness can be measured in terms of the degree to which a leader promotes (a) instrumental attitudes, traits and behaviours that encourage the achievement of group objectives; (b) followers' satisfaction with the task and context within which they operate; and (c) followers' acceptance of their leader's influence (Cooper & Conger, 2010). This last dimension of the leader's influence is often manifested through the followers' emotional bond with the leader (Madera & Smith, 2009, Cooper & Conger, 2010 and

Osbaldeston, 2010). The dynamics of leadership depend on followership (Rosenau, 2004). Characteristics of leaders and followers define the leadership-followership relationship. Kelley (1992: 20) states that the leader's effect on organisational success is only 10% to 20%, whereas followership is responsible for the remaining 80% to 90% of success. A better understanding of the phenomenon of leadership behaviour may aid current and future organisational leaders in the implementation and maintenance of organisational structures, cultures and behaviours to enhance organisational performance.

This study presents a specific analysis of experiences and expectations of followers with regard to leadership behaviour qualities within the Air Traffic and Navigation Services Company in terms of inspirational and discouraging leadership styles. An understanding of relevant literature served as the basis for the mentioned analysis. The scope of the critical review of literature includes a review of leadership, a review of followership and an overview of leadership and followership research. Knowledge and organisational performance aspects were also incorporated as part of this review. This critical review furthermore contains literature on followership, views held by followers with regard to leadership behaviour qualities, leader trait and behaviour qualities that inspire follower behaviours (followership), leader trait and behaviour qualities that discourage follower behaviours (followership) and leadership training and development. Finally, leadership within the South African Aviation Industry was scrutinised and an overview of the Air Traffic and Navigation Services Company is presented.

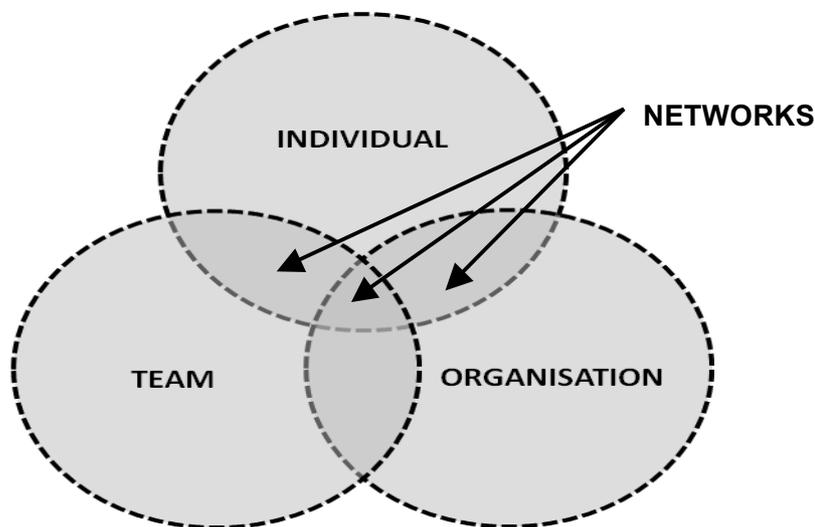
2.3. Critical review

2.3.1. A review of leadership

What is leadership? Like most terms in social science, the concept of leadership is arbitrary and subjective (Karp & Helgo, 2008: 30). Leader-oriented theories imply that leadership is a construct contained within the individual leader, whether inherent or learned (Agashae & Bratton, 2001: 93). The leader in turn acts upon his/her environment in an effective or ineffective manner (Agashae & Bratton, 2001: 93). Leadership occurs when leaders and followers are able to develop effective and supportive relationships that result in mutual and incremental influence (Uhl-Bien, 2006). Leadership begins from within and is focused on the desired vision and goals (Bender, 1997). Leadership can be described as events and activities of multiple organisational contributors (Lynham & Chermack, 2006 and Küpers, 2007: 210). Hill and Lineback (2011: 26 & 27) have identified three imperatives critical to the effective leader's success. The first imperative refers to an ability to effectively manage

oneself as a dedicated and cooperative leader, including human and caring relationships and influencing abilities (Hill & Lineback, 2011 and Osbaldeston, 2010). The second imperative refers to an ability to effectively manage one's network, also referred to as the organisational political environment (Hill & Lineback, 2011 and Osbaldeston, 2010). The third imperative refers to the leader's ability to build high performing teams (Hill & Lineback, 2011). An engaging leader personality that promotes empowerment, delegation and team development initiatives supports the building of high performance teams (Wilson, 2004). Leadership can be interpreted as a tri-party culmination of the leader as individual, the organisational context and network within which leadership transpires and those being led, namely the followers (depicted in Figure 2.1).

Figure 2.1. A tri-party culmination of the leader



Source: Adapted by the researcher from Hill, L.A. & Lineback, K. 2011. *Being the Boss; the three imperatives for becoming a great leader.* Boston: Harvard Business Review Press.

For the purposes of this research, leadership and management were considered to be interchangeable, as advocated by Yukl (2006). These terms were used to indicate people who occupy positions in which they are expected to perform a leadership role, but without any assumption about their actual behaviours or successes. Leadership of any type springs from the interplay of an individual's motivation, assertion and ability to lead, subordinates' desire for direction and authority and events calling for leadership (Padilla, Hogan & Kaiser, 2007: 179). Leadership and followership are intertwined and subject to organisational dynamics.

What truly defines leadership remains unattainable as no one unifying theory has emerged to date that can provide the framework for further research (Burns, 2003, Bass & Bass, 2008 and Drath, 2008). Leadership is a complex set of effective behaviours set in a specific context. Leadership can be viewed as a responsibility to influence others in terms of their actions, thoughts and feelings. It may therefore be important to find out what managers/leaders actually do to shape and transform the behaviours, thoughts and feelings of others. Stewart (2006: 2) and Kirchhubel (2010) agree that the roles of both leaders and followers have become more complex, elaborate and that multiple perspectives exist on how leadership is conceptualised.

Leadership is a combination of personal characteristics/traits and areas of competence (Higgs, 2003, Hill & Lineback, 2011 and Osbaldeston, 2010). Leadership competence is inclusive of enabling, focused visioning, developing people, engagement and inquiring skills (Higgs, 2003: 278, Glynn & Jamerson, 2006 and Van Dick, Hirst, Grojean & Wieseke, 2007). Personal characteristics include dedication, authenticity, integrity, willingness, cooperation, self-belief and self-awareness (Higgs, 2003: 278). Rooke and Torbert (2005: 69) report that different leaders exhibit different kinds of action logic (ways in which they interpret their surroundings and react when their power or safety is challenged). Based on research conducted by Rooke and Torbert (2005: 69) a classification was developed that depicts leaders' dominant ways of thinking. This classification is presented in Table 2.1.

Table 2.1. Leaders' dominant ways of thinking

Action Logic	Characteristics	Strengths
Opportunist	Wins any way possible. Self-oriented. Manipulative.	Good in emergencies.
Diplomat	Avoids overt conflict. Wants to belong. Obeys group norms.	Good as supportive strength within an office and helps bring people together.
Expert	Rules by logic and expertise. Seeks rational efficiency.	Good as an individual contributor.
Achiever	Meets strategic goals. Effectively achieves goals through teams. Juggles managerial duties and market demands.	Well suited to managerial roles, action and is goal oriented.

Individualist	Interweaves competing personal and company action logics. Creates unique structures to resolve gaps between strategy and performance.	Effective in venture and consulting roles.
Strategist	Generates organisational and personal transformations. Exercises the power of mutual inquiry, vigilance and vulnerability for both the short and long term.	Effective as a transformational leader.
Alchemist	Generates social transformations. Integrates material, spiritual and societal transformation.	Good at leading society-wide transformations.

Source: Rooke, D. & Torbert, W.R. 2005. "Seven transformations of leadership", *Harvard Business Review*, April, 66-76.

Rooke and Torbert (2005: 69) conclude that the least effective for organisational leadership are the Opportunist and Diplomat; the most effective, the Strategist and Alchemist. Leaders who move towards the Strategist and Alchemist levels will explore the disciplines and commitments entailed in creating projects, teams, networks and strategic alliances on the basis of collaborative inquiry (Rooke & Torbert, 2005: 75). Rooke and Torbert (2005: 75) found that it is this ongoing practice of reframing inquiry that makes these leaders (Strategist and Alchemist) and their organisations successful. The Strategist and Alchemist share qualities associated with transformational leadership. In turn transformational leadership emphasises the importance of followership.

As leadership is also concerned with social interactions between leaders and subordinates, emotional awareness and emotional regulation are important factors that affect the quality of these interactions and relationships (Wong & Law, 2002, Hur, 2008, Madera & Smith, 2009, Ibarra & Barbulescu, 2010 and Hill & Lineback, 2011). Leadership as a group or organisational phenomenon may be observed as a set of role behaviours performed by an individual. Leadership comes into being when followers perceive the leader's behaviour in a certain way and accept or reject the leader's attempt to influence them. Lang (2001: 55) confirms that these human relationships (connecting people to enable them to cooperate and share what expertise and knowledge they have at the moment) within an organisation are crucial for knowledge creation, sharing and utilisation. A leader's influence is manifested

through the followers' emotional bond with the leader and by their attributions of qualities to him or her.

Leadership is shaped by local conditions, individual backgrounds/experience and circumstances (Kezar, 2004: 114). According to House and Aditya (1997) leadership in organisations has moved in several directions, but two approaches have dominated the literature (Vigoda-Gadot, 2007: 662). The first approach has focused on the leader's characteristics and behaviour (Vigoda-Gadot, 2007: 662 and Osbaldeston, 2010). The second approach has emphasised the circumstances necessitating the demonstration of leadership and the possible results of different leadership styles (Vigoda-Gadot, 2007: 662).

The history of leadership theories is mapped as follows (Baicher, 2005: 12-13):

- 1920s: Emergence of Trait Paradigm (Great man theories).
- 1940s: Behavioural Paradigm.
- 1950s and 60s: Situational/ Contingency Paradigm.
- 1970s: Emergence of Neo-Charismatic Leadership Paradigm (Transactional and Transformational).
- 1990 - 2000s: Emergence of Ethical/Spiritual Theories (Ethical, Shared, Spiritual Theories) and re-emergence of Traits, Universal and Cultural specific leadership.

Baicher's (2005) mapping of the history of leadership theories emphasises Vigoda-Gadot's (2007) mentioned dual approach. Van Vugt (2006) expands on the notion of a dual approach. According to Van Vugt (2006: 367) leadership correlates with traits and actions that encourage initiative-taking (such as ambition, boldness, dedication, self-esteem and extraversion), general intelligence (for example reflecting an ability to identify a problem, analyse a problem and organise group coordination) and competence, fairness and generosity qualities that might persuade followers. According to Wilson (2004: 14) traits such as intelligence, self-confidence, integrity and sociability contribute to leadership. Research has identified these traits in Implicit Leadership Theory, Servant Leadership, Transformational Leadership and Social Exchange Theory (Wilson, 2004: 14). In addition Wilson (2004: 14) asserts that leadership consists of two general types of behaviours: task behaviours and relationship behaviours. It follows that leader and leadership styles, characteristics, traits and behaviours deserve attention when studying leadership occurrences and trends.

There are no essential traits or behaviours that can or should be identified. Leadership is contingent upon many factors and conditions (Kezar, 2004: 114). Lord and Hall (1992: 153) noted that “too much research in the past has attempted to probe the complex issues of leadership using simple correlations”. It is perceived that although most models of leadership have causal predictions, a relatively small percentage of the accumulated literature has actually tested these predictions (Yukl, 2006). As an example, Luthans and Avolio (2003) verify that one would be hard-pressed to find in the leadership literature a general model of leadership development. Even more difficult to find is evidence-based leadership development (Luthans & Avolio, 2003 and Osbaldeston, 2010). Winston and Patterson (2007) cautions leadership researchers and scholars alike that while on the quest to define and extract the true meaning of leadership, perhaps the full meaning of leadership has become too fragmented. Fairholm (2004: 585) suggests that one’s understanding of leadership depends on the perspective that one brings to the question. The perspective a person has defines the truth to them about leadership, the leader’s job, how one analyses the organisation, how one measures success in the leadership activity and how followership is viewed (Fairholm, 2004: 585). Perceptions and perspectives held regarding leadership may not presuppose the existence of a single or universal epistemological view.

Leaders play an active role in the construction of the images followers have of leadership (Gray & Densten, 2007). Exploring leadership and followership as interrelated events implies a methodological focus on relationships, connections, dependences and reciprocities investigating specific encounters, issues or situations (Wood, 2005, Küpers, 2007: 211 and Mushonga & Torrance, 2008). Leadership also emphasises the importance of interpersonal relations in the leader/follower dynamic and in the emotions involved (Hartog, Koopman, & Van Muijen, 1997, Drath, 2008, Jackson and Parry, 2008, Madera & Smith, 2009, Hill & Lineback, 2011 and Osbaldeston, 2010). However there is lack of agreement about what makes for effective leadership, particularly concerning the qualities, traits, behaviours or capabilities required by leaders (Guzzo & Dickson, 1996; Kozlowski & Bell, 2003). This lack of agreement may be compounded by a lack of understanding amongst leaders relating to their own levels of personal and practical leadership competence, successes and failures (Hill & Lineback, 2011).

Fairholm (2004) suggests that leadership can be studied and understood by using two approaches. The first approach focuses on the leader, suggesting that leadership is best understood by studying specific individuals in specific situations (Fairholm, 2004 and Osbaldeston, 2010). The second approach accepts that leadership is something larger than the leader and that leadership encompasses all there is that defines who a leader may be

(Fairholm, 2004: 579-580 and Osbaldeston, 2010). This second more idealistic approach guided this research by exploring how followers framed and interpreted leadership. This approach allowed for a structured investigation of leadership and leader traits and behaviours as suggested by Wilson (2004) and Van Vugt (2006). This approach also permitted an unstructured investigation of leadership and leader traits and behaviours as suggested by Kezar (2004), Guzzo and Dickson (1996) and Kozlowski and Bell (2003).

2.3.2. A review of followership

Followers are the people who act with intelligence, independence, courage and a strong sense of ethics (Kelley, 1992, Grisaffe & Jaramillo, 2007, Eberlin & Tatum, 2008, Flynn, 2008 and McCloskey, 2008). Leadership and followership is a process that can be influenced by relationships between people. Without followers there are plainly no leaders or leadership (Hollander, 1993: 29 and Howell & Shamir, 2005). Leadership is not only a matter of leaders, or even of leaders and followers. Leadership emphasises the relationship between leaders and followers within a social group (Haslam, 2001, Van Knippenberg & Hogg, 2003, Mushonga & Torrance, 2008, Hur, 2008 and Winsborough, Kaiser & Hogan, 2009). Both leadership and followership can be observed, analysed and encouraged.

Leadership and followership may be viewed as interconnected human agencies that are continuously connecting and disconnecting in a dynamic network (Glynn & Jamerson, 2006 and Küpers, 2007: 209). Padilla, Hogan and Kaiser (2007: 179) describe two groups of followers: conformers and colluders. Conformers comply with destructive leaders out of fear whereas colluders actively participate in a destructive leader's agenda (Tepper, 2007). Ehrhart and Klein (2001) identify four underlying assumptions to note when examining follower characteristics. The first assumption is that individuals may differ in their responses to identical leadership behaviours (followers may evaluate and describe the leader quite differently) (Ehrhart & Klein, 2001: 155 & 156). A second assumption is that individuals' preferences for and reactions to particular types of leaders are based, to a considerable extent, on similarity attraction and/or need satisfaction (followers are likely to be drawn to leaders with whom they perceive they share similar attributes and values and/or leaders whom they perceive will meet their needs) (Ehrhart & Klein, 2001: 155 & 156). A third assumption is that individuals will enjoy and perform well when working for a particular style of leader (Ehrhart & Klein, 2001: 155 & 156). The fourth assumption is that individuals' evaluations and descriptions of their leaders are predictive of organisationally relevant outcomes (Ehrhart & Klein, 2001: 155 & 156).

Shamir (2004) presents a more sophisticated overview of five main follower motivations, all of which can be viewed as examples of conformist selves. Shamir (2004) postulates that position-based followers respect leaders' formal position in a social institution (Collinson, 2006: 183). Shamir (2004) suggests that calculated followers believe that following will help them achieve their goals (Collinson, 2006: 183). Shamir (2004) proposes that safety-based followers hope that leaders will satisfy their needs for security (Collinson, 2006: 183). Shamir (2004) also suggests that meaning-based followers fear chaos and look to leaders to provide advice, order and meaning (Collinson, 2006: 183). Finally Shamir (2004) proposes that identity-based followers seek to enhance their own self-esteem by identifying with leaders they perceive as powerful and attractive (Collinson, 2006: 183).

Views held by followers of leadership behaviours are characterised by the nature of the relationship between leaders and followers. Followers will endorse leaders they see as quintessentially embodying the values of groups with which they strongly identify (Hogg, Martin, & Weeden, 2003). It is thus the interrelationship between leaders and followers that constitutes their unique realities (Küpers, 2007: 209 and Mushonga & Torrance, 2008). Newcombe and Ashkanasy (2002) have found that leaders' emotional expressions are more important to followers than the objective content of their communication. Yukl (2006) suggests that followers are more effective when they view themselves as active and independent rather than passive and dependent on the leader.

Blackshear (2003) describes five stages of follower performance. Stage one is characterised by the employee providing work in return for some form of pay (thus becoming an employee) (Blackshear, 2003). Stage two occurs when an employee is committed and bound to the mission, idea, organisation, or has an internal pledge to an effort or person (Blackshear, 2003). Stage three transpires when the follower engages as an active supporter, willing to go above and beyond the routine (Blackshear, 2003). Stage four becomes imminent when the follower is capable, dependable and effective (Blackshear, 2003). Stage five is apparent when the follower sets ego aside and works to support the leader by leading as an exemplary follower (Blackshear, 2003).

Employee performance affects organisational achievement and leaders of organisations influence follower achievement (Northouse, 2007). Lord and Brown (2004) state that leaders are influential because of their impact on their followers' self-concepts. The study of involvement of followers within the leadership dynamic deserves further attention. A need exists to understand cognitive frames and logic (thus conceptualising followers' introspection

and cognition as the encoding of a variety of previous experiences and contexts) that guided mentioned understanding of beliefs and reported behaviours.

2.3.3. An overview of leadership and followership research

Research in leadership studies has tended to focus on the leader as the primary element of the leader-follower relationship (Kellerman, 2007, Shamir, 2007 and Kirchhubel, 2010). Moreover little empirical research on exactly what team leaders do to assist team effectiveness has been undertaken by the research community (Guzzo & Dickson, 1996 and Kozlowski & Bell, 2003). Collinson (2006: 179) and Kirchhubel (2010: 18) state that research on leadership has historically been heavily leader-focused with little attention paid to followers. Studies have typically concentrated on leaders as if they were entirely separate from those they lead whereas followers have tended to be treated as an undifferentiated mass or collective (Collinson, 2006: 179 and Boezeman & Ellemers, 2008). Leadership theories and paradigms have been criticised for being too concentrated on leaders (Kellerman, 2007, Vroom & Jago, 1988 and Shamir & Howell, 1999). Howell and Shamir (2005) reported that most theories are leader-focused unidirectional exercises that leave followers unexplored (Dixon, 2009: 34). This focus has led to the false impression that leaders are more important than followers (Riggio, Chaleff & Lipman-Blumen, 2008 and Kirchhubel, 2010).

Ilies, Morgeson and Nahrgang (2005) and Osbaldeston (2010) suggest that future research should examine how authentic leadership relates to other leadership constructs such as relational leadership approaches and leader behaviours. Research in this regard indicates that both leaders and followers express their emotions to a higher degree (thus employees mostly express what they feel) than suppressing them (Tschan, Rochat & Zapf, 2005). Swann, Chang-Schneider and McClarty (2007) mention a key question regarding what constitutes leaders' working self-concept and/or identity with respect to how they go about influencing others. Holcomb (2008: 779) states that successful leaders should understand that the expectations followers have about how their leaders should behave directly impact the effectiveness and efficiency of the work unit. Leaders must understand the dynamics of "followership" and harness its energy (Holcomb, 2008: 779, Jackson & Parry, 2008 and Mushonga & Torrance, 2008). Effective leadership and effective followership requires a partnership between leaders and followers in a fashion that meets the needs and advances the objectives of both.

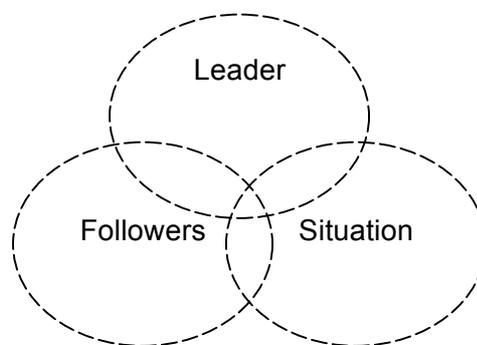
Kark and Van Dijk (2007: 500) and Kellerman (2007) state that the leadership literature, in general, has paid limited attention to the underlying psychological processes and mechanisms through which leaders motivate followers. Followers have often been systematically devalued (Alcorn, 1992 and Kirchhubel, 2010) or manipulated in a given subject-object relationship (Küpers, 2007: 195). Barbuto (2000) suggests that understanding the follower's perspective will improve the chance of success of the leader (Dixon, 2009: 35). Yukl (1999) has suggested that to improve understanding of normative models of leadership such as transformational and transactional, future research should include follower characteristics.

Avolio, Walumbwa and Weber (2009) state that "perhaps one of the most interesting omissions in theory and research on leadership is the absence of discussions of followership and its impact on leadership". Avolio, Walumbwa and Weber (2009) state that "leadership researchers treat follower attributes as outcomes of the leadership process as opposed to inputs, even though there have been a number of calls over the years to examine the role that followers play in the leadership process". Stetz, Stetz and Bliese (2006) and Shamir (2007) made some specific recommendations for future work on follower-centred research, including examining how followers' expectations, values and attitudes determine leader behaviour; how followers' expectations affect the leader's motivation and performance; and how followers' acceptance of the leader and their support for the leader affect the leader's self-confidence, self-efficacy and behaviour.

What makes leadership effective in an organisation? Scholars have been preoccupied with addressing this key question perhaps since the inception of leadership as a formal field of scientific inquiry (Seyranian, 2009: 152). One classic approach that gained prominence during the 1970s and 1980s is contingency theories of leadership (Seyranian, 2009: 152). Contingency theory suggests that a leader's effectiveness depends on how well the leader's style fits with the context (Wilson, 2004: 15). Contingency theories hold that leadership effectiveness is related to the interplay of a leader's traits or behaviours and situational factors (Seyranian, 2009: 152). Lord and Maher (1993: 11) state that leadership research should involve behaviours and traits produced by leaders, as interpreted by followers (Andrews & Field, 1998: 128). It is therefore suggested that any resolution of the question "what is leadership?" must look within the mind of the follower to observe and understand the process of influence (Andrews & Field, 1998: 128). Socialisation and exposure to leadership phenomena leads one to structure knowledge about that construct in the form of frames or mental models held by followers (Andrews & Field, 1998: 128).

Fiedler's (1971) contingency theory defines how enduring leader attributes interact with situational parameters to influence leader effectiveness. Contingency theories emphasise that leadership cannot be understood in a vacuum separate from various elements of the group or organisational situation (Daft, 2008: 21). According to Fiedler (1967 & 1972), leaders can determine whether the situation is favourable to their leadership style (Daft, 2008: 89). Contingency approaches are defined as approaches that seek to delineate the characteristics of situations and followers and examine the leadership styles that can be used effectively (Daft, 2008: 66). According to Daft (2008: 65) the contingencies most important to leadership are the situation and the followers (depicted in Figure 2.2).

Figure 2.2. Contingencies most important to leadership



Source: Daft, R.L. 2008. *The leadership experience*. 4th ed. Mason: South-Western.

Fiedler (1967 & 1972) identified three contingency dimensions that define the situational factors (Robbins, 1993: 374). The first dimension is leader-member relations, describing the degree of confidence, trust, respect followers have in their leaders. The second dimension is task structure, describing the degree to which the task is structured and procedure-driven. The third dimension is position power, describing the extent of influence of the leader.

Contingency models argue for a fit between leader attributes and situational variables (Zaccaro & Horn, 2003). The contingency approach presents a perspective on management that emphasises that no single way to manage people or work is best in every situation (Raduan, Jegak, Haslinda & Alimin, 2009). This is due to differing environmental and organisational needs and structures that affect an organisation, coupled with differing resources and capabilities pertaining to an individual organisation (Raduan, Jegak, Haslinda & Alimin, 2009). The study of leadership is rooted in social psychology (Zaccaro & Horn, 2003) and leaders act in the context of a social system. Early authors seemed to be discussing leadership in the context of organisations that were larger than primary groups.

However they were not explicit about the settings to which their ideas applied (Raduan, Jegak, Haslinda & Alimin, 2009). In essence they seemed to assume that one type of leadership fits all situations. This assumption cannot be true because of context and setting differences within which leaders and leadership function and because of the complexity of organisations.

A contingency theory of leadership should take account of leader position and influence, as well as the congruence between leader and followers regarding goals and values. Furthermore such a theory should consider the anxiety present for the followers and the extent to which the leader can assuage it. In summary a study in this regard should consider both enablers and disablers associated with leadership. Any valid explanation of behaviour in organisations should begin with recognising the systemic nature and uniqueness synonymous with the organisation in question. This is important because organisational contexts influence and mediate the fundamental nature of leadership work, including those forces that animate or retard leadership initiatives or behaviours (Zaccaro & Horn, 2003: 774 and Zaccaro & Klimoski, 2001: 13).

This research project endeavours to further develop the social contingency theory in order to create a better understanding of leadership by emphasising the importance of context when studying leaders and leadership. It may be claimed that leaders are confronted continuously with uncertain tasks due to organisational dynamics. However leaders need to motivate followers to use their intellectual and creative powers to resolve the unknowns. Contingency theory represents a shift in leadership research from focusing on the leader to looking at the leader in conjunction with the situation in which the leader works (Wilson, 2004: 15). This research project acknowledges that leaders will therefore need sources of influence beyond that offered by their positions. It is asserted that such influence can be provided by means of effective leader and leadership development initiatives.

According to Hollander (1995) and Kirchhubel (2010) one of the major components of the leader-follower relationship is not only the leader's perception of himself or herself relative to his or her followers, but also how the followers perceive the leader. Howell and Hall-Merenda (1999) contended that in leadership research, a relationship of some sort between leader and follower is assumed and it is further postulated that the nature and quality of this relationship are essential to linking leader behaviour to follower response. Followers experience the reality of a leader's approach and action and are thus positioned to evaluate its effects on the relationship between a leader and his/her followers (Hollander, 1995 and Castro, Perinan & Bueno, 2008: 1842). Models of leadership should therefore take account

of the role of followers, their cognitions and their psychological states (Ilies, Morgeson & Nahrgang 2005; McCann, Langford & Rawlings, 2006 and Castro, Perinan & Bueno, 2008: 1842). Newell (2002) and Mushonga and Torrance (2008) acknowledge that a growing trend within the field of leadership studies is the importance of followership. Research in leadership and charismatic/transformational leadership in particular has been criticised for providing little information on the mechanisms through which leader behaviour influences group member behaviour (Hunt, 1999). Leadership cannot be studied without examining the needs and desires of followers (Van Vugt, 2006: 355 and Kirchhubel, 2010).

Leaders play an active although subtle role in the development of followers' perceptions of leaders and thereby contribute to the implicit theories of leadership held by followers (Glynn & Jamerson, 2006 and Gray & Densten, 2007). Recent studies of leadership focus less on skills and behaviours and more on relationships between the leader and the follower (Dering, 1998 and Kirchhubel, 2010). Cropanzano and Mitchell (2005: 882) state that within contemporary management research, the aspect of social exchange theory has garnered by far the most research attention in terms of workplace relationships. Social exchange theory stipulates that certain workplace antecedents lead to interpersonal connections, referred to as social exchange relationships (Cropanzano, Byrne, Bobocel & Rupp, 2001). Blau (1964) outlined exchange relations as causally related. For example, he argued that "the character of the relationship between exchange partners" might "affect the process of social exchange" (Blau, 1964: 97), meaning that the relationship influences the type of exchange (Cropanzano & Mitchell, 2005).

Social exchange as a theory can be thought of as a theoretical orientation or approach (Collett, 2010). It is a way of looking at social life and interaction and is used as a guiding principle to explore the benefits that people derive from and contribute to social interaction (Collett, 2010). Individuals initiate relationships that are valuable to them and maintain those relationships as long as they continue to benefit from the interactions (Rusbult & Buunk, 1993). The unit of analysis in each of these interactions is the relation rather than the individual (Collett, 2010). The social exchange theory is a commonly used theoretical base for investigating individuals' knowledge-sharing behaviour. Social exchange theory explains that the most fundamental form of social interaction is an exchange of benefits, which can include not only material benefits, but also psychological benefits such as expressions of approval, respect, esteem and affection (Wilson, 2004: 19). According to this theory, individuals regulate their interactions with other individuals based on a self-interest analysis of the costs and benefits of such an interaction (Brown & Mitchell, 2010, Homans, 1958 and Blau, 1964). This theory asserts that people develop attitudes toward other people and

things in the context of anticipated personal benefits and costs to be derived from contact with them (Brown & Trevino, 2006 and Blau, 1964). Whitener (2001: 516) has found that a well-established stream of research rooted in social exchange theory has shown that employees' commitment to the organisation derives from their perceptions of the employers' commitment to and support of them (Eisenberger, Fasolo & Davis-LaMastro, 1990, Hutchison & Garstka, 1996, Settoon, Bennett & Liden, 1996 and Wayne, Shore & Liden, 1997).

Emerson (1981) established the importance of networks in which exchange relations are embedded (Collett, 2010). Emerson (1981) postulates that even when individuals are ignorant about the structure that surrounds them, a larger social structure will affect their behaviours as a result of dyadic exchange relations (Collett, 2010). Emerson's (1981) theoretical contributions paved the way for others to systematically explore aspects of social exchange beyond power and dependence (Collett, 2010). More recently there has been a turn towards an interest in the affective and cognitive outcomes of exchange, including valued outcomes like positive emotion and social solidarity (Cook & Rice, 2006). Within an organisational context this interest is evident in Leader-member exchange theory. Leader-member exchange theory is based on the assumption that leaders establish a social exchange relationship with their employees and that the nature of this exchange relationship influences the manner in which the leader treats each individual employee (Wang, Law, Hackett, Wang & Chen, 2005).

The theory of social exchange and the norm of reciprocity can explain aspects of the relationship between the organisation and its employees (Whitener, 2001). Collett (2010) suggests that research needs to focus on the relational outcomes of exchange (Collett, 2008), including cohesion, commitment, trust, perceptions of fairness and positive emotion and regard. In addition Lawler (2002) presents a Relational Cohesion Theory and argues that individuals become committed not to another person but to the relation. Central propositions of the affect theory of social exchange (Lawler, 2001) are rooted in the effect of shared responsibility for outcomes and the attributions related to them (Collett, 2010). A micro social order is created (Lawler, 2002) and individuals come to see themselves as part of a group and act accordingly (Collett, 2010). Of special interest to social exchange theorists are differences in the parties involved in the relationships (Cropanzano & Mitchell, 2005: 883). In support of the mentioned view this research project did not consider a one-on-one type relation but considered a relation with and within a specific structure.

Contemporary leadership research explores how strongly leadership traits and behaviours are observed or are absent, as well as how leaders and followers interact within the context and situation, as presented by means of multiple stakeholder perspectives (Strang, 2005: 69). Accordingly this research project explored follower experiences and expectations of leadership behaviours in a defined safety-critical commercial environment with due consideration of Social Contingency Theory and Social Exchange Theory principles.

It is important to search for those leadership traits and behaviours that foster the development of leaders and organisations (Lang, 2001 and Wilson, 2004). Ehrhart and Klein (2001) state that additional research is needed to further explore the follower characteristics that influence followers' reactions to leaders. Hollander and Offermann (1990: 182) agree that there is a significant need for follower-centred approaches to leadership research.

2.3.4. Knowledge and organisational performance

According to Davenport and Prusak (1998), knowledge is "a fluid mix of framed experiences, values, contextual information and expert insight". Knowledge (as a strategy and as a resource to be managed) has gained popularity in business management practice and theory (Earl, 2001 and Singh, 2008). Knowledge management capacity plays a mediating role between strategic human resource practices and innovation performance (Chen & Huang, 2007). Innovation is extremely dependent on the availability of knowledge and therefore the complexity created by the explosion of richness and reach of knowledge has to be recognised and managed to ensure successful innovation (Du Plessis, 2007). In order to implement an appropriate knowledge management strategy the cultural, behavioural and organisational issues need to be dealt with before even considering technical issues (Nunes, Annansingh, Eaglestone & Wakefield, 2006 and Osbaldeston, 2010). It is therefore expected from leaders to appreciate present and future organisational focus and strategies by functioning both as an operational leader and strategic thinker (Osbaldeston, 2010). An organisational leader should accordingly be aware of the objectives and business processes of the organisational unit and then timely select the knowledge management strategy and objective in accordance with the business strategy, objective and success.

Organisations by their natures are political environments (Hill & Lineback, 2011: 97). Leaders can expect to find political conflict within an organisation due to diverse groups, differing objectives, competitiveness, interests, points of view and changing needs (Hill & Lineback, 2011: 77). The roles and responsibilities of leaders are constantly changing as a

result of workplace and workforce transformations (Hartley, 2000, Carmeli & Sheaffer, 2008, Hill & Lineback, 2011 and Osbaldeston, 2010). These transformations include amongst other rising levels of responsibilities, competitiveness, increased diversity, globalisation and technological changes. According to the concept of Psychological Contracts an individual has certain beliefs about what he/she thinks is expected of another in a relationship (Prilipko, Antelo & Henderson, 2011: 82). The concept suggests that when individuals are involved in a relationship, they have certain expectations about what the given relationship is going to produce (Prilipko, Antelo & Henderson, 2011: 82). Mentioned transformational forces and influences lead to a changing psychological contract in which stability and long-term relationships no longer underpin mentioned contract (Hill & Lineback, 2011). A new psychological contract that is increasingly temporary and transactional now emerges (Hill & Lineback, 2011: 25). Despite a new psychological contract it is prudent for leaders and followers to continuously produce results and ensure achievement of defined outcomes in spite of constant changes, rising complexities and knowledge advancements.

An understanding of leadership behaviours can contribute towards organisational knowledge creation. In this context knowledge is not restricted to formal training. Critics of formal training programs have claimed that formal training does not prepare managers to keep pace with the constant change that occurs in today's workplace (Hartley, 2000 and Carmeli & Sheaffer, 2008) and does not provide managers with sufficient real-world experience to develop proficiency (Sheckley & Keeton, 1999, Enos, Kehrhahn & Bell, 2003: 369 and Osbaldeston, 2010). Organisations therefore have an inherent interest in using both the business knowledge owned by the organisation and the personal knowledge of their employees (Gao, Li & Clarke, 2008: 4). Employees can help to improve business performance through their ability to generate ideas and use these as building blocks for new and better products, services and work processes (De Jong & Den Hartog, 2007: 41). Polanyi (1966) divides human knowledge into two dimensions: explicit knowledge (formalised and written knowledge and expressed in the form of data) and tacit knowledge (action-based and unformulated, highly personal and hard to transfer) (Gao, Li & Clarke, 2008: 5). Personal knowledge belongs to the person who possesses it rather than the organisation s/he works for, but it can be used by the organisation (Gao, Li & Clarke, 2008: 6). From an organisational perspective it may be sensible to move away from a fragmented and peripheral approach to leadership development towards linking leadership development to corporate strategy (Osbaldeston, 2010).

Successful integration and utilisation of information/data means that consistent and compatible mechanisms will be needed to handle the critical aspects of information

collection, content management and dissemination throughout a specific environment (Hamilton, 2003b: 65). An efficient reporting system that facilitates the monitoring of the performance of different departments contributes to the management of quality of work (Hamilton, 2003b). Such a system can consist of defined processes, reporting paths and supporting tools (Hamilton, 2003b). An organisational reporting system may also contribute to overall information and knowledge management. Such a system allows an organisation to realise the benefits of experience as defined activities are performed (Hamilton, 2003b). Effective networks are characterised by ongoing sharing of information, trust amongst stakeholders and favourable perceptions of the leader's competence (Hill & Lineback, 2011: 108 & 112). Sharing experience with other parts of the organisation contributes to the transfer of expertise as much as possible through the organisation in order to reduce the potential reliance on any individuals (Hamilton, 2003b). Osbaldeston (2010: 37) concurs that a leader must be able to process and make sense of a profusion of complex data from almost every source in the organisation.

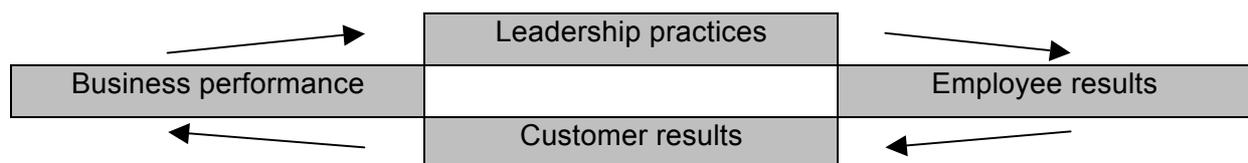
Obtaining and analysing personal knowledge requires dedicated effort. Three entities, namely the individual, the team and the organisation, are recognised as the key elements of the social construct of knowledge society (Lytras, 2005: 5 and Singh, 2008). Individual and team dynamics formulate a contextual environment where value exchanges are facilitated (Lytras, 2005: 6 and Hall & Lineback, 2011). Communication by leaders is considered to contain both affective and cognitive strategies (Hall & Lord, 1995 and Madlock, 2008: 61). When leaders effectively communicate their vision, values and intent they win the confidence of followers, which in turn aids in communication success between the leader and follower (Pavitt, 1999, Moore & Beadle, 2006, Spell & Arnold, 2007, Wright & Goodstein, 2007, Van Dick, Hirst, Grojean & Wieseke, 2007, Flynn, 2008 and Madlock, 2008: 61). The knowledge capacity of each person is in a continuing exchange with the environment of the individual, which can be the team, the leader and the organisation (Lytras, 2005: 6, Knights & Willmott, 2007 and Boezeman & Ellemers, 2008). Osbaldeston (2010) defines the leader's personal knowledge as "cognitive complexity", which refers to the ability of the leader to quickly process and make sense of complex issues and changing situations.

Drucker (1993) and Singh (2008) describe knowledge as a key resource for individual firms and the key driver of competitive advantage for developed nations that are competing in knowledge-based industries. Employee knowledge is valued because it can generate sustainable competitive advantage (Garrick, 1998 and Agashae & Bratton, 2001). Knowledge or intellectual capital need to be fostered within organisational contexts (Watkins & Cervero, 2000, Knights & Willmott, 2007 and Agashae & Bratton, 2001). Senge (1990a:

340) asserts that leaders are responsible for building organisations where people continually expand their capabilities to understand complexity, clarify vision and improve shared mental models. Such a change in thinking is explained by Osbaldeston (2010: 37); he differentiates between “doing” competencies” and “being” competencies. “Doing” competencies refer to leaders’ abilities to cope with constant pressures to deliver (Osbaldeston, 2010: 37). Osbaldeston (2010: 37) states that “being” competencies refer to the leader’s ability to quickly process and make sense of complex issues (cognitive complexity), his/her ability to have a strong understanding of his/her emotions (emotional energy) and being aware of one’s psychological make-up, ethics and values (psychological maturity). A leader’s personal and practical virtues impacts upon an organisation’s competitive advantage.

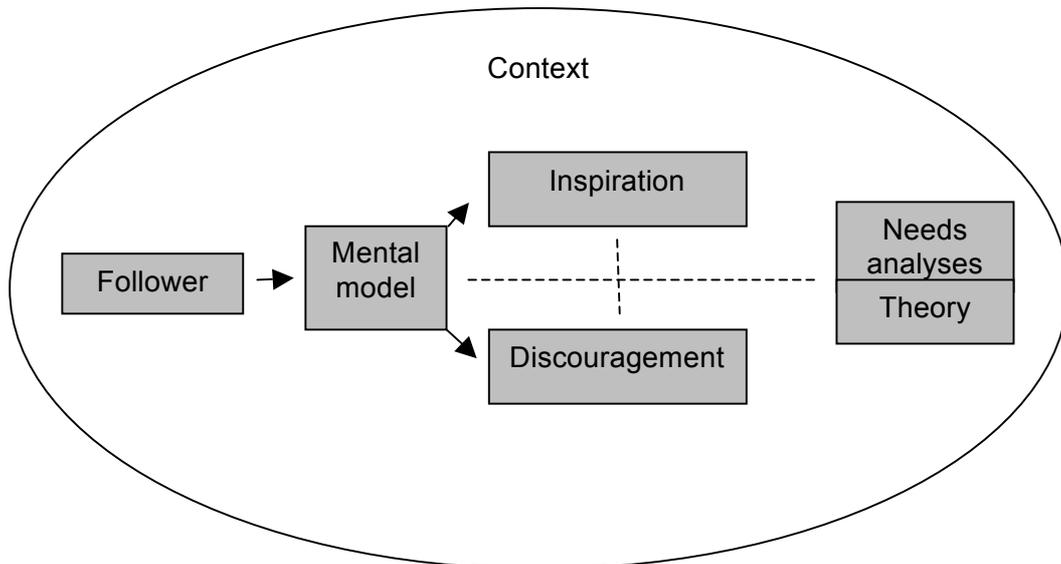
According to Kets de Vries (2001) the effectiveness of an organisation’s employees, who are in leadership positions, will determine how well the organisation will perform in future (Von Eck & Verwey, 2007: 44). The linkage research model (Figure 2.3) suggests that the more present certain organisational or leadership practices are in a given work environment, the more energised and productive the workforce. In turn the more energised and productive the workforce, the greater the satisfaction of customers and the stronger the long-term business performance of the organisation (Wiley & Brooks, 2000: 177 & 178). The link between leadership practices and employee results (as per Figure 2.3) serves as the point of interest as applicable to this research project. This research project encompasses a specific context as presented in Figure 2.4. Figure 2.4 illustrates that followers should be able to distinguish between encouraging and discouraging leadership behaviours by using different mental models. It is postulated that an analysis of follower feedback and an understanding of mentioned follower mental models may assist with leader training and development needs analyses. Furthermore it is suggested that these needs analyses may be linked to leadership theories. This work reinforces the importance of context and the details of the situation in order to link general theories with organisational reality.

Figure 2.3. The linkage research model (Wiley & Brooks, 2000: 178)



Source: Wiley, J.W. & Brooks, S.M. 2000. “The high-performance organizational climate”. In: Ashkanasy, N.M., Wilderom, C.P.M. & Peterson, M.F. eds. *Handbook of Organizational Culture & Climate*, Thousand Oaks: Sage. 177-191.

Figure 2.4. Research project illustration



Compiled by the researcher

This project probed leadership behaviour data by examining follower perceptions of leaders within a South African Air Navigation Service Provider (Air Traffic and Navigation Services Company). By studying leader-follower interactions, an understanding of framed experiences, values, contextual information and expert insights (contextualised as knowledge management) in response to business strategies and objectives were achieved. Such understanding illustrated the knowledge management efforts, networks, obstacles and benefits that prevail within the Air Traffic and Navigation Services Company and also highlighted the contributions made by leaders and followers towards mentioned knowledge management.

2.3.5. Followership

Noticing other people means recognising their importance and value (Van Quaquebeke & Eckloff, 2010: 344). It means actively confronting oneself with the task to find out who or what they “really” are (Van Quaquebeke & Eckloff, 2010: 344). This includes being consciously aware of the presence, conduct and actions of the other person in one’s own environment, thus recognising and understanding his/her role appropriately in the context of the situation (Van Quaquebeke & Eckloff, 2010: 344). The wellness of human self-realisation relies upon self-acceptance, environmental mastery (the capacity to manage effectively one’s life and the surrounding environment), purpose in life, positive relationships, personal growth and autonomy or self-determination (Ryff, 1989 and Ryff & Keyes, 1995).

Ryff and Singer (2000) state that mentioned criteria shape self-realisation. Positive self-realisation emphasises the value and importance of constructive interpersonal situations and relationships. Quality of leader-follower exchange has been found to be positively related to follower's satisfaction, organisational commitment, role clarity, performance ratings given by leaders and objective performance and negatively related to role conflict and turnover intentions (Bauer & Green, 1996 and Glynn & Jamerson, 2006). Leader behaviour is subsequently cognitively evaluated, interpreted and labelled by followers.

An organised collection of individual beliefs can consequently be viewed as the formation of a mental model; albeit a shared mental model. Decision theorists Lipshitz and Ben Saul (1997: 293) and Johnson (2008: 86) define mental models as "specific situation representations, differentiating them from schemata which are more enduring abstract cognitive structures which help shape the mental model". Mental models are deeply ingrained assumptions, generalisations and images we have to understand the world (Senge, 1990a & 1990b and Johnson, 2008: 86). The Mental Model is part of the cognitive system of the person (Sauermann, Van Elst & Dengel, 2007: 271 and Johnson, 2008: 86). Subject to the person, the mental model is individual and cannot be externalised thoroughly (Sauermann, Van Elst & Dengel, 2007: 271). Individuals use the meanings of propositions and general knowledge to construct mental models (Johnson-Laird, 2006). Mental models represent people's experiences (Van Dijk, 2006). Mental models are subjective and possibly consist of biased representations of reality (Van Dijk, 2006: 169). These may also feature evaluations of events or situations (opinions), as well as emotions associated with such events (Van Dijk, 2006: 169).

Mental models are useful or functional in that they allow people to make predictions or explain phenomena or events (Greca & Moreira, 2000). Mental models are formed over a period of time by various experiences of a similar nature (Lipshitz & Ben Shaul, 1997 and Berryman, 2007). These mental models are always under construction and based on new knowledge, ideas, conceptions and experiences. They are personal, idiosyncratic and often unstable (Greca & Moreira, 2000). A mental model refers to a specific mental representation of information about reality, which encompasses the context into which such a mental model is embedded and which gives sense and meaning to it. Mental models are relevant for meaningful interaction and understanding (Van Dijk, 2006). It is accepted that mental models are incomplete and constantly evolving (Johnson-Laird, 1983). Mental models may also contain errors, misconceptions and contradictions (Johnson-Laird, 1983). Mental models may furthermore provide simplified explanations of complex phenomena (Johnson-

Laird, 1983). Mental models often contain implicit measures of uncertainty about their validity that allow them to be used even if incorrect (Johnson-Laird, 1983).

In the workplace both demonstration and development of mental models are also shaped by values held by staff, specific work goals and the planned work actions intended to achieve those goals (Beach, 1993). According to Glaso and Einarsen (2006) leader-subordinate relationships are influenced by positive and negative moods, emotions and emotion-laden judgements. Osbaldeston (2010: 37) provides further guidance by proposing that leadership competencies include cognitive complexity, emotional energy and psychological maturity. Personal competencies, social environments and work environments may therefore support the construction of social reality and influence it.

When seeking and using information, people must make choices by drawing on experience, personal preferences and possibly personal interaction with contextual factors (Kuhlthau, 2004 and Berryman, 2007). A decisional response, then, can be understood as that point at which an individual commits to action, a commitment which comes after an appraisal of the options available (Harrison, 1999 and Berryman, 2007: 2). A decisional response can also be influenced by levels of uncertainty (Berryman, 2007). Because of uncertainty, people may use estimates of probability (readily available recollections or familiar positions) in developing heuristics (rules for making decisions with realistic mental resources) that guide their decisional responses (Mellers, Schwartz & Cooke, 1998 and Berryman, 2007).

On the basis of a constructivist theory of learning the conceptual change approach emphasises that knowledge is not always cumulative in the sense that new knowledge is only “added” to the prior knowledge (as a process of enrichment) (Prediger, 2008). Instead, new knowledge acquired often necessitates the reconstruction of prior knowledge when confronted with new experiences and challenges (Prediger, 2008). Problems of conceptual change can appear when the followers’ prior knowledge is incompatible with the necessary new conceptualisations (Carmeli & Sheaffer, 2008 and Prediger, 2008). Hence in this perspective the fact that followers’ conceptions are not always aligned and/or compatible with prior conceptions can possibly be explained by the influence of prior conceptions and non-accomplished processes of these reconstructions (Prediger, 2008). If, according to Posner, Strike, Hewson and Gertzog (1982) and Prediger (2008) there is discontent with the existing conception, then the new conception appears comprehensible (hence it makes sense to the person). When the new conception appears likely (can offer a better explanation than the existing one) and it appears pertinent (can be applied in a broader context) then the possibility of bringing about conceptual change is enhanced.

Discrepancies between these individual conceptions are not seen as individual deficits but as typical stages of transition in the process of reforming knowledge (Duit, 1999).

Mental modelling may also be influenced by knowledge convergence; processes by which two or more people share mutual understanding through social interaction, (reflecting the fundamentally social nature of the knowledge construction process) (Brown & Campione, 1996, Jeong & Chi, 2007, Johnson, 2008 and Ibarra & Barbulescu, 2010). Knowledge convergence occurs because the shared nature of collaboration leads to an increased similarity in the cognitive representations of the group members (Jeong & Chi, 2007: 288). Group members could have the same or similar knowledge because their members experience the same environmental conditions or because members collaboratively interpret a situation or solve a problem together (Jeong & Chi, 2007: 291). A result of knowledge convergence is an increase in common knowledge following collaboration (directed by group interaction and/or sharing the same input) (Jeong & Chi, 2007: 289 & 312). This phenomenon is also termed and described as a shared mental model. Shared mental models refer to an organised mental representation of knowledge of team tasks, equipments, roles, goals and attitudes shared by team members (Cannon-Bowers, Salas & Converse, 1990 and Lim & Klein, 2006).

According to Cannon-Bowers and Salas (2001) four types of mental models can be shared by team members (Chou, Wang, Wang, Huang & Cheng, 2008: 1716). These mental models refer to task-specific knowledge (refers to knowledge about the exact procedures, sequences, actions and strategies that are necessary to carry out a task), task-related knowledge (refers to knowledge of information on team roles/responsibilities and interaction patterns), knowledge of teammates (involves team members' knowledge of one another – colleagues' preferences, strengths, weaknesses and tendencies to capitalise on team performance) and knowledge of attitudes or beliefs (refers to knowledge of colleagues' common attitudes, values, or beliefs toward work tasks, working environments or the work itself) (Cannon-Bowers & Salas, 2001 and Chou, Wang, Wang, Huang & Cheng, 2008: 1716). Shared mental model theory posits that when team members are alike in terms of their values, those shared values result in congruous interpretations and attuned perceptions about tasks and environments (Cannon-Bowers & Salas, 2001 and Chou, Wang, Wang, Huang & Cheng, 2008: 1717).

Perspective transformations are achieved by means of an assessment of the justification of beliefs, ideas and feelings; identified as reflection (Mezirow, 1993: 187 and Agashae & Bratton, 2001: 92). Such self-awareness includes being aware of one's strengths and

weaknesses as well as understanding one's emotions and personality (Ilies, Morgeson & Nahrgang, 2005 and Stetz, Stetz, & Bliese, 2006). Understanding one's emotions is a component of emotional intelligence (Ilies, Morgeson & Nahrgang, 2005). Reflective activities suggest a connection to Senge's (1990a & 1990b) discipline of mental models (Agashae & Bratton, 2001: 92), which are "deeply held internal images of how the world works, images that limit us to familiar ways of thinking and acting" (Senge, 1990a: 174-176). Followers were required to reflect on leadership behaviours and then intentionally apply the results of mentioned reflection to further their appreciation of leadership performances. A central process in developing reflective thinking is metacognition. Reflection had to consider (necessitating individuals' reflective responses) making sense of leadership views held, knowledge of leadership strategies and methods, knowledge and understanding of thinking processes, monitoring and evaluation of leadership behaviours from the success (or otherwise) of chosen strategies or methods and making connections across contexts.

Follower identities may possibly be more complex than previously acknowledged and studies of leadership need to develop a broader and deeper understanding of followers' identities and of the multifaceted ways that these selves may interact with those of leaders (Collinson, 2006: 186 and Sluss & Ashforth, 2007). A follower's self-concept informs all he or she does and can augment or hinder the relationship between that of the leader and follower (Day & Harrison, 2007 and Uhl-Bien & Pillai, 2007). Followers can determine the quality of their own followership and the leadership relationship (Uhl-Bien & Pillai, 2007). This process of transformation is founded on empathy, understanding, insight and consideration exhibited by leaders; not manipulation, power wielding, or coercion by leaders (Crawford, 2005: 8).

It may be concluded that followers' views, especially their image of leaders in general or of ideal leaders as well as their needs within a defined context, influence their perceptions and expectations of the value of their relationship with their leader. Schon (1983) and Brookfield (1995) suggested that knowledge constructions and beliefs can be distinguished and corrected through reflection. Critical reflection allowed followers to identify assumptions that underlined their thoughts and actions. An objective of this research project was to identify and understand followers' mental models (by permitting followers to disclose their existing paradigms, which in turn informed their mental models).

2.3.6. Views held by followers with regard to leadership behaviour qualities

The term “views” incorporates both follower experiences and expectations. Follower experiences as applicable to this study acknowledged that one's past experiences influence one's current and future views. Follower experiences translate as personally significant or meaningful encounters, guided by reflective thoughts. Experienced leadership behaviours and qualities shape followers' mental models and subsequently facilitate critical evaluations of leadership. Follower expectations are presented as evidence that confirms prospects and previously existing beliefs. Expected leader behaviours and qualities influence the mental models used and held by followers to critically evaluate leadership. Follower expectations had to be confirmed by considering espoused follower experiences in order to validate follower views.

Hollander (1992a & 1992b) acknowledges that a central part of the leadership-followership relationship is found in the followers' perception of the leader. Followers may elect not to follow the leader's instructions because followers may disagree with the leader, may not perceive a similar priority, may not understand instructions, may dislike/distrust the manager/leader, may hold different views on authority or they may be confused (Hill & Lineback, 2011: 39). Northouse (2007) and Allio (2009) recognise the importance of a positive leader-follower relationship as it relates to a more productive work environment and satisfaction within the workforce. Leadership is a social phenomenon loaded with symbolism and power that manifests itself through interaction between leaders and followers (Lynham & Chermack, 2006, Glynn & Jamerson, 2006, Karp & Helgo, 2008: 35 and Hur, 2008). The sociological and psychological literature on the follower's experience “tells us that people seek, admire and respect – that is, they follow – leaders who produce within them three emotional responses (a feeling of significance, a feeling of community and a feeling of excitement)” (Goffee & Jones, 2001: 148). Leadership views held by followers are accordingly comprehended by the linking of the interior world of moral reflection with the outer world of work and social relationships (Fairholm, 2004: 581).

Followers' views pertaining to leadership behaviour assessments appear to be directed by relationships, transformational and supportive qualities, initiatives and actions. In support of this statement Laub (1999) describes six constructs in his Organisational Leadership Assessment (OLA). The first construct refers to valuing people – leaders approach others with an understanding that each person is valuable (Laub, 1999). A second construct refers to developing people – leaders understand the potential of others to grow (creating a learning environment) (Laub, 1999). A third construct refers to building a community –

leaders and followers work together and inspire collaborative behaviours that build a partnership for team achievement (Laub, 1999). Hill and Lineback (2011: 137) propose that too many managers fail to see the management possibilities of using a team to influence other people. A fourth construct refers to displaying authenticity – leaders understand that they have a number of things to learn from followers (this leads to follower trust and increased involvement) (Laub, 1999). A fifth construct refers to providing leadership – leaders initiate action to serve the needs of the organisation and team and set direction as they communicate with their followers (Laub, 1999). The sixth construct refers to sharing leadership – leaders recognise that they have positional authority and power, however, they acknowledge that decision-making power is shared and followers are encouraged to act accordingly (Laub, 1999).

The Gallop Organisation also found that talented employees (employees that need to thrive, stay engaged and strive to do their best at work) need great leaders (Forbringer, 2002). The Gallop Organisation compiled a questionnaire comprising 12 questions (Q-12 Survey) to measure the core elements needed to attract, focus and keep the most talented employees (Forbringer, 2002). Questions posed are listed below (Forbringer, 2002):

1. Do you know what is expected of you at work?
2. Do you have the materials and equipment you need to do your work right?
3. At work, do you have the opportunity to do what you do best every day?
4. In the last seven days, have you received recognition or praise for doing good work?
5. Does your supervisor, or someone at work, seem to care about you as a person?
6. Is there someone at work who encourages your development?
7. At work, do your opinions seem to count?
8. Does the mission/purpose of your company make you feel your job is important?
9. Are your associates (fellow employees) committed to doing quality work?
10. Do you have a best friend at work?
11. In the last six months, has someone at work talked to you about your progress?
12. In the last year, have you had opportunities at work to learn and grow?

Q-12 survey results collected from 2,500 business units (with responses from over 105,000 employees) indicate that employees who responded more positively to the twelve questions also worked in business units with higher levels of productivity, profit, retention and customer satisfaction (Forbringer, 2002). According to Forbringer (2002) these findings indicate that employee responses were driven not by the policies or procedures of the company, but by the influence and ability of the employee's immediate supervisor.

Leaders have to actively engage the organisation in order to exercise their influence, meet objectives, represent and/or negotiate for their teams and to protect their teams (Hill & Lineback, 2011: 85-88). Leadership behaviour qualities are also shaped by followers' observations, values, perceptions and perspectives. Interpersonal styles of different leaders and the interpersonal context they create with their subordinates will vary (Ilies, Morgeson & Nahrgang, 2005: 386 and Kark & Van Dijk, 2007). Therefore the quality of the relationships between leaders and followers is likely to have a meaningful effect on follower wellbeing and leaders can influence the quality of these relationships (Ilies, Morgeson & Nahrgang, 2005: 386). Castaneda and Nahavandi (1991) suggest that followers who perceive their leaders' behaviours to exhibit both relationship orientation and task orientation report being the most satisfied (Madlock, 2008: 62). Ilies, Morgeson and Nahrgang (2005) assert that authentic leaders are aware of their values and beliefs. They are self-confident, assertive, genuine, reliable and trustworthy and they focus on building followers' strengths, broadening their thinking and creating a positive and engaging organisational context (Avolio & Gardner, 2005, Gardner, Avolio, Luthans, May & Walumbwa, 2005, Walumbwa, Avolio, Gardner, Wernsing & Peterson, 2008 and Osbaldeston, 2010). Lynch (2001) and Parolini (2005: 5) assert that the purpose of a leader's vision is to create shared vision and purpose, inspire interest and passion, guide individual and organisational decision-making and convey values.

Choo (1998) agrees that knowledge could be shared explicitly and implicitly among employees who interact with each other and with the social dimensions of their work tasks and organisational setting (Enos, Kehrhahn & Bell, 2003: 379 and Hur, 2008). Goleman (1998) explains that social skill persuades others to respond to leadership through influence, communication that is inclusive of listening and convincing messages, inspiration and guidance, initiating and managing change, building networks of instrumental relationships, collaborating and cooperating towards shared goals and creating team synergy in pursuing collective goals (Parolini, 2005: 5). Followers may elect to consider and pay attention to different leadership behaviour qualities and characteristics based on followers' mental models and foci influences and diversities. According to Fairholm (2004: 581) capturing the spirit of followers at the emotional, but also at the value, intellectual and technical levels are essential when studying leadership behaviour.

2.3.7. Leader behaviour qualities that inspire followership

Subordinate performance can be enhanced by leader behaviours that fulfil subordinate personal needs (Knight, Shteynberg & Hanges, 2004: 1165). When need fulfilment is in the

follower's mind, contingent on goal-directed behaviour, it can increase the positive valence of goal-directed effort (Knight, Shteynberg & Hanges, 2004: 1165).

Leaders would be more likely to win the support of followers if they appear to behave in ways that are congruent with follower implicit theories of leadership (Gray & Densten, 2007: 561). Leaders can influence followers to view reality as patterns of behaviour (Senge, 1990a: 353 and Agashae & Bratton, 2001: 94). Identifying patterns of behaviour helps to focus towards longer-term trends and their implications (Senge, 1990a: 353 and Agashae & Bratton, 2001: 94). De Jong and Den Hartog (2007: 45) state that the quality of the relationship between a leader and follower influences outcomes such as subordinate satisfaction, supervisor satisfaction, performance, commitment, role conflict, role clarity and turnover intentions (Yukl, 2006). Leaders can exercise influence by building a network of key relationships and then using these networks to negotiate support, resources and information/knowledge (Hill & Lineback, 2011: 95 & 97). Leaders should ensure that individuals or groups are competent to exercise the responsibility that is given to them, understand the goals of the organisation and are committed to them (Blanchard, 1996, Handy 1996, Cavell, 2007 and Winsborough, Kaiser, & Hogan, 2009). Sustainable and forceful leadership will more frequently come from sources of recognition, credibility, trust and respect; all psychological processes that emerge from cooperative and supportive human interaction (Castiglione, 2006, Karp & Helgo, 2008: 35 and Sendjaya & Pekerti, 2009).

Leadership influence stems from the success of leaders in connecting followers' self-concepts to the aims of the work group and organisation (Van Dick, Hirst, Grojean & Wieseke, 2007: 137). Follower performance may increase when leadership behaviours provide evidence that the organisation is desirable and attractive (Van Dick, Hirst, Grojean & Wieseke, 2007: 137). Leaders must be able to define the future that will allow a team to have purpose, focus and goals (Hill & Lineback, 2011 and Osbaldeston, 2010). Defining the future keeps the team, its leader and his/her network focused on important aspects (Hill & Lineback, 2011: 149 and Osbaldeston, 2010). The relationship between leaders and followers is dependent upon a shared social identity (Van Dick, Hirst, Grojean & Wieseke, 2007: 137). Authentic leaders have more satisfied followers because their goals focus on values and wellbeing, in addition to individual and organisational performance (Ilies, Morgeson & Nahrgang, 2005: 283 and Walumbwa, Avolio, Gardner, Wernsing & Peterson, 2008).

Leadership behaviour qualities that evoke positive followership can be understood in terms of supporting leader behaviours and emotional intelligence, as well as leadership styles. Definitions of supporting leader behaviours associated with high-exchange relationships (Graen & Cashman, 1975, Castiglione, 2006, Yukl, O'Donnell & Taber, 2009: 292 and Winsborough, Kaiser & Hogan, 2009) are listed as:

- Supporting – Acting considerate, showing sympathy and support when someone is upset or anxious and providing encouragement and support when there is a difficult, stressful task.
- Recognising – Providing praise and recognition for effective performance, significant achievements, special contributions and performance improvements.
- Developing – Providing coaching and advice, providing opportunities for skill development and helping people learn how to improve their skills.
- Consulting – Checking with people before making decisions that affect them, encouraging participation in decision making and using the ideas and suggestions of others.
- Delegating – Assigning new responsibilities and additional authority to carry them out and trusting people to solve problems and make decisions without getting prior approval.
- Clarifying – Assigning tasks and explaining job responsibilities, task objectives and performance expectations.
- Short-term planning – Determining how to use personnel and resources to accomplish a task efficiently and determining how to schedule and coordinate unit activities efficiently.
- Monitoring operations – Checking on the progress and quality of the work and evaluating individual and unit performance.
- Leading by example – Setting an example of exemplary behaviour for subordinates and modelling behaviours that reflect the leader's values and standards.
- Envisioning change – Describing appealing outcomes that can be achieved by the unit, describing a proposed change with great enthusiasm and conviction.

Leadership styles that emphasise supporting leader behaviours and the role, contribution and influence of followers include transformational leadership, servant leadership (Matteson & Irving, 2006, Herman, 2010 and Savage-Austin & Honeycutt, 2011) and empowering leadership. For empowered teams with complex tasks, gains could be realised from increased emphasis on transformational, servant and empowering leadership (Pearce & Sims, 2002: 184, Stone, Russell & Patterson, 2004: 354 and Savage-Austin & Honeycutt,

2011). Transformational leadership refers to leaders at any level in the organisation (Vera & Crossan, 2004). Transformational leadership is a relationship in which leaders' and followers' purposes, which might have started out as separate but related, become merged, leading to greater leader-follower congruence in value hierarchies (Krishnan, 2005: 444-445).

Values are intertwined and therefore analysing a person's values separately and independently of one another cannot meaningfully explain attitudes and behaviours (Krishnan, 2005: 444). Transformational leadership adopts a symbolic emphasis on dedication to a team vision, emotional engagement and fulfilment of higher-order needs such as meaningful professional impact or desires to engage in breakthrough achievements (Pearce, 2004). Transformational leaders transform the personal values of followers to support the vision and goals of the organisation by fostering an environment where relationships can be formed and by establishing a climate of trust in which visions can be shared (Bass, 1985).

The four primary behaviours that constitute transformational leadership are idealised influence (the charismatic element of transformational leadership in which leaders become role models who are admired, respected and emulated by followers); inspiration/motivation (leaders motivating others by providing meaning and challenge to their followers' work); innovation (leaders stimulating followers' efforts to be innovative and creative by questioning assumptions, reframing problems and approaching old situations in new ways) and personal attention to followers based on the individual follower's needs for achievement and growth (Avolio & Bass, 2002, Barbuto, 1997, Bass, 1985 and Bass & Avolio, 1994).

Hater and Bass (1988) found transformational leadership to be positively correlated with how effective subordinates perceive leaders, how much effort they say they will expend for the leader and how satisfied they are with the leader. Views of transformational leadership behaviours expressed by other authors (Kent, Crotts & Azziz, 2001: 224 and Higgs, 2003) are summarised in Table 2.2.

Table 2.2. Views of Transformational Leadership behaviours

Bass (1985) and Bass and Avolio (1994)	Coinciding views
Intellectual stimulation	<ul style="list-style-type: none"> • Attention through vision (Bennis & Nanus, 1985). • Sensing opportunity, formulating a vision and empowering others to achieve the vision (Conger, 1989). • Establishing direction (Kotter, 1990a). • Inspiring a shared vision (Kouzes & Posner, 1995). • Visioning (Kent, Graber & Johson, 1996).
Charisma	<ul style="list-style-type: none"> • Meaning through communication (Bennis & Nanus, 1985). • Communicating a vision that inspires (Conger, 1989). • Communicating for meaning (Kent, Graber & Johson, 1996).
Individualised consideration	<ul style="list-style-type: none"> • Deployment of self (Bennis & Nanus, 1985). • Encouraging commitment in followers (Conger, 1989). • Aligning people (Kotter, 1990a). • Enabling others to act (Kouzes & Posner, 1995). • Enlisting and developing stakeholders (Kent, Graber & Johson, 1996).
Inspiration	<ul style="list-style-type: none"> • Trust through positioning (Bennis & Nanus, 1985). • Building trust through personal commitment (Conger, 1989). • Motivating and inspiring (Kotter, 1990b). • Encouraging the heart (Kouzes & Posner, 1995). • Building wilfulness and spirit (Kent, Graber & Johson, 1996).
Idealised influence	<ul style="list-style-type: none"> • Attention through vision (Bennis & Nanus, 1985). • Modelling the way (Kouzes & Posner, 1995). • Managing oneself (Kent, Graber & Johson, 1996).

Source: Kent, T.W., Crotts, J.C. & Azziz, A. 2001. "Four factors of transformational leadership behaviour", *Leadership and Organizational Development Journal*, 22(5): 221-229.

Greenleaf (1977) suggests that a leader's purpose is to serve in order to develop the follower for the follower's sake (Stone, Russell & Patterson, 2004: 354). This study also relies on servant leadership theory because of its emphasis on the follower and its de-emphasis on the leader. Both transformational and servant leadership (depicted in Table 2.3) are viewed as being people-oriented leadership styles and incorporate- influence, vision, trust, respect or credibility, risk-sharing or delegation, integrity and modelling

(Baicher, 2005: 40 and Sendjaya & Pekerti, 2009). Both transformational leadership and servant leadership emphasise the importance of appreciating and valuing people, listening, mentoring or teaching and empowering followers (Stone, Russell & Patterson, 2004: 354, Barbuto & Wheeler, 2006, Herman, 2010 and Savage-Austin & Honeycutt, 2011).

Transformational and servant leadership are probably most similar in stressing individualised consideration and appreciation of followers (Baicher, 2005, Matteson & Irving, 2006 and Parolini, Patterson, & Winston, 2009). The principal difference between transformational leadership and servant leadership is the focus of the leader (Stone, Russell & Patterson, 2004: 354 and Barbuto & Wheeler, 2006). Transformational leaders and servant leaders both show concern for their followers. However the focus of the servant leader is upon service to their followers and the focus of the transformational leader is to get followers to engage in and support organisational objectives (Stone, Russell & Patterson, 2004: 354 and Matteson & Irving, 2006).

Table 2.3. Transformational and Servant leadership competencies

Transformational leadership competencies	Servant leadership competencies
<i>Charisma</i> Vision, trust, respect, risk-sharing, integrity, modelling	Influence, credibility and competence, delegation, vision, trust, honesty and integrity, modelling , visibility, service
<i>Individual consideration</i> Personal attention, mentoring, listening, empowerment	Appreciation for others, encouragement, teaching, listening, empowerment
<i>Intellectual stimulation</i> Rationality, problem-solving	Pioneering, persuasion
<i>Inspiration</i> Commitment to goals, communication, enthusiasm	Stewardship, communication

Sources:

Baicher, R. 2005. Leadership Competencies of Successful Business Leaders in South Africa. MBL dissertation. University of South Africa.

Stone, A.G., Russell, R.F. & Patterson, K. 2004. "Transformational versus servant leadership: a difference in leader focus", *The Leadership & Organization Development Journal*, 25(4): 349-361.

Five types of organisational citizenship behaviours (Organ, 1988) encouraged by transformational leadership may further explain and create understanding associated with follower cognitive frames (Podsakoff, MacKenzie, Moorman & Fetter, 1990: 115). The five types of organisational citizenship behaviours (Organ, 1988) pertinent to followers are altruism (discretionary behaviours that have the effect of helping a specific other person with an organisationally relevant task or problem), conscientiousness (discretionary behaviours on the part of the employee that go well beyond the minimum role requirements of the organisation, in the areas of attendance, obeying rules and complying with regulations), sportsmanship (willingness of the employee to tolerate less than ideal circumstances without complaining), courtesy (discretionary behaviour on the part of an individual aimed at preventing work-related problems with others from occurring) and civic virtue (behaviour on the part of an individual that indicates that he/she responsibly participates in, is involved in, or is concerned over the wellbeing of the organisation) (Podsakoff, MacKenzie, Moorman & Fetter, 1990: 115). Empowering leadership has the potential to direct organisational citizenship by facilitating self-directed individual and team processes.

Empowering leadership emphasises the development of follower self-management or self-leadership skills (Pearce & Sims, 2002: 175). In terms of the empowering leadership behavioural type, it is proposed that the leader models appropriate self-leadership behaviour, which is subsequently adopted by the subordinate (Pearce & Sims, 2002: 175). Representative behaviours of empowering leadership include encouraging independent action, encouraging opportunity thinking, encouraging teamwork, encouraging self-development, using participative goal setting and encouraging self-reward (Pearce & Sims, 2002: 175, Cavell, 2007 and Allio, 2009).

Leadership is a highly emotional process that is loaded with affects and affective responses. Leadership that evokes followership is found when leaders set and describe a vision that is energising and signifies a possible and prosperous future (employees want to follow leaders who can see and articulate a future that is compelling, that deserves effort and which is exciting to contemplate) (Bushe, 1998). Leadership that evokes followership is also found when leaders bring in new resources and increase the prosperity of the organisation (Bushe, 1998). Leadership that evokes followership is furthermore found when leaders develop measures that provide the necessary stability for the flexibility of empowered work systems (people and processes) (Bushe, 1998). Leadership that evokes followership is moreover found when leaders ensure that the needs of the business are understood by everyone (Bushe, 1998). Finally, leadership that evokes followership is found when leaders maintain the involvement and trust of employees by distributing the wealth created by the

organisation in a way that appears equable (Bushe, 1998). Mentioned qualities also aptly describe and highlight understanding of leader dedication and pragmatic performance virtues.

Emotional intelligence can support leaders in more accurately perceiving reality through understanding and relating to others' emotions (Parolini, 2005: 1). Understanding and relating to others by taking followers' thoughts and feelings into account may assist leaders when they think about the future and empower followers (Cherniss, 2001 and Parolini, 2005). Shamir, House and Arthur (1993) support a notion that transformational leaders that are emotionally attuned, may motivate followers in three key ways: by increasing follower self-efficacy (Stetz, Stetz & Bliese, 2006), by facilitating followers' social identification with their group or organisation and by linking the organisation's work values to follower values.

This connection allows followers to feel greater levels of self-determination in their work and increases their level of perceived empowerment (Avey, Hughes, Norman & Luthans, 2008: 114). An emotionally intelligent leader creates an environment of support, one in which people see problems not as weaknesses but as issues to be solved (Fullan, 1998). Goleman, Boyatzis and McKee (2003) suggest that emotions and emotional intelligence are central to effective leadership. Leaders who possess high emotional intelligence are also better able to benefit from positive moods and emotions (George, 2000). High emotional intelligence leads to enthusiasm, excitement, optimism, cooperation, empowerment and trust on the part of the leader and followers due to the constructive interpersonal relations (George, 2000).

Effective leaders are sensitive and responsive to their followers' needs, provide advice, guidance and emotional and instrumental resources to group members, support their followers' creativity, initiative and autonomy; enhance their followers' self-worth and self-efficacy, support their followers' desire to take on new challenges and acquire new skills, affirm their followers' ability to deal with challenges and encourage their followers' personal growth (Davidovitz, Mikulincer, Shaver, Izsak & Popper, 2007: 646). Leaders can be, and can be viewed as sensitive and responsive caregivers who provide followers with a sense of security and a platform for personal growth and development (Davidovitz, Mikulincer, Shaver, Izsak & Popper 2007: 646 and Mayseless & Popper, 2007). Critical emotional competencies associated with effective leadership (Cherniss, 2001: 28) are presented in Table 2.4.

Table 2.4. Critical emotional competencies in effective leadership

	Personal competence	Social competence
Recognition	<u>Self-awareness</u>	<u>Social awareness</u>
	Emotional self-awareness	Empathy
	Accurate self-assessment	Service orientation
	Self-confidence	Organisational awareness
Regulation	<u>Self-management</u>	<u>Relationship management</u>
	Emotional self-control	Developing others
	Trustworthiness	Influence
	Conscientiousness	Communication
	Adaptability	Conflict management
	Achievement drive	Visionary leadership
	Initiative	Catalysing change
		Building associations
	Teamwork and collaboration	

Source: Cherniss, C. 2001. "Emotional intelligence and organizational effectiveness." In: C. Cherniss, C. and Goleman, D. eds. *The emotionally intelligent workplace*. San Francisco: Jossey-Bass.

Interpersonal relationships are influenced by role modelling. Effective leaders are viewed as attractive role models when they display a susceptibility to engage in group-orientated activities such as championing organisational needs and increasing the number and quality of resources available to employees (Van Dick, Hirst, Grojean & Wieseke, 2007: 136). Highly identified leaders will be more receptive and responsive to group members' individual needs (thus enhancing follower satisfaction) (Van Dick, Hirst, Grojean & Wieseke, 2007: 136). These leaders may be more likely to make changes to employees' work environments and take action to eliminate or address negative aspects of employees' work, thus increasing employee job fulfilment (Van Dick, Hirst, Grojean & Wieseke, 2007: 136). Increased satisfaction and the development of leader-member bonds will stimulate followers to internalise the leaders' values and goals and to demonstrate strong personal or moral commitment to such values and goals (Howell & Shamir, 2005, Kark & Van Dijk, 2007, Van Dick, Hirst, Grojean & Wieseke, 2007: 136 and Reynolds & Ceranic, 2007).

It is generally accepted in theory that effective leaders need to build a compelling, shared vision of the future; they ensure a deep understanding of the purpose of the organisation

and articulate a clear set of values that are embedded in their behaviours (Strang, 2005: 75 and Van Dick, Hirst, Grojean & Wieseke, 2007). Leaders could thus increase follower identification by developing and articulating a compelling vision (De Cremer & Van Knippenberg, 2002 and Van Dick, Hirst, Grojean & Wieseke, 2007: 136). Ilies, Morgeson and Nahrgang (2005: 283) maintain that the personal integrity and elevated self-awareness of authentic leaders, coupled with their striving for truthful relationships, leads to unconditional trust on the part of their followers.

This trust relationship enhances followers' organisational-derived self-concept by influencing followers' personal identification with the leader (Ilies, Morgeson & Nahrgang, 2005: 283 and Sendjaya & Pekerti, 2009). Ilies, Morgeson and Nahrgang (2005: 283) and Madera and Smith (2009) affirm that authentic leaders influence followers' wellbeing through emotions and by providing an atmosphere conducive to the experience of positive emotions. Ilies, Morgeson and Nahrgang (2005: 283) found that leaders also serve as positive behavioural models. Authentic leaders support the self-determination of followers, in part by providing opportunities for skill development and autonomy (Ilies, Morgeson & Nahrgang, 2005: 283 and Walumbwa, Avolio, Gardner, Wernsing & Peterson, 2008).

Leaders in successful companies often try to improve performance by achieving the agreement or consensus of employees (Appelbaum, St-Pierre & Glavas, 1998: 290). Followers need to know that they are valued as people (Hill & Lineback, 2011: 63). Thus, leaders and followers may work together to set mutually agreeable performance goals and objectives (Appelbaum, St-Pierre & Glavas, 1998: 290). Employee suggestions are sought and a positive work-group spirit, which serves as a basis for enhanced motivation, is encouraged (Appelbaum, St-Pierre & Glavas, 1998: 290). Leaders, who provide support for autonomy, provide non-controlling positive feedback and acknowledge the other's perspective will have quality relationships with their followers because, through these mechanisms, such leaders foster the experience of self-determination (Deci, Connell & Ryan, 1989 and Ilies, Morgeson & Nahrgang, 2005: 286). Leaders consequently influence others with persuasion, personal or political network, coercion or rewards. Leadership behaviour qualities that promote followership need to be synonymous with supporting leader behaviours and emotional intelligence, as well as a leadership style that subscribes to transformational, servant and empowering leadership virtues.

Aforementioned leader behaviour qualities that encourage followership are similar to leader traits and behaviours identified by Wilson (2004). The six factored traits that were factored were labelled as "Dedicated", "Practical", "Cooperative", "Assertive", "Personable" and

“Analytical” (Wilson, 2004: 72 & 73). The first trait factor, *dedicated*, included items such as “hardworking”, “productive”, “focused”, “dedicated”, “efficient” and “disciplined”. The next factor, *practical*, included items such as “not a micro-manager”, “non-abrasive tone”, “perceptive”, “pragmatic”, “practical” and “tact”. The third factor, *cooperative*, included items such as “loyal”, “loyalty”, “justice”, “patient demeanour” and “contemporary thinking”. The fourth trait factor, *assertive*, included items such as “powerful/strong”, “competitive”, “authoritative”, “strong”, “control” and “outspoken”. The fifth factor, *personable*, included items such as “engaging personality”, “charismatic”, “passionate”, “sociable” and “energetic”. The sixth factor, *analytical*, included items such as “complex-thinker”, “analytical”, “concentrated” and “broad skills”.

The seven factored behaviours were labelled as “Focused”, “Supportive”, “Developer”, “Delegator”, “Advisor”, “Competitive” and “Charismatic” (Wilson, 2004: 79 & 80). The first behaviour factor, *focused*, included items such as “strives for success”, “sees opportunities”, “sets clear goals”, “focused” and “shares vision and knowledge”. The second behaviour factor, *supportive*, included items such as “approachable”, “courteous”, “always willing to help others”, “asks for feedback” and “cares about others' welfare”. The third behaviour factor, *developer*, included items such as “develops others”, “empowers others”, “positions individuals for success” and “builds leaders”. The fourth behaviour factor, *delegator*, had items such as “determines needs”, “directs”, “appears in charge”, “decisive” and “delegates authorities”. The fifth behaviour factor, *advisor*, included items such as “gathers all information”, “removes barriers”, “evaluates talent”, “solves problems” and “facilitates”. The sixth behaviour factor, *competitive*, included items such as “risk taker”, “keeps a competitive edge”, “involved in Community”, “speaks out” and “is creative and innovative”. The seventh behaviour factor, *charismatic*, included items such as “convincing”, “assertive”, “challenges others”, “assumes responsibility” and “role model”. These summative leader traits and behaviours as well as the detailed qualities describing each identified trait and behaviour (Appendix H) were considered to be synonymous with leader behaviour qualities that encourage followership. Mentioned leader traits and behaviours motivated and guided further interest and investigation.

2.3.8. Leader behaviour qualities that discourage followership

Korte and Wynne (1996) suggest that a deterioration of relationships in organisational settings resulting from reduced interpersonal communication between followers and leaders negatively influences job satisfaction and sometimes leads to employees leaving their jobs (Madlock, 2008: 65). Leaders deal with a broad spectrum of intricate emotional pressures,

including managing their own fears and uncertainties, containing the uncertainties of others, resisting unconscious attempts to idealise or denigrate and responding to the desires of others for protection and care (Krantz, 2006: 231). Followers need to trust that the manager is emotionally stable and dependable at work and believes and consistently follows a set of acceptable values and motives (Hill & Lineback, 2011: 61 & 65). Followers need to believe that the manager values the work performed and is competent as a leader (Hill & Lineback, 2011: 59).

Mentioned competence includes technical competence (knowing the business), operational competence (applying technical competence) and political competence (knowing how to influence others) (Hill & Lineback, 2011: 60 and Osbaldeston, 2010). Followers' dissent can be fuelled by their awareness of significant discrepancies between leaders' policies and actual practices and by leaders repeatedly changing the rules or goals (Collinson, 2006: 185). According to Weierter (1997) and Tepper (2007) transformational leaders may be destructive if they are self-serving, with an internal focus. Bass and Steidlmeier (1999) support this view, stating that these spurious transformational leaders behave unethically and immorally.

Organisational progress and success may be subdued by poor leadership (Morris, Ely & Frei, 2011). Poor management stifles continuous innovation (Hill & Lineback, 2011: 9). The result of poor leadership can be attributed to leaders that prefer to overemphasise their personal goals (Morris, Ely & Frei, 2011 and Kanter, 2011). A pursuit of personal goals may lead to self-protection and self-promotion and do not support desirable followership (Morris, Ely & Frei, 2011: 161). Deficient leadership may result when leaders attempt to protect their public image (Morris, Ely & Frei, 2011 and Kanter, 2011). This implies that leaders do not veer from the persona that they have created and the associated and supportive behaviours that they have crafted (Morris, Ely & Frei, 2011: 161). When leaders turn followers that they do not get along with, into enemies those leaders may find that their links to reality are severed and that they are reliably incapable of exerting influence (Morris, Ely & Frei, 2011: 162). Morris, Ely and Frei (2011) suggest that leaders should learn to cope with their fears by relying on the advice and support of followers. Organisational progress and success may be inspired by good leadership, provided that leaders learn to recognise and overcome these self-imposed barriers.

Collinson (2006: 186) states that leaders cannot at all times control followers' perceptions, identities and practices. By also emphasising the possibility that resistance will be subject to discipline and sanctions, post-structuralists observe that followers may feel compelled to

“self-censor“ for fear of the consequences that disagreement may produce (Collinson, 2006: 186). Amabile, Schatzel, Moneta and Kramer (2004) revealed that leaders of unsuccessful teams tend to over-control workers by excessive monitoring, issuing decrees and spending much time on checking performance and activities, even for their highly experienced workers (De Jong & Den Hartog, 2007: 56). Leaders may also compound mentioned concerns when they fail to exercise their authority or when formal authority is used to impose commitment, enforce change or disregard followers’ knowledge and insights (Hill & Lineback, 2011: 40 & 43). Conflict may result as a consequence of incompatible or differing views, perceptions and assumptions. When conflict takes place between followers and leaders, their sources refer to psychological distance (followers do not feel involved in the organisation and feel that their needs are not met), power and status (followers feel powerless and alienated), differences in value and ideology (this difference represents underlying beliefs on objectives and goals of an organisation) and scarce resources (disagreements regarding benefits, salary and work conditions) (Brewer, Mitchell & Weber, 2002).

Pearce and Sims (2002: 173) suggest that Aversive, Directive and Transactional leadership styles may not support follower preferences in terms of follower-desired leadership behaviours. These three leadership style behaviours are aversive leadership behaviours (leadership that primarily relies on coercive power – engaging in intimidation and dispersing of reprimands), directive leadership behaviours (leadership that primarily relies on position power – issuing instructions and commands and assigning goals) and transactional leadership behaviours (leadership focused on clarifying the effort–reward relationships – providing personal rewards, providing material rewards and managing by exception) (Pearce & Sims, 2002).

Abusive leadership behaviour has also been associated with an array of negative affective outcomes, including lower job and life satisfaction, lower normative and affective commitment, increased work-family conflict and increased psychological distress (Tepper, 2000). Conger and Kanungo (1998) and Tepper (2007) describe destructive behaviours common to narcissistic leaders, such as ignoring reality, overestimating personal capabilities and disregarding the views of others. Padilla, Hogan and Kaiser (2007: 179) describe five features of destructive leadership. Firstly, destructive leadership is seldom absolutely or entirely destructive since there are both good and bad results in most leadership situations (Padilla, Hogan & Kaiser, 2007: 179). Secondly, the process of destructive leadership involves dominance, coercion and manipulation rather than influence, persuasion and commitment (Padilla, Hogan & Kaiser, 2007: 179). Thirdly, the process of destructive leadership has a selfish orientation. It is focused more on the leader's needs than the needs

of the larger social group (Padilla, Hogan & Kaiser, 2007: 179). Fourthly, the effects of destructive leadership are outcomes that compromise the quality of life for constituents and detract from the organisation's main purposes (Padilla, Hogan & Kaiser, 2007: 179). Finally, destructive organisational outcomes are not exclusively the result of destructive leaders, but are also products of susceptible followers and conducive environments (Padilla, Hogan & Kaiser, 2007: 179).

Kets de Vries (1993) has also identified four reasons for destructive leadership (Clements & Washbush, 1999). The first being that leaders may have a tendency to see themselves as they are perceived by their followers and to feel they must act to satisfy the projections or fantasies of followers (referred to as "mirroring") (Kets de Vries, 1993 and Clements & Washbush, 1999). A second reason is that leaders have a distorted view of self (narcissism; a broad personality construct that includes an exaggerated sense of self-importance, fantasies of unlimited success or power, need for admiration, entitlement, lack of empathy and exploitation of others) (Kets de Vries, 1993 and Clements & Washbush, 1999). Conger & Kanungo (1998) agree that the one construct that researchers have continually linked to a leader's proclivity to behave ineffectively and unethically is narcissism. A third reason is that leaders may have an inability to differentiate and verbalise emotion, known as emotional illiteracy (Kets de Vries, 1993 and Clements & Washbush, 1999). Finally leaders may experience sources of dysfunction that arise within individuals who, knowing they no longer fit the demands of the job, nevertheless cannot let go (Kets de Vries, 1993 and Clements & Washbush, 1999).

Padilla, Hogan and Kaiser (2007: 185) suggest that four environmental factors are important for destructive leadership: instability, perceived threat, cultural values and absence of checks and balances and institutionalisation. However effective institutions, system stability and proper checks and balances, along with strong followers, will tend to trump attempts to take over the system (Padilla, Hogan & Kaiser, 2007: 186).

Kipnis (1976) agrees that the leadership-followership relationship is influenced by corrupting power influences. According to Kipnis (1976) power is desired and becomes an end in itself and needs to be sought continuously. Kipnis (1976) postulates that power holders are tempted to manipulate organisational resources for own gain (even if such actions constitute illegal conduct). Kipnis (1976) states that power creates a basis that guides and encourages inaccurate/bogus feedback, whereas holders of power may avoid contact with others and devalue others' worth.

A leader's behaviour should provide evidence for his/her motives and values regardless of the setting (Osbaldeston, 2010). Employees notice when leaders act and take decisions that are not consistent with the organisation's values (Stout, 2007: 70). Identified leadership styles and leadership behaviours can discourage followership. Follower-leader relationships are negatively influenced by emotional and/or practical aspects. In summary, these factors include trust concerns, ethical problems, unfairness, conflict situations, work dissatisfaction, environmental factors, destructive leadership tendencies and power influences.

2.3.9. Leadership within the South African Aviation Industry

Air travel in Africa is set for unprecedented levels of growth over the next twenty years. Reasons for the growth in Africa's air transport include the globalisation impacting on Africa, the liberalisation of both trade and transport, economic integration and the privatisation of many state-owned industries, including those in the aviation sector. South Africa's transport strategy aims to positively impact on our economic and social development and will do so by supporting goals for sustainable economic growth, economic transformation, meeting basic needs, human resource development and creating jobs. This strategy also aims to broaden economic participation in transport service provision and improve competition within the sector. Furthermore this strategy should assist to build Southern Africa's competitiveness by ensuring the region's competitive advantages can be accessed and marketed. A further aim of mentioned strategy is to allow for participation with other sectors in broader policy-making and decisions which affect the demand for transport and ensuring the safety of all transport participants.

An upgrade of aviation services in South Africa may serve government and businesses alike, while the subsequent effect that these upgrades will have on major income earners such as tourism, trade and industry can benefit the public at every level. Leadership and followership are thus situated in increasingly complex, uncertain and dynamic business environments with multiple realities based on various values, priorities and requirements (Küpers, 2007: 194). Organisational initiatives planned to meet these challenges will be dependent on sound organisational, leadership, team and individual employee efforts.

Are industry and organisational influences found within the aviation industry similar to those found in other global business organisations? Safety regulations, economic pressures to increase efficiency and social pressures from employees to improve work conditions are three main constraints that shape production and operational activities within the aviation industry (Paries, 2009: 17). Organisations functioning within the aviation industry also need

to deal with demands to ensure that project realisation times are shortened, to curtail production costs and to improve safety and quality. These organisations need to ensure that products or services that are designed, produced or operated are optimised (Paries, 2009: 16 and Malakis, 2009). These demands are considered to be similar to those found within other global business organisations.

Within the aviation industry it is likely that aviation safety should arguably remain a primary business concern, despite regulatory and organisational change and innovation. Safety requirements include fail-safe-designs, adequate back-up and redundancy functionalities, high quality and reliable equipment, excellent system maintenance capabilities, adequate staffing and training and due consideration of human limitations in the design of the work environment and processes (Paries, 2009: 16). Organisations are thus challenged to maintain the same levels of safety in the face of industry changes (Paries, 2009: 16). Industry and organisational influences found within the aviation industry may be similar to those found in other global business organisations. However safety and safety management efforts and initiatives are vital within the aviation industry and therefore emphasised as a critical business imperative. Barrass (2009: 24) extends this view by asserting that efficiency and profitability can be achieved without compromising safety. They require professionalism, imagination, a safety culture and leadership.

Findings from a study within the European Air Traffic Management community may be regarded as desired air traffic management practices that should drive future performance, especially if they are accepted as industry standards, acknowledging that in some circumstances these practices must be tailored to the specific external environment (Hamilton, 2003a). The first practice refers to a safety management process – a safety management process allowing for maximum accountability, transparency and awareness at all levels of the organisation, while continuously assessing the corporate performance and culture to further determine whether risk is being reduced to a level as low as reasonably practicable as desired (Hamilton, 2003a: 7). The second practice refers to customer involvement. A customer-oriented culture that is pervasive throughout the organisation should be sought (Hamilton, 2003a: 7). The third practice refers to scope of service delivery. A clear and well-articulated mission, values and objectives should be communicated and shared throughout the organisation (Hamilton, 2003a: 7). Moreover a transparent organisational and financial structure (including accounting process for cost and resources allocation), embedded organisational flexibility and systematic processes to unbundle or outsource services as appropriate should be integrated and incorporated (Hamilton, 2003a: 7). The fourth practice refers to tactical flexibility. Flexibility to perform tasks and

responsibilities in order to react to changes in demands in a timely manner with due consideration towards optimising operations and use of resources is postulated (Hamilton, 2003a: 7). The fifth practice refers to integrated strategic management. Full integration of all functional areas into a comprehensive strategic management process is recommended. This process should be iterative and closed-loop, using a combination of top-down and bottom-up processes, with the embedded ability to monitor success against targets and standards as well as identify improvement opportunities (Hamilton, 2003a: 8). Successful implementation of these critical air traffic management strategic imperatives and associated practices will require decisive leadership actions that are capable of directing and guiding initiatives towards meeting and hopefully exceeding performance targets. Essential leadership expertise should include business planning, human resource management, operations planning, crisis management, environmental planning, research and development planning, technology planning, information/knowledge management and infrastructure planning (Hamilton, 2003a & 2003b).

Any organisational efforts aimed at meeting strategic imperatives need to be conducted with due consideration of the risks and safety requirements synonymous with the aviation industry. Features of high-risk organisations are complexity, tight coupling and the potential for catastrophes (Bierly & Spender, 1995). Accidents are normal for high-risk organisations because of the irreconcilable structural paradoxes – centralisation and delegation (Bierly & Spender, 1995). Centralisation, for dealing with tight coupling must be combined with delegation for dealing with complexity (Bierly & Spender, 1995). Strong organisational cultures provide a centralised and focused cognitive system within which systems can function effectively (Bierly & Spender, 1995, Chong & Wolf, 2009 and Walumbwa & Schaubroeck, 2009). A measure of group processes and climate for innovation includes participative safety, support for innovation, vision, task orientation and social desirability (Anderson & West, 1996). The organisation, the cultural setting, the people involved and the nature of the work are constantly changing and these all have a significant effect on the process of leadership (Kezar, 2004: 121). Aspects of climate related to either objective or subjective indices of individual behaviour or attitudes concerning the organisation, include effective organisational structure, work autonomy versus encumbered by non-productive activities, close impersonal supervision, open challenging environment and management and peer support or employee-centred orientation (Waters, Roach & Battis, 1974).

A safety culture is crucial for aviation industry operations. A safety culture encompasses several interlinked subcultures (Reason, 1997, Ek, Arvidsson, Akselsson, Johansson & Josefsson, 2003 and Isaac & McCabe, 2009). These subcultures are a just culture, reporting

culture, learning culture, informed culture and flexible culture (Reason, 1997 and Isaac & McCabe, 2009). A reporting culture allows for the creation of an organisational climate in which people are prepared to report their errors (Reason, 1997 and Isaac & McCabe, 2009). A reporting culture allows people to voice safety concerns and when safety concerns are reported, they are analysed and appropriate action is taken (Reason, 1997 and Isaac & McCabe, 2009). An informed culture is a safety system that collates data from accidents and incidents and combines them with information from proactive measures such as safety audits and climate surveys (Reason, 1997 and Isaac & McCabe, 2009). An informed culture allows employees to understand the hazards and risks involved in their own operations and how to work continuously to identify and overcome threats to safety (Reason, 1997 and Isaac & McCabe, 2009). A flexible culture is one that successfully manages safety during change due to external demands, such as for example increasing technological complexity of an operating system or major organisational changes (Reason, 1997 and Isaac & McCabe, 2009). A learning culture is needed to draw appropriate conclusions from the information collected along with the will to implement changes to procedures and equipment as deemed necessary (Reason, 1997 and Isaac & McCabe, 2009). A just culture refers to a way of safety thinking that promotes a questioning attitude, is resistant to complacency, is committed to excellence and fosters both personal accountability and corporate self-regulation in safety matters (Reason, 1997 and Isaac & McCabe, 2009). A just safety culture, then, is both attitudinal as well as structural, relating to both individuals and organisations (Reason, 1997 and Isaac & McCabe, 2009). Striving towards an ideal safety culture requires from an organisation to embark upon organisational changes that allow for amongst other realistic operational and safety goals, commitment from leadership towards safety, continuous safety improvements and establishment of learning, reporting and feedback mechanisms.

Success of leader and follower efforts in support of organisational change may be influenced by normative beliefs. Normative beliefs are cognitions held by an individual regarding others' expectations of his/her behaviour as a member of a particular group or organisation (Cooke & Szumal, 1993). Shared behavioural expectations are those normative beliefs that are held in common by the members of a group or organisation (Cooke & Szumal, 1993). Centralisation based at the collective level can coexist with decentralisation at the individual level. Therefore a high-risk system can be transformed into a high-reliability system (Bierly & Spender, 1995). The psychology of an individual and relationships within teams are essential aspects of transformational processes (associated with transformational leaders) and culture change, focusing on the team and organisation process (Simpson & Beeby, 1993 and Drath, 2008).

Key characteristics of a successful and empowered team are collective work and mutual commitment (Hill & Lineback, 2011: 137). Team members need clarity on individual roles, team practices, team interaction and feedback regarding the team's progress (Hill & Lineback, 2011: 172 & 173). Leaders need to foster the emergence of a preferred team culture by ensuring clarity of work standards, espousing clear norms and encouraging constructive dialogue and conflict (Hill & Lineback, 2011: 180 & 181). Transformational leaders develop an initiating vision, articulated in such a way as to capture the attention of organisational members (Simpson & Beeby, 1993). Transformational leaders also communicate the significance of what the organisation seeks to attain (Simpson & Beeby, 1993). Transformational leaders facilitate continuous development and redevelopment of the initial vision that successively incorporates the negotiated visions of change movers (Simpson & Beeby, 1993). Transformational leaders also utilise a process of developing negotiation leading to consensus and commitment (Simpson & Beeby, 1993).

Leadership demands within the South African Aviation Industry should be investigated and understood by following a pragmatic approach in order to determine, amongst others, compliance with risk mitigation efforts and safety regulations. It is further postulated that organisational culture and climate influences would also impact upon leader behaviours, relationships within teams and followership. Insight and knowledge of context specific information was therefore also considered necessary in order to understand organisation-specific attributes and associated influences.

2.3.10. Overview of the Air Traffic and Navigation Services Company

Air traffic management is essentially a public interest function. It has the maintenance and improvement of safety as its principal objective (Hamilton, 2001: 40). The monopoly characteristic of air traffic management services is determined by the fact that only one entity can provide an air traffic control service at the point of delivery (to the user) (Hamilton, 2001: 39). There is currently no scope for a multiplicity of providers offering services within South Africa. The provision of air traffic management services in South Africa resorts under the Air Traffic and Navigation Services Company.

The Air Traffic and Navigation Services Company is a state-owned, limited liability company regulated in terms of Act 45 of 1993. The Air Traffic and Navigation Services Company operates with a focus on providing quality services and it needs to ensure that it is able to recover the costs of its operation and provide for expansion. The Air Traffic and Navigation

Services Company has as its vision to be the preferred supplier of Air Traffic Management solutions and associated services to the African Continent and selected international markets (ATNS, 2010). Its mission is to provide safe, expeditious and efficient Air Traffic Management solutions and associated services (ATNS, 2010).

The Federal Aviation Administration (FAA) of the United States of America has identified global strategic imperatives as applicable to the Global Aviation Industry; known as NextGen (FAA, 2011). These global strategic imperatives include a need to improve ways of doing business, reduce aviation's impact on the environment, improve safety, be more proactive to reduce incidents and accidents, obtain better information management and to pay more attention to client needs (FAA, 2011).

The Air Traffic and Navigation Services Company has set and listed the following strategic imperatives (ATNS, 2010):

- To deliver continuous improvement of our safety performance.
- To become a transformative organisation that invests in its people.
- To provide efficient Air Traffic Management solutions and associated services which meet the needs and expectations of the Air Traffic Management community.
- To maintain long-term financial sustainability.
- To play a leading role in the development of Air Traffic Management solutions and associated services in Africa and selected international markets.
- To deploy and use leading technologies to the benefit of the Air Traffic Management Community.

By means of comparison it is observed that these broad strategic imperatives set by the Air Traffic and Navigation Services Company for the future are aligned to the NextGen (FAA, 2011) global strategic imperatives.

A recent business review conducted within the Air Traffic and Navigation Services Company (ATNS, 2009b) accentuates that management and leadership behaviours need to be aligned to the organisation's objectives. These required behaviours need to lay emphasis on a need for improved employee training, personnel utilisation, career planning and career development (ATNS, 2009b). In addition it was found that the Air Traffic and Navigation Services Company is not optimising its revenue potential. A need therefore exists to review financial management practices and process. The business review also highlighted a need to improve knowledge management and to ensure that operational statistics are validated to ensure effective follow-up and corrective actions (ATNS, 2009b). The Air Traffic and

Navigation Services Company has developed a business concept that will drive its business going forward (ATNS, 2010).

The Air Traffic and Navigation Services Company will focus on the air traffic and navigation services needs of the Air Traffic Management Community, primarily in South Africa, as well as the rest of the Africa and Indian Ocean Region (AFI) and ultimately in selected global markets (ATNS, 2010). This company will develop a thorough understanding of the global Air Traffic Management Community with the emphasis on product and service offerings, technology developments and customers in order to effectively respond to the needs of selected markets with innovative and relevant air navigation service solutions (ATNS, 2010). The Air Traffic and Navigation Services Company will source, develop, market, distribute and support a complete range of air traffic and navigation services solutions that meet the expectations of access, equity, safety, efficiency and affordability, thereby supporting clients and the Air Traffic Management Community at large (ATNS, 2010).

The Air Traffic and Navigation Services Company will stabilise and enhance air navigation service provision in South Africa in order to create a platform from which to lever strategic partnerships, establish a global influence as well as harmonised technologies and methods to become the leading Air Navigation Services Provider in the African and Indian Ocean region (ATNS, 2010). The Air Traffic and Navigation Services Company will secure future growth, revenue, profit and relevance as a provider of choice (ATNS, 2010). The Air Traffic and Navigation Services Company will expand further into selected markets around the globe, whilst at the same time expanding the range of services in air traffic and navigation that are appropriate for market needs (ATNS, 2010). The Air Traffic and Navigation Services Company will attract, develop, retain and appropriately reward a diverse and motivated team that has the right skills, experience, commitment and drive to implement this strategy, creating win-win situations (ATNS, 2010). Effective implementation of this strategy will ensure a well equipped resource base, enhance financial sustainability and support the global air traffic and navigation and safety plans.

The Air Traffic and Navigation Services Company ensures safe and efficient production and operational activities within the organisation by means of its safety management system. The Air Traffic and Navigation Services Company is committed to implementing, developing and improving appropriate strategies, management systems, processes and procedures to ensure that all activities uphold the highest level of safety performance and meet national and international standards and expectations (ATNS, 2009a). The mentioned safety management system recognises the importance of an embedded safety culture that allows

for the active development and improvement of safety processes and procedures (ATNS, 2009a). A supportive safety culture is inspired by the Air Traffic and Navigation Services Company values. These values are safety, honesty, openness, quality service, innovation, equity and teamwork (ATNS, 2010). Clearly defined accountabilities, responsibilities and training of personnel are regarded as essential to ensure the highest safety standards and performances (ATNS, 2009a). The safety management system relies upon sound risk management, effective management of external supplied systems and services, successful implementation of safety strategy and policy, safety measurement activities, regular safety audits, beneficial safety promotions and continuous safety monitoring (ATNS, 2009a). Leadership required to ensure the success of the safety management system may thus be described as collaborative efforts aimed at sharing responsibility to ensure common focus, mutual support, enabling conditions, safe practices and continuous improvements as applicable to an excellent safety management system.

Leadership findings reported as part of the business review conducted within the Air Traffic and Navigation Services Company (ATNS, 2009b) were of specific importance for this research project. It was found that leadership is working in “silos”, leaders are insufficiently visible on the “frontline” and leaders fail to communicate effectively within the organisation (ATNS, 2009b). Furthermore it was reported by participants that a “blame culture” exists within the Air Traffic and Navigation Services Company (ATNS, 2009b). In this regard participants suggested the introduction of a leadership development programme that requires involvement from all management levels in order to facilitate an organisational culture change. It was also found that managers do not consistently assume accountability for their actions and the actions of subordinates. In addition underperformance is apparently tolerated within the Air Traffic and Navigation Services Company (ATNS, 2009b). Indecisiveness exhibited by leaders, lack of clarity of goals and responsibilities, inefficient business processes and lack of focus on continuous improvements were also reported as concerns (ATNS, 2009b). Non-compliance with industry best practices, inability to pursue excellence or world class status and poor succession planning were also included as leadership findings reported as part of the business review conducted within the Air Traffic and Navigation Services Company (ATNS, 2009b). It will be expected of leadership to facilitate organisational and behaviour changes required by the Air Traffic and Navigation Services Company (ATNS, 2009b). These business review findings suggest changes that encompass a need to sustain and reinforce appropriate leadership behaviours.

When allowing for changes to leadership behaviours it is imperative to accept that leadership is considered to be contextual. Leadership is unique within each context (Kezar, 2004). However leadership personifies the more relationship-based and values-laden aspects of the work performed in organisations. These aspects include changing organisational contexts, setting and aligning the organisational vision with group action and ensuring individuals have a voice so that they can grow into productive, proactive and self-led followers (Kotter, 1990a & 1990b, Rosener, 1990 and Fairholm, 2004: 588). A future directed leadership approach may be beneficial in this respect.

Specific attributes have emerged as essential for leading in the twenty-first century (Kotter, 1998, Marquardt, 1999, Marquardt, 2000 and Osbaldeston, 2010). These are classified as system thinkers, change agents, innovators and risk-takers, teachers/mentors/coaches/learners, servants and stewards, polychronic coordinators and vision builders (Kotter, 1998, Marquardt, 1999 and Marquardt, 2000). Leaders need to be systems thinkers – systems thinkers have the ability to see connections between issues, events and data points, thus emphasising the whole rather than its parts (Kotter, 1998, Marquardt, 1999 and Marquardt, 2000). Leaders need to be change agents. Leaders must develop an understanding and high degree of competence in creating and managing change so that their organisations can survive (Kotter, 1998, Marquardt, 1999 and Marquardt, 2000).

Leaders need to be innovators and risk-takers who can challenge the old ways, can encourage risks and can surface and test the mental models and basic assumptions of colleagues (Kotter, 1998, Marquardt, 1999 and Marquardt, 2000). Leaders need to be servants and stewards. Servant-leadership emphasises increased service to others, a holistic approach to work, a sense of community and shared decision-making (Kotter, 1998, Marquardt, 1999 and Marquardt, 2000). Leaders need to be polychronic coordinators that are able to manage and integrate many things at the same time (Osbaldeston, 2010); they must also be able to work collaboratively with many others, often in unfamiliar settings on unfamiliar problems (Kotter, 1998, Marquardt, 1999 and Marquardt, 2000). Leaders need to be teachers, mentors, coaches and learners. The leaders should find teaching and learning opportunities and try to turn every interaction with their people into learning and teaching events (Kotter, 1998, Marquardt, 1999 and Marquardt, 2000). Leaders need to be visionaries and vision-builders. They should be able to build shared, desired pictures for the organisation or unit, to the extent that people are willing and committed to carry out the vision (Kotter, 1998, Marquardt, 1999 and Marquardt, 2000). This study contextualised leadership behaviour within a specific organisation – the Air Traffic and Navigation Services Company.

The Air Traffic and Navigation Services Company views leadership development as a critical future activity and has emphasised a need to meet this important obligation (ATNS, 2010). Leadership behaviours should be supportive of the vision, mission, strategic imperatives, business concept, safety management system and values of the Air Traffic and Navigation Services Company. An analysis and understanding of present leadership behaviours, albeit from a follower-perspective, may inform the current state of leadership and direct future leadership development activities planned by the Air Traffic and Navigation Services Company.

2.3.11. Leadership development

Propelled by the competitive exigencies of speed, global responsiveness and the need to innovate constantly or perish and enabled by new information technologies, learning will become the only viable alternative to corporate extinction (Kiernan, 1993 and Schwandt & Marquardt, 2000: 2). Learning has become the critical avenue for understanding and adapting to the ever-increasing speed of change (Schwandt & Marquardt, 2000 and Marquardt, 2002). Learning relies on dynamic interaction between the social and cognitive nature of the organisation and leads to change in knowledge structures, behaviours and performances (Schwandt & Marquardt, 2000). The field of instructional design is associated with systematically analysing human performance problems in order to find learning and development solutions. Systems thinking represents a conceptual framework with which to make full patterns clearer and determine how to change them effectively (Marquardt, 2002: 26).

The purpose of instructional design is to improve employee performance and to increase organisational efficiency and effectiveness (Rothwell & Kazanas, 1998). Knowles (1984) suggests that an instructional design process should include andragogical elements that are synonymous with adult learning programmes. An andragogical process design requires the establishment of a climate conducive to adult learning (Knowles, 1984 and Van Dyk, Nel, Loedolff & Haasbroek, 1997: 216). Furthermore such a process requires the careful diagnosis of learning needs, careful formulation of learning objectives, the development of learning activities and evaluation of learning (Knowles, 1984 and Van Dyk, Nel, Loedolff & Haasbroek, 1997: 216).

A consequence of rapid workplace change is a growing focus on the work setting rather than on the instructional setting (Rothwell & Kazanas, 1998). This means that the work environment exerts an influence on performance changes and as a result the work environment should be more supportive to what people learn within workplace settings (Rothwell & Kazanas, 1998). The location of the learning process should be contained within the social dynamic actions and the complexity of the interacting components of the organisation (Schwandt & Marquardt, 2000: 23). Such learning should encapsulate performance related issues that transcend traditional knowledge, skills and attitudes and requires a focus on assessing and modelling competencies (Rothwell & Kazanas, 1998).

For training to be effective it is necessary to discern the training needs not only of the individual and the group but also how their needs impact the overall organisational objectives (Beardwell & Holden, 1995: 340 and Van Dyk, Nel, Loedolff & Haasbroek, 1997: 252). A needs analysis is a detailed investigation of a phenomenon in order to establish the needs of the situation and to establish which of these needs may be addressed by training and development. Characteristics that underpin successful performance are the focus of competency needs analyses (Rothwell & Kazanas, 1998). A training needs analysis considers individual, work-group and organisational factors that affect performance. Individual performance factors include job context, motivation, knowledge, skills, attitudes, abilities and aptitudes (Rothwell & Kazanas, 1998).

A training needs analysis can provide a conceptual framework that explains the operation or functioning of the subsystems with respect to each other and to the system as a whole. Work-group performance factors consider work structure, leadership, group cohesiveness, group roles, norms and group status (Rothwell & Kazanas, 1998). Organisational performance factors include the external environment, organisational structure, role of technology, organisation strategy and organisational culture (Rothwell & Kazanas, 1998). A performance analysis ensures that human performance problems are analysed systematically and their causes are determined before solutions can be identified (Rothwell & Kazanas, 1998). A training needs analysis considers the difference between a condition (a description of current performance) and a criterion (a description of the ideal/sought-after state) (Rothwell & Kazanas, 1998). Interviews and focus groups derived information can be used for data collection in support of a training needs analysis (Rothwell & Kazanas, 1998). Individuals in organisations retain information based on their own direct experiences and observations (Schwandt & Marquardt, 2000: 203). These individuals store their organisation's memory in their own capacity to remember and articulate experience and in

the cognitive orientations they employ to facilitate information processing (Schwandt & Marquardt, 2000: 203).

Organisational memory as related by members of the organisation can be divided into episodic and semantic memory (Schwandt & Marquardt, 2000: 206). Episodic memory refers to the conscious recollection of personally experienced events (Schwandt & Marquardt, 2000: 206). Semantic memory is knowledge of the world that appears to be independent of personally experienced events (Schwandt & Marquardt, 2000: 206). A training needs analysis functioning within a system of organisational learning relies upon two sources of information. The first source or input is prevailing information – the organisation has no control over this information; it just happens (Schwandt & Marquardt, 2000: 55). The second source or input is those activities purposely designed to gather information (Schwandt & Marquardt, 2000: 55). These two sources of information are filtered by a set of values and assumptions that the organisation and employees hold (Schwandt & Marquardt, 2000). Laukkanen (1994) expands on this view by proposing a cause-mapping approach when performing training needs analyses. According to Laukkanen (1994: 335) information gathered is the product of a tentative explanation for the observed situational isomorphism of the underlying casual link assertions. This approach is useful to analyse a narrative, to model a domain of reality as represented in the knowledge/belief base of the participants and to model the cognitive structures of the participants (Laukkanen, 1994 and Schwandt & Marquardt, 2000: 134).

A training and development strategy enables the different functional subsystems of an organisation to improve identified shortcomings of its human resource potential (Van Dyk, Nel, Loedolff & Haasbroek, 1997: 165). Such a strategy should be characterised by proactive, long-term, systems-oriented, flexibility-oriented, innovation-oriented and opportunity and risk-oriented thinking and should acknowledge that learning is a central theme (Van Dyk, Nel, Loedolff & Haasbroek, 1997). Learning also occurs when people become aware of opposing ideas (Garvin, Edmondson & Gino, 2008: 3). Recognising the value of competing functional outlooks and alternative worldviews increases energy and motivation, sparks fresh thinking and prevents lethargy and drift (Garvin, Edmondson & Gino, 2008: 3). Learning is most thorough when it involves the whole person – mind, values and emotions (Marquardt, 2002: 36). New learning is more easily understood if it can be linked to previous relevant experience (Van Dyk, Nel, Loedolff & Haasbroek, 1997). Learning and unlearning can be achieved by an adaptive learning approach, an anticipatory learning approach or an action learning approach (Marquardt, 2002). Aspects of learning and unlearning should form the core of an instructional design and development strategy.

Such an approach should highlight the importance of understanding both the subjective and objective action variables simultaneously (Schwandt & Marquardt, 2000). This approach will enhance understanding of the complex nature of organisational actions as they pertain to learning and change (Schwandt & Marquardt, 2000).

An instructional design and development strategy helps instructional designers to conceptualise, before they embark upon preparation and selection of instructional materials (Rothwell & Kazanas, 1998). Learning is an active experience (Van Dyk, Nel, Loedolff & Haasbroek, 1997). Considerations include adaptive learning that allows learners to reflect on past experiences and modify future actions, anticipatory learning that encourages learning by envisioning various futures and/or action learning that allows learners to apply current knowledge in present settings (Marquardt, 2002).

A further benefit of a well defined training needs analysis may be found in its apparent value for recruitment, selection and appointment of human resources. Selection is a means of screening potential candidates to choose the best candidate for the training program (Leonard & Hilgert 2004: 336). Organisations can systematically screen out applicants who lack the necessary skills to accomplish the organisational tasks (Van Dyk, Nel, Loedolff & Haasbroek, 1997: 159). A training needs analysis also influences the need to develop specific skills development activities for new employees (Van Dyk, Nel, Loedolff & Haasbroek, 1997: 159).

The penultimate stage in a training strategy is the evaluation and monitoring of training (Beardwell & Holden, 1995: 351 and Van Dyk, Nel, Loedolff & Haasbroek, 1997: 440). Measuring the effect of learning and change processes against the original objectives is required to demonstrate benefits achieved by a well-specified process. A well defined training and development needs analysis assists with the evaluation of a training and development system. Such a needs analysis essentially sets the objectives that should be measured when evaluating training and also when determining the contribution or return-on-investment associated with training presented. Factual information would be helpful in assessing the extent of value associated with leadership development. This would be helpful in evaluating its degree of success, according to the particular criteria and methods.

Effective leadership represents a competitive advantage and is becoming more of a rare resource (Kaiser, 2005 and Ruvolo, Petersen & LeBoeuf, 2004). According to Burmeister (2012: 24) relatively few people know how to lead, incorporating emotions and passions in a collaborative way. There is an increased demand for leaders or managers with excellent

leadership skills (Slavik, 2008: 1). A developed and tested leadership programme that allows potential leadership candidates to move an organisation forward is a critical part of any succession plan (Collins & Collins, 2007). Leadership is not an individual act but rather a social process of mutual influence that is enacted within a network of leader-follower relationships (Hollander, 1978 and Parry, 1998). In this sense leadership is very much a relational concept. However with the exception of research on the development of leader-member exchange relationships (Graen & Uhl-Bien, 1995), most research on leadership development fails to account for the relational elements of leadership.

According to Avolio and Chan (2008) and Bernal (2009) the field of leadership development requires empirical research for advancing the science of leadership development, particularly with studies that aid understanding of the permanence of leadership effects and studies that can begin to show the possible benefits of leadership development for individuals and organisations. Bernal (2009) suggests that leadership and leadership development theories and constructs are all assuming that people will change behaviour as a result of a leadership intervention. However the predictor of future behaviour is past behaviour. Current leadership development literature fails to answer the question of how leadership development programmes, aimed at enhancing leadership competency, have to be designed to influence long lasting change in individuals and organisations (Bernal, 2009: 7). Learning leadership competencies is about one's ability to modify or change existing patterns of behaviour and ultimately to regulate those depending on the different circumstances that leaders are faced with (Bernal, 2009: 7).

Asserting that leadership can be learnt and taught, Brungardt (1996) reviewed the literature on leadership development. Brungardt (1996: 84) observed that most of the research was categorised as leadership development theory and learning leadership theory. Sims and Manz (1982) examined how modelling principles implicit in social learning theory have been used in conjunction with deliberate interventions to change leader behaviour (Komives, Longerbeam, Owen, Mainella & Osteen, 2006). Sims and Manz (1982) placed value on modelling in organisations to help an individual establish new behaviours, change the frequency (increasing or decreasing) of existing behaviours and provide behavioural cues about what behaviours are appropriate in a given context (Komives, Longerbeam, Owen, Mainella & Osteen, 2006). Day (2001: 585) asserts that the primary emphasis in leadership development is on building and using interpersonal competence (Komives, Longerbeam, Owen, Mainella & Osteen, 2006).

Bush and Glover (2004) identified three contrasting models of leadership development. These include the Scientific Model (managerial/technicist) that depends on training to meet clearly defined targets, the Humanist Model (empowerment/persuasive) which is more people-focussed and emphasises strategically planned transformational interaction and the Pragmatic Model (rational/reactive), which is project-focused with an emphasis on the immediate needs of individuals and groups (Bush & Glover, 2004). Bernal (2009: 8) claims that the work of Prochaska and Norcross (2006) is possibly the most influential psychological model that has been used in the design of specific behaviour change programmes over the past decade.

The Trans-Theoretical Model of Prochaska and Norcross (2006) proposed a linear model of change consisting of six stages: pre-contemplation, contemplation, preparation, action, maintenance and termination (Bernal, 2009). The pre-contemplation stage as applicable to leadership development emphasises a need to also identify and address observable behaviours that are negatively perceived by others (Bernal, 2009). During the contemplation stage there is acknowledgement that behaviour problems exist and a need for change is warranted (Bernal, 2009). During the preparation stage the focus is on solutions, rather than on the problems and emphasis is placed more on the future than the past (Bernal, 2009). During the action stage behavioural change is more apparent (Bernal, 2009). The maintenance stage is about working to prevent relapse, typically to pre-contemplation or contemplation stages and therefore commitment to change has to remain strong (Bernal, 2009). Encouragement through positive reinforcement appears again as a critical success factor (Bernal, 2009). The termination stage represents the confidence that individuals have in order to maintain behaviour change in specific situations (Bernal, 2009). The stages of Trans-Theoretical Model of Prochaska and Norcross (2006) was found to be applicable to this study due to model's emphasis on desired and undesired leadership behaviours and its application in terms of leadership behaviour development.

Managers need to encourage employees to take responsibility for their careers and provide feedback on personal performance and its implications for future development (Eurocontrol, 2004). They also need to ensure that any planned development is realistic and achievable and will contribute to the Air Navigation Service Providers' objectives (Eurocontrol, 2004). Leadership development is at its core a process of human growth and change (McCauley, Moxley, & Van Velsor, 1998). However most of the existing literature on leadership development is concentrated on the efficacy of specific leadership development practices (for example action learning and feedback programs) and historically, very little scholarly attention has been directed at describing or explaining the dynamic change processes that

ought to take place during leadership development (Day, 2000). Rath and Conchie (2008) and Spreitzer (2006) suggest that building on people's strengths and not just focusing on their shortcomings is an important element of leadership development. Leadership development may not only be a single activity, but a set of activities, often taking place over many years. According to Burmeister (2012: 24) leadership development expectations should be managed, so that current leaders understand that leadership development and envisaged results take time. Each leadership development activity may contribute to leadership capacity, either of the individual, the group or the leadership capability of the organisation.

One of the best practices of leadership development is linking development to an organisation's purpose (Buus, 2005: 187). This method ties leadership development to the daily functions of an organisation and helps to reinforce learning and the application of skills (Buus, 2005: 187). Quatro, Waldman and Galvin (2007: 428) propose that leadership development programs and initiatives may need to be holistic in their scope, explicitly addressing the analytical, conceptual, emotional and spiritual domains of leadership practice and development. The analytical domain refers to developing leaders who are adept at understanding and managing discrete complexity (Quatro, Waldman & Galvin, 2007: 428). The analytic domain stresses cognitive abilities and skills of leaders (Quatro, Waldman & Galvin, 2007: 432). The conceptual domain refers to developing leaders that are adept at both understanding and managing interrelated complexity and fostering creativity (Quatro, Waldman & Galvin, 2007: 428).

The conceptual capacity allows leaders to have insight into, and to construct visions over long-time horizons using their own judgment processes unconstrained by the boundaries, values, beliefs, or points of view of others (Quatro, Waldman & Galvin, 2007: 432). Conceptual capacity also allows leaders to demonstrate intellectual stimulation to help followers get at the heart of complex problems (Quatro, Waldman & Galvin, 2007: 432). The emotional domain refers to developing leaders who are attuned to emotional issues (Quatro, Waldman & Galvin, 2007: 428). The emotional domain of leadership can be largely understood by considering how leadership visions become shared with followers (Quatro, Waldman & Galvin, 2007: 433). The spiritual domain refers to developing enlightened leaders who recognise the value of spirituality (Quatro, Waldman & Galvin, 2007: 428). Spiritually enlightened leaders enable their followers to connect both individual tasks and the mission of the larger firm to deeply held moral and ethical values (Quatro, Waldman & Galvin, 2007: 428). At its core this domain involves an understanding of how the needs of

followers to connect to higher-order, spiritual purposes are relevant to effective leadership in work settings (Quatro, Waldman & Galvin, 2007: 433).

Most leadership development focuses on skill-building or short-term interventions such as retreats or courses, rather than on the process of how leadership capacity or leadership identity is created, or changes over time (Komives, Owen, Longenbeam, Mainella, & Osteen, 2005: 594). Leadership training can take place through behaviour role-modelling (demonstration and role play) and discussion on case studies (Slavik, 2008: 6). If the training is more difficult and complex, business games and simulations are often used (Slavik, 2008: 6). Leadership development mechanisms can be classified within a framework that includes the classroom, job and organisational contexts (Quatro, Waldman & Galvin, 2007: 435). The organisational context takes into account important organisational mechanisms that are largely left out of existing leadership development schemes (Quatro, Waldman & Galvin, 2007: 434). The organisational context can include mechanisms and activities that exist or take place at the organisational level that are outside the classroom and do not fit into the job context, such as culture, core values, existing vision and human resource strategies (Quatro, Waldman & Galvin, 2007: 436 & 437). Burmeister (2012: 24) proposes custom leadership development programmes, inclusive of specific job assignments and special projects that will allow future leaders to develop new skills, while testing resilience and flexibility.

Burns (1978) and Russell and Kuhnert (1992) introduced two categories of leadership behaviours, transactional and transformational, which have since received great attention in the leadership field, with research finding transformational receiving the most positive follower reaction. Studies that indicate positive relationships with transformational leadership relate positively to an increased group process (Avolio, Waldman, & Einstein, 1988); increased work satisfaction (Singer & Singer, 1990), increased work productivity (Yammarino & Bass, 1990) and increased personal empowerment (Roberts, 1985). When leadership development is conceptualised in terms of classroom, job and organisational contexts, individuals stand the best chance of maturing in the analytical, conceptual, emotional and spiritual domains of leadership practice and development (Quatro, Waldman & Galvin, 2007: 436).

This study aimed to better understand which specific components of leadership development should be incorporated in a leadership development programme. A training needs analysis aimed at leadership development paid attention to the social and cognitive nature of the organisation by applying systems thinking. A purpose of such an analysis was to note,

explain and understand the nature of differences between conditions (descriptions of current leadership performances and qualities) and criteria (descriptions of the ideal/sought-after leadership performances and qualities) within an organisational context. Reliance on episodic and semantic memories was considered central in the information-gathering process of a training needs analysis. Domains of leadership behaviours and qualities/traits that require learning and unlearning became evident as a result of the training needs analysis.

2.4. A conceptual agenda

This literature review provides various views held by scholars of identified constructs. An investigation of these constructs presented an ideal opportunity to identify and summarise foremost current inadequacies.

2.4.1. Leadership

Evidence found in leadership studies positions the leader as the primary element of the leader-follower relationship. Leadership is described and defined with reference to various perspectives presented in literature including leadership history, occurrences, styles, characteristics, thoughts, behaviours, successes, abilities, traits, enablers and limitations. Mentioned features and facets subsequently deserve attention when studying leadership occurrences and trends. However these current views are shaped and influenced by a prevailing epistemological view. It follows that leaders understand the dynamics of “followership” and may be able to harness its energy. This view is founded primarily in a leader perspective derived from leader and organisational points of view and research. It is accepted that studies of leadership may focus less on skills and behaviours and more on relationships between the leader and the follower (Dering, 1998 and Kirchhubel, 2010). Research aimed at exploring how followers frame and interpret leadership and leader traits and behaviours as suggested by Wilson (2004) and Van Vugt (2006) may be construed as a current shortfall when considering the literature reviewed. In this regard it may be valuable to determine how followers understand the dynamics of “leadership” and how to harness its supposed energy.

2.4.2. Followership

Leadership and followership are continuously connecting and disconnecting in a vibrant environment. It was observed that leader and follower relationships are discussed within a

sphere of leadership focus and significance. It was found that associated interpersonal dynamics (leader-follower) are also dealt with in detail. It is acknowledged that leaders play an active role in the development of followers' perceptions of leaders and thereby contribute to the implicit theories of leadership held by followers (Glynn & Jamerson, 2006 and Gray & Densten, 2007). An intrapersonal view describing leadership from a follower perspective therefore probably requires greater awareness. Such a view may include follower preferences and prevailing epistemological views associated with leader and leadership experiences and expectations. Despite these perceived inadequate insights it is acknowledged by Ehrhart and Klein (2001) and Hollander and Offermann (1990: 182) that more research is needed to further explore the follower characteristics that influence followers' reactions to leaders. Assumed derived insights possibly will identify individual and shared mental models which were incomplete in the literature reviewed.

2.5. Conclusions

Research on leadership seems to be dominated by a leader perspective and discourse. Not as much attention is afforded to followers and followership (as a facet of leadership). Research aimed at understanding followership and followers' views of leadership may be justified and of interest, especially when such research aims to purposefully create understanding within a specific organisational setting – the Air Traffic and Navigation Services Company.

Leadership and followership cannot be defined by means of a single universal accepted definition. Research on leadership accepts that leaders and followers (individually and collectively) define and describe leadership and followership from different perspectives. These definitions and descriptions are influenced, guided and created by amongst other factors, the leader-follower context, local conditions, attitudes held and shared, emotional bonds, type of follower-leader relationships, organisational climate and culture. Leadership can manifest itself as traits, behaviours, influences, events, activities, competences, personal characteristics and/or action logic. No ideal leadership type or style can be presented. However transformational leadership accentuates followership. Leadership traits and behaviours draw attention to social interactions and emotional filters within leader-follower relationships. Leadership can be studied, viewed and postulated from various perceptions and perspectives. One such basis is the followers' perceptions and perspectives. Followers may be able to view, describe and decode meaningful leadership definitions, determining forces, manifestations and preferences. However these may only be

uncovered, understood and shared if an opportunity is created to critically reflect upon follower-leader experiences, relations and perceptions.

Followers are not considered a homogenous group. Followers within a leader-follower relationship share a common social classification known as followership. Despite this common classification it is observed that followers differ in terms of general characteristics, motivations, views, opinions, realities and performances. The influence of these differences may be of interest when followers are requested to critically reflect upon leadership behaviours. It follows that reported leadership behaviours are the result of followers' mental model differences. However links between follower classifications and reported leadership behaviours are not evident within the Air Traffic and Navigation Services Company. Understanding contextual/organisational specific followership dynamics may thus be regarded as a prerequisite when studying leadership behaviours. An opportunity was accordingly created to allow followers to define and describe followership as an integral component of leadership. These definitions and descriptions may be evaluated, interpreted and labelled by means of followers' mental models. An understanding of these mental models may identify a premise upon which followers base their perceptions. It follows that these premises need to be known in order to comprehend and contextualise followers' perceptions of leadership behaviours. An understanding of followers' mental model types (including estimates of probability, conceptual changes, knowledge convergences, shared mental models, emotions, identities and views) were included in this study.

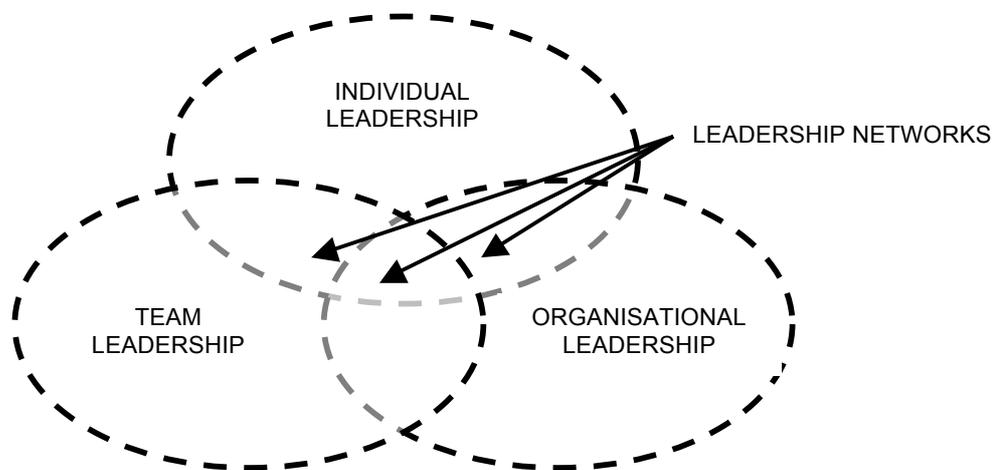
Finally leadership behaviour findings reported within the Air Traffic and Navigation Services Company had to be grasped within both an Air Traffic and Navigation Services Company context and a South African Aviation Industry context. These contextual frameworks illustrate and inform whether reported leadership behaviours found within the Air Traffic and Navigation Services Company did indeed align, support and sustain present and future organisational and industry business demands. Results exemplified leadership development needs that may be realised by training and development initiatives implemented by the Air Traffic and Navigation Services Company.

2.6. Key Constructs

Key constructs inform the research conceptual framework and support the research design. A review of previous research studies and research results associated with the research problem is summarised and was used to identify key constructs.

Concepts express generalisations from particulars (Cohen, Manion & Morrision, 2000: 13). Concepts enabled the researcher to impose meaning on the world; through them reality was given sense, order and coherence (Cohen, Manion & Morrision, 2000: 13). This literature review suggests that leadership behaviours may be conceptually framed as subdivisions which will enable followers to describe their realities. These subdivisions include the leader’s behaviours (as an individual), the leader’s interaction with the team (described as team behaviours), the leader’s behaviour within a specific organisational setting (described as organisational behaviours) and the leader’s interactions with individual, team and organisational subdivisions (described as network behaviours, which support knowledge and organisational performance). A conceptual framework proposed for this study is depicted in Figure 2.5. Collectively these subdivisions/concepts form part of a broader meaning system (as informed by the research questions) that will allow the researcher to take account of reported follower realities.

Figure 2.5. A conceptual framework depicting leadership behaviour subdivisions within the Air Traffic and Navigation Services Company



Source: Adapted by the researcher from Hill, L.A. & Lineback, K. 2011. *Being the Boss; the three imperatives for becoming a great leader*. Boston: Harvard Business Review Press.

Findings from the literature review allowed for three interrelated ethnographical key constructs. These key constructs were regarded as the means to focus upon, describe and interpret leadership behaviours (presented in Tables 2.5 and 2.6). Key constructs identified did not only provide a theoretical framework, they also indicated the focus of data collection. The first key construct emphasised a need to understand how followers delineate leadership traits and behaviours in terms of significance of these behaviour qualities. These views were comprehended and appreciated in terms of the juxtaposition of followers' cognitions directed by their mental models and leadership behaviours reported within the Air Traffic and Navigation Services Company. Understanding created was subdivided in terms of a further juxtaposition that provided deeper understanding regarding the second and third key constructs. The second key construct emphasised a need to understand leadership traits and behaviours that inspired followership. The third key construct emphasised the need to understand leadership traits and behaviours that discouraged followership. The second and third key constructs required deeper and collective understanding of phenomena (accentuating individual leadership behaviours, team leadership behaviours, organisational leadership behaviours and network behaviours) reported by followers.

Table 2.5. Key constructs and a summary of associated focus areas (as informed by the literature review)

Key constructs	Focus areas (following a follower perspective)
Delineating leadership behaviour qualities; contextualised within the Air Traffic and Navigation Services Company.	Definition/conceptualisation of leadership as a construct.
	Understanding of the perspective held regarding leadership.
	Views held regarding roles and responsibilities of the leader.
	Understanding how the leader manages/conducts him/herself.
	Description of behaviour imperatives synonymous with effective leadership.
	Description of behaviour imperatives synonymous with ineffective leadership.
	Definition/conceptualisation of preferred leadership style(s).
	Definition/conceptualisation of leadership style(s) not preferred.
	Description of characteristics of leadership competence.
	Description of leader's action logic.
Description of emotional bonds between follower and leader.	

	Definition/conceptualisation of followership as a construct.
	Description of follower motivations/assumptions held.
	Description of needs/wants/desires of followers.
	Description of the nature of the leader-follower relationship.
	Understanding followers' introspection/cognition regarding leadership.
	Describing the impact of followership on leadership.
	Understanding how the leader manages the team.
	Understanding aspects of information collection, content management and dissemination.
	Describing what knowledge is regarded as business knowledge.
	Describing what knowledge is considered as personal knowledge.
	Describing how knowledge is shared (information managed).
	Describing the impact of the leader's ability to manage his/her network(s).
Leadership behaviour qualities that inspire followership; contextualised within the Air Traffic and Navigation Services Company.	Understanding how leadership behaviour is identified and cognitively evaluated (with reference to inspiring behaviours).
	Understanding the nature of positive leader-follower exchanges and relationships.
	Understanding the follower's current individual mental model in use (with reference to inspiring behaviours).
	Understanding the changes of the follower's individual mental model (conceptions) in use (with reference to inspiring behaviours).
	Understanding the current shared mental model in use (with reference to inspiring behaviours).
	Understanding the impact of the work environment on positive follower perceptions.
	Describing items used by followers to assess inspiring leadership behaviours.
	Understanding the follower's implicit theory/theories of leadership.
	Understanding what leader behaviours will allow for increased follower performance.

	Understanding leadership behaviour qualities that evoke positive followership.
	Understanding critical emotional competencies of effective leadership.
	Understanding the impact of role modelling.
	Understanding leader's motives that contribute to desired leadership.
Leadership behaviour qualities that discourage followership; contextualised within the Air Traffic and Navigation Services Company.	Understanding how leadership behaviour is identified cognitively evaluated (with reference to discouraging behaviours).
	Understanding the nature of negative leader-follower exchanges and relationships.
	Understanding the follower's current individual mental model in use (with reference to discouraging behaviours).
	Understanding the changes of the follower's individual mental model (conceptions) in use (with reference to discouraging behaviours).
	Understanding the current shared mental model in use (with reference to discouraging behaviours).
	Understanding the impact of the work environment on negative follower perceptions.
	Describing items used by followers to assess discouraging leadership behaviours.
	Understanding what leader behaviours will allow for decreased follower performance.
	Understanding leadership behaviour qualities that do not evoke positive followership.
	Understanding critical emotional competencies of ineffective leadership.
	Understanding the impact of role modelling.
	Understanding self-imposed leadership barriers.
	Understanding leader's motives that contribute to undesired leadership.

Compiled by the researcher

Table 2.6. A summary list of leader trait and behaviour clusters (as informed by the literature review)

Leader Traits	Leader Behaviours
Dedicated	Focused
Practical	Supportive
Cooperative	Developer
Assertive	Delegator
Personable	Advisor
Analytical	Competitive
	Charismatic

Compiled by the researcher

Source: Adapted by the researcher from Wilson, M.S. 2004. Effective developmental leadership: A study of the traits and behaviours of a leader who develops both people and the organization. Ph.D. thesis. Louisiana State University, Louisiana.

This research study was only limited to an analysis of follower expectations within a specific organisation. Subsequently it did not rely on comments, views and expectations from leadership. Follower expectations were contextualised within a defined industry, specific organisation and specific organisational settings. It was thus not required to extend this research focus to more than one organisation. It was accepted that follower reports would be shaped, guided and presented as opinions/perceptions within specific organisational settings. Broad generalisation of research findings was not intended. However quantitative and qualitative design validity, reliability and trustworthiness could be supported by obtaining follower opinions/perceptions within different business units/settings. The research design ensured that views held by followers regarding leadership traits and behaviours and those behaviour qualities that inspire and discourage follower behaviours were focused upon, described and interpreted.

2.7. Summary

A literature review should allow for a descriptive and critical analysis of what other authors have written and contributed (Jankowicz, 2005). This review of literature contributed to the context of the planned research by considering leadership behaviour qualities and followership. Current experiences and expectations of followers with regard to leadership behaviour qualities within the Air Traffic and Navigation Services Company in terms of

inspirational and discouraging leadership styles were sought. In response to this research question this literature review presented a synopsis of leadership, leadership development and training, followership and an overview of leadership and followership research. This literature review also considered influences associated with knowledge management and organisational performance. Critical reviews of followership, views held by followers with regard to leadership behaviour qualities, leadership behaviour qualities that inspire follower behaviours and leadership behaviour qualities that discourage follower behaviours were also integrated. Finally, leadership within the South African Aviation Industry was examined and an overview of the Air Traffic and Navigation Services Company was offered.

Literature covered was thus thematically organised and relates to the research questions and objectives. Knowledge regarding the nature, role and impact of leadership traits and behaviours in safety-critical commercial environments (specifically Air Navigation Service Providers) from a follower's perspective was limited. A need to gain greater insight into followership dynamics was identified by known research addressing leadership-followership relationships.

This literature review furthermore covered up-to-date theories and contributions of recognised experts in a coherent manner. An understanding of leadership behaviours could possibly contribute towards organisational knowledge creation. Leadership research signifies a need to further understand leadership behaviours as evident from the point of view of followers. Leadership and followership is found to be mutually dependent and mutually supporting. However these phenomena are shaped, guided and understood as dynamic and interconnected constructs. It is apparent that leadership behaviour could be analysed and understood by relying on follower observations and reports. Follower-derived information was the result of amongst other reflective practices, mental modelling, the nature of relationships, perceptions held and motives assumed. Inspiring and discouraging leadership styles and leadership behaviours were acknowledged. It is of interest to note that leadership behaviours could be analysed from a follower-perspective within a specific organisational setting in order to facilitate a comprehensive understanding of these behaviours.

CHAPTER 3: THEORETICAL PARADIGMS

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CHAPTER 3: THEORETICAL PARADIGMS

3.1. Introduction

All research needs a foundation for its inquiry, which is provided by worldviews and scientific paradigms (Gelo, Braakmann & Benetka, 2008: 269). Worldviews imply how we view and, thus think about research and go about conducting it (Gelo, Braakmann & Benetka, 2008: 269). The primary goal of research is the generation and communication of knowledge (Khagram, Nicholas, Bever, Warren, Richards, Oleson, Kitzes, Katz, Hwang, Goldman, Funk & Brauman, 2010: 390). All research shares an implicit, if not explicit effort to use and produce theory to organise this knowledge (Khagram, Nicholas, Bever, Warren, Richards, Oleson, Kitzes, Katz, Hwang, Goldman, Funk & Brauman, 2010: 390). Furthermore in research, it is good practice to create transparency on the personal, epistemological, ontological and methodological orientation of the researcher (Guba & Lincoln, 2000). The researcher accepted that a theory that generated rich meaningful understanding within, and in a particular context, would be suitable for this research project. Such a preferred theory had to allow for an explication or a systematic way to organise ideas, define social concepts contextually, create understanding, employ context-specific narratives and suggest generalisation within a defined/specific case.

The researcher also accepted that a theory that generated rich meaningful understandings would probably not offer conclusive answers to all the research questions. However it may facilitate a continued debate regarding a specific research topic.

3.2. Philosophy

A metaparadigm is the most abstract component in the structural hierarchy of knowledge (Fawcett, 2000). A metaparadigm is made up of highly abstract concepts that identify the phenomena of interest (Fawcett, 2000). Philosophical assumptions or a theoretical paradigm about the nature of reality are crucial to understanding the overall perspective from which the study is designed and carried out (Krauss, 2005: 759). Different philosophies or worldviews may lead to different conceptualisations of the central concepts of a discipline and to different statements on the nature of the relationships among those concepts. Conceptual frameworks provide different perspectives or frames of reference for the phenomena identified by the metaparadigm of a discipline (Fawcett, 2000 and Rimmer Tiffany & Johnson Lutjens, 1998). The usefulness of conceptual frameworks comes from the organisation they provide for thinking, for observation and for interpreting (Rimmer

Tiffany & Johnson Lutjens, 1998). Conceptual frameworks provide a systematic structure and a rationale for activities (Rimmer Tiffany & Johnson Lutjens, 1998).

A conceptual framework should be intended as a starting point for reflection on the research and its context (Smyth, 2004). Attention afforded to a conceptual framework provided reference points back to the literature, which assisted the researcher to give meaning to data and provided a structured approach to communicating findings. The conceptual framework of a study describes the system of concepts, assumptions, expectations, beliefs and theories that support and inform the research. The need for a conceptual framework signifies the importance of developing or adopting a set of logically related abstract ideas that are central to the research problem. This conceptual framework elaborates the research problem in relation to relevant literature and presents a meta-cognitive perspective (Smyth, 2004). A conceptual framework comprises a set of ideas used to structure and guide the research effort (including the research question, the literature review, methods and data analysis).

The principal matter that required attention was the description of the proposed phenomena that had to be analysed and the justification for studying such phenomena. When approaching this study on the understanding that behaviours determine the actions undertaken, a general question is raised: what are the behaviours that impact upon actions? Behavioural norms evolve over long periods of time and are influenced by peoples' values and beliefs, the nature of the activities carried out by the group, past and present leader influences, historical events, successes, traumas, physical and geographical conditions and the demands and behaviours of external parties (Taylor, 2005: 5). Specific to this research is a study of leadership behaviours. Constant, clear and quality leadership is necessary for success (Everett, 2002 and Buch & Rivers, 2002). Cockerell (2008: 7) affirms that great leadership leads to employee excellence, which leads to customer satisfaction and strong business results. According to Daft (2005), Taylor (2005) and Collins (2001) existing literature has highlighted the existence of a relationship between behaviour and leadership. This study makes this link explicit and provides understanding framed within a specific organisation and organisational setting. In this conceptual model, the constructs of perceived leadership behaviours and followership orientations may be accepted as interrelated constructs.

3.3. A systems perspective

A study of human behaviour within an organisational setting may require that organisations be viewed as systems and even as systems within systems (Van der Merwe & Verwey, 2007: 33). Viewpoints are the products of synthesis of information, either in a given situation or over time (Marcum & Smith, 2007: 146). This synthesis leads to assumptions, which may show up as differences of opinion about the meaning of data, an idea's relevance, or the significance or outcome of a situation (Marcum & Smith, 2007: 146). A systems view relies upon mentioned differences and openness, interrelation and interdependence of its members (Van der Merwe & Verwey, 2007: 33 and Haines, 2000).

Leadership (contextualised as human behaviour within an organisational setting) may be viewed as a process involving both mutual and collaborative relationships (Antelo, Henderson & St Clair, 2010: 10 and Daft, 2005: 21). Relationships imply connection with people; "mutual" involves sharing with others; and "collaborative" means people working together in the interest of goal attainment (Antelo, Henderson & St Clair, 2010: 10). Leaders can be characterised by respect for the followers and motivation to contribute to social and moral causes (Popper, Mayseless & Castelnovo, 2000). Desired/pro-subordinate behaviour fosters the motivation, wellbeing and job satisfaction of followers, including taking care of and supporting them in accordance with organisational policies (Einarsen, Aasland & Skogstad, 2007).

Destructive/undesired leadership is not one type of leadership behaviour, but instead involves a variety of behaviours. Destructive leadership may be viewed as systematic and repeated behaviour by a leader that violates the legitimate interest of the organisation by undermining and/or sabotaging the organisation's goals, tasks, resources and effectiveness and/or the motivation, wellbeing or job satisfaction of subordinates (Einarsen, Aasland & Skogstad, 2007: 208). What is perceived as destructive/undesired behaviour may vary between individuals, teams, cultures and societies and also over time (Einarsen, Aasland & Skogstad, 2007). It is of importance to realise that it helps to view leaders as they really are, and not as followers think they should be (Daft, 2005: 208)

A systems perspective also considers that leadership serves to co-create shared possible futures and realising a shared, specific chosen future with, through and for employees (Veldsman, 2002 and Van der Merwe & Verwey, 2007: 34). Landsberg (2000: 5) adds that effective leaders create substantial forms of vision, inspiration and momentum in their teams. These leadership tasks and responsibilities may require desired leadership traits, behaviours

and skills. Furthermore interactions between leaders and followers represent a new view of leading as a process that takes place as a result of interactions (Landsberg, 2000 and Antelo, Henderson & St Clair, 2010). These leadership competencies are based on behavioural indicators, but can also be expressed in terms of skills, traits or characteristics (Boak & Coolican, 2001 and Van der Merwe & Verwey, 2007: 35).

A study of human behaviour aimed at discovering deeper understanding of phenomena may not wish to ignore human intentions, individualism and freedoms that are synonymous with human behaviours (Cohen, Manion & Morrision, 2000). In his theory of knowledge formation, Habermas theorises that human beings socially construct their knowledge and that the perspective that they generally use, governs their actions with respect to each other and their environment (Smyth, 2004). The researcher accepted that human behaviour may not be passive, determined and controlled. However it was also noted that feedback regarding human behaviours will not always be accurate; the data received filters through the biased lens of the one giving it, as well as the one receiving it (Marcum & Smith, 2007: 63).

Behavioural norms permit discrimination between behaviours that are acceptable, unacceptable, valued and not valued (Taylor, 2005: 17). Through their observations people draw conclusions about what is valued and accepted (Taylor, 2005: 17). If these conclusions do not align with the stated values, leaders may be accused, with some justification, of exhibiting undesired behaviours (Taylor, 2005: 17). If, however, these conclusions do align with the stated values, leaders may be exhibiting desired traits and behaviours. The researcher accordingly sought to gain an understanding of the meanings humans attach to events and gain a close understanding of the research context.

The researcher realised that such understandings called for respondent clarity, context and assumptions. This view favoured primarily an inductive research paradigm (Saunders, Lewis & Thornhill, 2007). Such a view also signified a possible need to consider and accept alternates to a positivistic social science approach. In this regard Cohen, Manion and Morrision (2000) recommend a naturalistic approach that will allow a researcher to obtain understanding from the standpoint of the individuals who were part of the phenomena being investigated. Naturalistic, qualitative interpretive approaches are suggested as alternatives to positivist approaches (Cohen, Manion & Morrision, 2000). An interpretive approach allows a researcher to commence an investigative journey by understanding the interpretations of individuals of the world around them (Cohen, Manion & Morrision, 2000).

Such an approach accepts that situations are examined and understood through the eyes of participants rather than the researcher (Cohen, Manion & Morrison, 2000).

Marcum and Smith (2007: 63) acknowledge that reports received from participants are directed by their perceptions and their perception is their reality. In such a case theory becomes emergent because events and individuals are unique, multiple interpretations and perspectives exist and these are largely non-generalisable. The researcher's theoretical lens also played an important role in the choice of method because the underlying belief system of the researcher (ontological assumptions) largely defines the choice of method (methodology) (Krauss, 2005). Quantitative methodology is concerned with attempts to quantify social phenomena and collect and analyse numerical data and focus on the links among a smaller number of attributes across many cases (Tuli, 2010: 106). Qualitative methodology, on the other hand, is more concerned with understanding the meaning of social phenomena and focuses on links among a larger number of attributes across relatively few cases (Tuli, 2010: 106).

A goal of a qualitative investigation is to understand the complex world of human experience and behaviour from the point-of-view of those involved in the situation of interest (Krauss, 2005: 764). A goal of a quantitative investigation is to collect and analyse closed-ended information such as that found on attitude, behaviour or performance instruments (Creswell, 2003). In quantitative research, numbers are used to provide information on our world. Analysis consists of statistically analysing scores collected on instruments or checklists to answer research questions (Creswell, 2003). Quantitative research is possibly weak in understanding the context or setting in which people "talk" and the "voices" of participants are not directly heard in quantitative research.

Bogdan and Biklen (2007), Creswell (2007), Merriam (2009) and Stake (2010) agree that the frequently cited attributes of qualitative research include face-to-face research conducted in naturalistic settings, a focus on rich description and the understanding of participants' points of view or meanings, the researcher as the primary data collection instrument, inductive data analysis, a concern with process, an emergent and flexible design, non-random, purposeful sample selection and a holistic understanding achieved through collection and analysis of multiple sources of data and perspectives. Qualitative research may be seen as deficient because of the personal interpretations made by the researcher, the ensuing bias created by this and the difficulty in generalising findings to a large group.

Attributes of quantitative research include an acceptance that knowledge comprises objective reports of measured dimensions of a phenomenon (Hathaway, 1995). Mentioned reports constitute general statements of regularities among objective properties that are internally consistent and that correspond to the way that things really are (Hathaway, 1995). Quantitative researchers recognise that qualitative data can play an important role in quantitative research (Denzin & Lincoln, 2005). Qualitative researchers, in turn, realise that reporting only qualitative participant views of a few individuals may not permit generalising the findings to many individuals (Denzin & Lincoln, 2005). A need for increased sophistication of evidence necessitated a collection of both quantitative and qualitative data. A mixed methods way of thinking is described by (Greene, 2008: 20) as an orientation toward social inquiry that actively invites us to participate in dialogue concerning multiple ways of seeing and hearing, multiple ways of making sense of the social world and multiple standpoints on what is important and should be valued and cherished. It was recognised that a mixed methods research decision could provide more comprehensive evidence for studying a research problem than either quantitative or qualitative research only.

Better understanding of the multifaceted and complex character of social phenomena can be obtained from the use of multiple approaches and ways of knowing (Greene, 2008: 20). The researcher accepted that the complexity of the research problem calls for answers beyond simple numbers in a quantitative sense or words in a qualitative sense. It was therefore acknowledged that a combination of both forms of data can provide the most complete analysis of the research problem. In support Greene (2008: 20) affirms that a mixed methods way of thinking rests on assumptions that there are multiple legitimate approaches to social inquiry and that any given approach to social inquiry is inevitably partial. The researcher thus opted for a mixed methods research design (primarily guided by a qualitative investigative view) that would sanction exploration and discovery of an emergent reality and be supported by an inductive paradigm.

3.4. Positivism, Post-positivism and Constructivism

Lincoln and Guba (2000) describe positivism as a perspective that assumes an objective external reality and emphasises the need for researchers to be objective in accessing that reality and focuses on generalisation and cause-effect linkages. Positivism predominates in science and assumes that science quantitatively measures independent facts about a single comprehensible reality (Healy & Perry, 2000 and Krauss, 2005). Positivists separate themselves from the world they study, while researchers within other paradigms acknowledge that they have to participate in real-world life to some extent to better

understand and express its emergent properties and features (Healy & Perry, 2000 and Krauss, 2005). In the positivist tradition an actual external material reality exists independently of human perception and is governed by law-like systems. This external reality can be objectively observed through direct or sensory perception and such observation is the only legitimate manner to collect information (Khagram, Nicholas, Bever, Warren, Richards, Oleson, Kitzes, Katz, Hwang, Goldman, Funk & Brauman, 2010: 391).

Lyotard (Belsey, 2002: 98) suggests that dissension and not consensus is required if “things” are to go better. A commitment to consensus may promote a bland centrism, satisfies nobody and leaves “things” much as they are (Belsey, 2002: 98). On the contrary, intellectual difference, inventiveness, lateral thinking and heterogeneity promote modifications of existing conventions, rules and views (Belsey, 2002: 98). The researcher did not believe that this research project would solely rely upon or support true objective knowledge that validly corresponds to an independent reality/universal law/law-like predictive theory because of the constructive focus and objective of the intended research (to explore social phenomena in detail and to interpret the meanings and functions of human actions). Despite this view expressed the value of quantifiable insights could not be exclusively ignored. The researcher specifically valued the strict methodological protocol presented by a positivist approach to research. Introducing a positivist approach could ensure a distance between the subjective biases of the researcher and the objective reality of the quantitative element of this study. A quantitative inclusion and perspective could thus not be excluded. However the researcher accepted that descriptive level research permits a researcher to gain insight into defined characteristics, opinions, attitudes and behaviours as they currently exist in the target population. Accumulation and insight into descriptive knowledge was considered beneficial by the researcher because this approach provides an opportunity to collect much data. However the researcher realised that even though there may be a breadth of data, it may lack depth for the sample.

Post-positivism provides an alternative to the traditions and foundations of positivism for conducting disciplined inquiry (Crossan, 2003: 52). For the post-positivist researcher reality is not a rigid intent. Instead it is a creation of those individuals involved in the research (Crossan, 2003: 52). Reality does not exist within a vacuum. Its composition is influenced by its context and many constructions of reality are therefore possible (Hughes, 1994 and Crossan, 2003: 52). Post-positivism dictates the need for rigour, precision, logical reasoning and attention to evidence, but unlike positivism, evidence is not confined to what can be physically observed (Crossan, 2003: 53). Furthermore research can generally be

approached from several perspectives (Crossan, 2003: 53). The limitations of post-positivist approaches generally relate to the interactive and participatory nature of qualitative methods.

Positivism adopts a clear quantitative approach to investigating phenomena as opposed to post-positivist approaches, which aim to describe and explore in-depth phenomena from a qualitative perspective (Crossan, 2003: 54).

Constructivism seeks to explain and understand how reality is constructed through social and natural processes. Knowledge reflects reality to different degrees, but is at least partly contingent upon convention, perception and social experience (Khagram, Nicholas, Bever, Warren, Richards, Oleson, Kitzes, Katz, Hwang, Goldman, Funk & Brauman, 2010: 392). Constructive-developmental theorists advanced that people construct reality (Magolda, 2004). The constructivist, therefore, takes the position that the knower and the known are co-created during the inquiry (Krauss, 2005: 761).

The researcher trusted that the assumptions of the constructivist paradigm – realities are multiple, context-bound and mutually shaped by interaction of the knower and known (Lincoln & Guba, 2000) – would be a better fit with constructive-developmental theory than the positivist and post-positivist assumptions (objective reality, context-free, researcher objectivity). The researcher favoured the constructivist assumption that knowledge is context-bound and that it would resonate with the participants' unique experiences and varied reports (thus viewing personal epistemology through a constructivist lens). Following a constructivist perspective should also facilitate the sorting of transcripts in terms of epistemological assumptions and allow the researcher to identify the core aspects of participants' stories.

Belsey (2002: 73) asserts that truth and knowledge exist at the level of the signifier. The researcher accepted that the method of research is inevitably linked to ontological and epistemological positions – philosophical assumptions about what are real (ontology) and how we know (epistemology) (Wicks & Whiteford, 2006). Ontology and epistemology views served as the foundations on which the researcher built the research as these views shaped the approach to theory and the methods.

3.5. Ontology

Ontologies are created to describe the existence of things in the world by different people who usually have different viewpoints concerning what the world looks like. Ontological

elements of realities are not absolutely true or correct in any sense, only more or less informed and sophisticated. The researcher contends that the “world” is socially and discursively constructed and hence dependent upon a particular time, event or culture. Moreover researchers operate under different ontological assumptions about the world (Krauss, 2005: 760). They do not assume that there is a single unitary reality apart from their perceptions (Krauss, 2005: 760). Realities are local and specific in the sense that they vary between groups of individuals. A person draws meanings from, or gives meanings to, events and experiences (Krauss, 2005: 763). That is experiencing starts to make sense as the person performs his or her psychological functioning of translating it into how he or she thinks and feels (Krauss, 2005: 763 & 764). Reality is actively constructed, thus not merely discovered.

Emotions are usually contagious (Fisher & Shapiro, 2005: 13). If, within a group, the resulting emotions are negative and strong, then there is a risk that each group member’s emotions will quickly escalate (Fisher & Shapiro, 2005: 13 & 14). The stronger and more troublesome the negative emotions, the greater the risk that participating individuals may lose focus and digress from shared meaning creation (Fisher & Shapiro, 2005: 13). It is individuals’ subjectivity, or phenomenological world, that forms the core for meaning origination and evolvement (Krauss, 2005: 764). People have the freedom to choose meaning (McArthur, 1958) through their interactive experiencing with various internal and external contexts (Chen, 2001). As such meaning is the underlying motivation behind thoughts, actions and even the interpretation and application of knowledge (Krauss, 2005: 764). Since everyone of us have experiences according to our own point of view, everyone of us experience a different reality (Krauss, 2005: 760). Organisational reality is interpreted by individuals and made sense of through a process of internalisation. Internalisation is an interpretation of elements of organisational reality (constructions) in terms of the individual’s local reality. As such, the phenomenon of “multiple realities” exists.

It is accepted that interpretive traditions are based on the belief that human beings create meanings that could be observed and studied through qualitative inquiries (Silverman, 2000). Ontologically, narratives are the very essence of human behaviour and a fundamental mode of thinking. People often organise and transfer knowledge in a narrative form (Bruner 1986, Williams, 2006, Pace, 2008 and Linde 2001). Qualitative researchers therefore tend to espouse a constructivist ontological view of the world (Broom, 2005). Quantitative researchers tend to favour a positivist view whereby reality is considered a concrete structure and process (Morgan, 1997). The researcher acknowledged that whilst there is a reality “out there” waiting to be discovered, this reality is neither static (objectivist

view) nor is it purely a projection of one's imagination (subjective view). In terms of this specific research study the researcher postulated that reality exists as a contextual field of information, reality is a realm of symbolic discourse and it is a social construction. The ontological view adopted in this study was thus somewhere between a subjective and objective view.

3.6. Epistemology

Epistemology concerns itself with the analysis of what is meant by the term "knowledge" itself and with questions on "the limits and scope of knowledge, its reliability and what constitutes justification for holding a knowledge" (Edgar & Sedgwick, 2003). People actively construct or make meaning of their experience – they interpret what happens to them, evaluate it using their current perspective and draw conclusions about what experiences mean to them (Magolda, 2004: 31). The meaning they construct depends on their current assumptions about themselves and the world, conflicting assumptions they encounter and the context in which the experience occurs (Magolda, 2004: 31).

A goal of epistemology is not only to define but also to add awareness to knowledge, thus identifying the otherwise invisible contextual aspects that influence behaviour based on certain understandings of concepts taken for granted (Audi, 2003 and Pakman, 2004). A systemic reflection aims at exploring concepts not as isolated entities in need of abstract definition, but as connected to a network of significantly related concepts (Audi, 2003 and Pakman, 2004). A constructivist view is that knowledge is established through the meanings attached to the phenomena studied; researchers interact with the participants of study to obtain data; inquiry changes both researcher and subject; and knowledge is context and time dependent (Coll & Chapman, 2000, Cousins, 2002 and Krauss, 2005: 759). Belsey (2002: 73) suggests that there is no purely objective knowledge, because knowledge is necessarily the property of a subject. Knowledge is thus not interpreted and accepted as a statement on absolute reality, but rather the end product of a creative search to "understand" through science.

The researcher will rely upon recalled accounts that are synonymous (albeit from a respondent perspective) with phenomena events. Participants will be required to reflect on original events and then decide what to say and how to say it. It is thus accepted that from the moment of the event onward, what the person does with the experience relies heavily on an internal element considered central to psychology, which is memory (Pakman, 2004: 267). Memory is a process mediated by many other experiences of the respondent, and as

such, it has psychological and sociological determinants as well as identity and relationship perspectives (Pakman, 2004: 267 and Magolda, 2004: 31). It is furthermore proposed that participants will be able to attune to their emotions and be able to recognise and explain how these emotions shape their perceptions, thoughts and actions (Goleman, 2004). In this sense the real conversations are the inner ones, if only because they reveal how participants actually think and feel about a phenomenon and what is transpiring (Goleman, 2004: 293). These experiences may be viewed holistically as individual and collective mental models.

Wittgenstein (Polkinghorne, 1983: 103-114) proposed that all knowledge is relative to one's perspective and that there is no absolute point of view outside one's historical and cultural situation. Wittgenstein (Polkinghorne, 1983: 103-114) suggested that an observation is theory-laden in that experience is built from an interaction with one's conceptual framework. It is claimed that meanings are theory dependent in that the meaning of the words used in various theories changes from theory to theory or from context to context (Polkinghorne, 1983: 103-114). Furthermore it is proposed that facts are theory-laden in that what one takes as fact and how one expresses that something as a fact, is relative to the worldview in which one organises experience (Polkinghorne, 1983: 103-114). Conceptualisation by the researcher of phenomena can be described as a complex interplay between meaning-making as a researcher, meaning-making by participants and the implications of the intersection of these two sets of meaning-making for the study. Beyond requiring self-awareness to retrieve participants' hidden thoughts and feelings, the researcher engaged in reflexivity, or "the process of reflecting critically on the self as researcher" (Lincoln & Guba, 2000: 183 and Magolda, 2004: 32), will need empathy (to truly listen to the respondent's point of view with sensitivity) and social skills to collaborate productively when exploring meaning that surfaces (Goleman, 2004: 293).

This research study was framed by a specific context. In this context, the epistemological assumption of extreme positivist view which promotes that knowledge can only be based on observing concrete reality was not supported. It was argued that in order to understand socially constructed phenomena the researcher could not be totally objective and independent. Hence the positivist notion that data should be value-free and objective was not fully accepted. The need to understand perceptions and preferences was tempered by the recognition of the inevitable role of the researcher and the researched as active participants of knowledge creation. This is the relativistic epistemology favoured in mixed methods research.

3.7. Congruence

Propositional and statistical approaches to meaning may ignore the fact that knowledge is derived from sensory experiences and from interactions with the world (Domijan & Setic, 2010: 48). Relativists/Interpretists do not intend to make objective statements about the real world. Hence, the distinction between ontology and epistemology is indistinct, as what constitutes reality depends on a person and his/her values. Relativists/Interpretists postulate that phenomena do not exist independently of our interpretation and every observation concomitantly affects what we observe. Perception and thinking is individual-based, the construction process involves other social and cultural artefacts and therefore inevitably becomes social. Perception and interpretation are themselves perspectives prior to the start of any interpretation (Wilber, 2003). Organisation members have their private local realities, that is, subjective beliefs, views and values. Organisation members' experiences can be viewed from an internal (intrinsic) or external (extrinsic) perspective.

The internal perspective is the felt experience of a moment/event as accessed by means of introspection, meditation or other phenomenological approaches (Wilber, 2006). The external perspective describes an experience that an objective observer structures when accessing an exterior or third person view of another person (Wilber, 2006). These realities are systems of meaning that are perceived by the member to be valid. They are reality. Groups can also be considered to have local realities. Knowledge is thus theoretically or discursively laden (Marsh & Furlong, 2002). Relativists/Interpretists usually employ qualitative research methods as they look to understand social behaviour rather than explain it and focus on its meaning. However this research study also aimed to test developed theories and to rate and describe current practices (with reference to the Leader Trait and Behaviour Questionnaire). Aforementioned is synonymous with a quantitative enquiry. The purpose of this research study called for a mix of descriptive, explanatory and exploratory types of research necessitating a mix of both quantitative and qualitative methods. Mixed methods can be conceived as methods that loop between constructivism and logical empiricism and include the notion that something can be "both socially constructed and yet real" (Hacking, 1999: 119). Greene (2005) extends this explanation by acknowledging that the mixed methods way of thinking also generates questions, alongside possible answers; it generates results that are both smooth and jagged, full of relative certainties alongside possibilities and even surprises, offering some stories not yet told (Greene, 2008: 20). Greene (2007) concludes that in these ways, a mixed methods way of thinking actively engages researchers with difference and diversity in service of both better understanding and greater equity of voice (Greene, 2008: 20).

Congruence was explicitly established between the means of investigating the situation (methodology), the nature of the situation's reality (ontology) and the form of the knowledge (epistemology) suited to the research. This congruence supported an overarching framework of guiding principles assisting the researcher to derive meaning from the investigation (Miles & Huberman, 1994a & 1994b and Booth, 2010). In summary, the epistemology involved understanding the environment within which actions were taking place. The ontology resided in the social world of human interaction. A mixed methods research design that integrates qualitative and quantitative research was consequently accepted.

Qualitative methods, such as interviews and a case study, improved the design by providing data that would provide insights into how findings transpired and how findings could be translated into practice. On its own a quantitative method could provide identified leader traits and behaviour ratings, but this method limited explanatory power. A qualitative design provided the potential to collect rich information on follower experiences and expectations, but the information would be more subjective and would be subject to restricted generalisation. By combining the two methods, the researcher created the potential to obtain a much richer understanding.

3.8. Envisaged research design and analysis

Leadership seems to be that process which emerges from interactions between the leader and the follower (Antelo, Henderson & St Clair, 2010: 10). It should be imperative to study followers within a leadership process, based on the understanding that both the leader and the follower influence the process (Antelo, Henderson & St Clair, 2010: 10). Understanding unique meanings has to do with the construction of the meaning process and the many different factors and dynamics that influence it (Krauss, 2005: 763). This is the role and purpose of research and data analysis – to identify the contributors to an individual's (or groups') unique meaning (Krauss, 2005: 763).

Any view is a view from some perspective and therefore is shaped by the location (social and theoretical) and “lens” of the researcher. Epistemologically the researcher is engaged in the setting, participating in the act of “being with” the participants in their lives to generate meaning from them (Krauss, 2005: 765). The conceptual framework provided the researcher with eight characteristics and associated conclusions that guided the

research design and analysis decisions. Together these characteristics (Table 3.1) described the nature of the intended research effort.

Table 3.1. Characteristics and conclusions that guided the research design and analysis decisions

Characteristics	Conclusions
Research purpose.	The researcher acknowledged a need to understand a social situation from participants' perspectives.
Ontological assumptions.	The researcher accepts and respects the presence of multiple realities. Individuals' realities will be explored in an attempt to avoid negative collective/group emotional inferences. These individual realities will facilitate an affirmation of multiple realities.
Objectivity (of data collection and analysis procedures).	Explicit and detailed descriptions of data collection and analysis procedures were required.
Precision (in terms of reflexivity and constant comparisons).	A detailed description and accepted understanding of the phenomenon (leadership behaviours) studied was essential.
Verification of results.	Co-creation and extension of understanding by others would be necessary.
Empirical compliance.	<p>Research efforts had to be guided by systematic methods.</p> <p>The researcher had to suspend own personal experiences and beliefs.</p> <p>The researcher had to make use of statistical analysis based on evidence collected.</p> <p>The researcher had to make use of logical interpretations based on the evidence collected.</p>
Logical reasoning.	The researcher was obliged to reach a conclusion by examining particular cases and forming summary generalisations – suggesting inductive reasoning. The reason being that with induction, data are collected and a theory is developed as a result of the data analysis (Saunders, Lewis & Thornhill, 2007: 122).

Research outcome.	Detailed but limited to context and organisation-bound generalisations would be reported. Booth (2010: 39) and Mole (2004) noted that current leadership research identifies context as an important factor in leadership.
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Source: McMillan, J.H. & Schumacher, S. 2001. *Research in education: A conceptual introduction*. 5th ed. New York: Addison Wesley Longman, Inc.

The conceptual framework served as a structure of what has been learned to best explain the natural progression of the phenomenon that was studied (Camp, 2001). The theoretical framework provided explanations of the phenomenon (Camp, 2001) and provided the researcher with a lens to view the world (Merriam, 2001 & 2009). The conceptual framework and supporting theoretical framework presented in this chapter and previous chapters essentially guided the orienting decisions that determined the nature of this research project. Characteristics and conclusions mentioned above (Table 3.1) were accepted as parameters of this research project.

Krauss (2005: 765) suggests that the closer the researcher gets to the conditions in which they actually do attribute meanings to objects and events the more opportunity the researcher and participants have to engage in meaning-making together. In order to discover this subjectively intended meaning, researchers have to empathise with social actors and appreciate the purposes, motives and causes that underlie those actions (Krauss, 2005: 765). Fisher and Shapiro (2005: 51) suggest that it is necessary to appreciate and understand a person's point of view, find merit in what the person thinks, feels or does and communicate your understanding through words. Accordingly this can only be accomplished within a framework and approach that encourages immersion of the researcher in the research setting of the participants (Krauss, 2005: 765). A hands-off approach where the researcher attempts to distance him or herself from the research setting will never be able to achieve this goal (Krauss, 2005: 765). Smyth (2004) suggests that these assumptions should inform the development of the conceptual framework as well as the research design and the means of investigating the realities of the situation.

3.9. Conclusion

The researcher embraces the significance of internal reality, values the participant's own interpretations of reality and maintains that knowledge emerges from achieving a deep understanding of the data and the context it is embedded in. The researcher acknowledged that a mixed methods enquiry supported a notion that reality is socially constructed, understood and interpreted by every unique individual, from within their own unique contextual and emotional interpretation. The researcher also accepted that maintaining an internal, socially-constructed ontology would affect the epistemological foundations of this research project.

This conceptual framework served as a bridge between paradigms which explained the research issues and the practice of investigating these issues. Finally this conceptual framework provided a "scaffold" (Leshem & Trafford, 2007: 99) within which strategies for the research design could be identified, clarified, motivated, determined and fieldwork could be undertaken.

CHAPTER 4: RESEARCH DESIGN AND ANALYSIS

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CHAPTER 4: RESEARCH DESIGN AND ANALYSIS

4.1. Introduction

4.1.1. Aim and purpose of the research

Researchers engaging in research need to have a clear sense of the logic and purpose of their approach and of what they are trying to achieve. This ultimately must underpin their practical strategy not only for choosing and deploying a particular method, but crucially also for linking their data analytically.

The aim of this research project was to discover and understand multiple realities that were found to be present in a defined organisational environment. The researcher acknowledges that human actions and performances were strongly influenced by the setting in which they occur. A study of multiple realities in real-world situations was subsequently deemed necessary in this specific case. A more personal understanding of these multiple realities and subsequent results produced knowledge that was valuable in terms of its contribution to existing leadership-followership theory. Mentioned contribution was found in logical generalisations that were linked to a theoretical understanding of a similar class of phenomena (Lincoln & Guba, 1985 and Case & Light, 2011: 188) rather than compelling probabilistic generalisations to a population.

The conceptual orientation as applicable to this research project suggested that meaning is socially constructed by individuals in interaction with their world. The reality investigated was subsequently not single, fixed, agreed upon or restricted to a measurable phenomenon. Instead numerous constructions and interpretations of reality were considered. The researcher was interested in understanding what those interpretations were at a particular time and in a particular context.

4.2. Orienting decisions

Orienting decisions are strategic as they set the general nature of the research and establish key parameters of the research (Cohen, Manion & Morrison, 2000: 75). The researcher was interested in understanding how participants gave meaning to a situation and phenomenon, mindful that this meaning needed to be mediated through the researcher as instrument. The researcher accepted that the preferred strategy was primarily inductive and that the outcome would be descriptive. The desired rich and descriptive account of the findings is presented

and discussed, using references to the literature that framed this study and a supportive triangulation technique. It was furthermore noted by the researcher that the relevance of single studies in terms of generalisation may be limited, because one study typically only assesses a small fraction of the behaviours and patterns that exist in reality.

4.3. Research possibilities

Choice of method is in part linked to the nature of the research question(s) and needs to take account of their epistemological bases (Brannen, 2005). Researchers' beliefs about reality, knowledge and values guide and frame their beliefs about research methods (Rocco, Bliss, Gallagher & Perez-Prado, 2003: 21). However a research strategy is devised to be best suited to a particular purpose rather than only tied to a philosophical position (Brannen, 2005).

Through qualitative methods researchers are able to gather information on human interactions, reflect on their meaning, arrive at and evaluate conclusions and eventually put forward an interpretation of those interactions (Ball & Craig, 2010, Reason & Riley, 2008, Marshall & Rossman, 1989: 21, Yin, 1994, Yin, 2003, Yin, 2008, Frost, 2009 and Mason, 2006). Quantitative methods enable researchers to emphasise objectivity and quantification of phenomena (McMillan & Schumacher, 2001: 31). These methods may constitute use of non-experimental modes of enquiry. Non-experimental modes of enquiry describe something that has occurred or examine relationships between things without direct manipulation of conditions that are experienced (McMillan & Schumacher, 2001: 33). A combination of qualitative and quantitative methods was deemed appropriate for this study. A mixed methods approach was thus followed. Data were subsequently collected through interviews and inductively analysed to identify the recurring patterns or common themes that were evident from the data. Data were also collected by means of a structured questionnaire and were deductively analysed to assess the nature of existing conditions and to characterise phenomena as they are.

The purpose and aim of the research was known and approved by the organisation (Appendix D). Moreover participants contributed voluntarily and data sources remained confidential. Adequate resources (funding, time and personal presence) existed to carry out this research. Furthermore no attempt was made to manipulate the situation under study and subsequently ethical compliance was upheld by the researcher. The feasibility (Cohen, Manion & Morrison, 2000: 83 & 84) of this research was recognised by acknowledging that

this research is regarded as useful in terms of its contribution to leadership theory and practice.

A fundamental purpose of any research project is to address a problem in the real world that has been identified in the research question. The researcher acknowledges that quantitative and qualitative research are not in contraposition to each other. The researcher accepts that different methods enable researchers to gain access to different types of knowledge. The researcher believes that this research study provides scholars and practitioners with new ways of looking at leadership development research and practice. Results of this study are aimed at making the learning situation more rewarding for those members involved in leadership development. Mentioned results focus on leadership students, on changes in their behaviours, on developing new competencies in them and on unlearning obsolete/undesired behaviours. The researcher anticipates that practitioners will discover useful insights and methods in leadership development that will help them to be more effective when working to develop leadership talent, especially in safety-critical commercial organisations.

4.4. Research constraints

The researcher accepted that the selected research design and strategy itself is open to critique. Chenail (2011: 256) and Poggenpoel and Myburgh (2003: 320) acknowledge that the researcher as instrument can be the greatest threat to trustworthiness in research if time is not spent on preparation of the field, reflexivity of the researcher, the researcher remaining humble and ensuring that triangulation and peer evaluation can take place. It was therefore important and beneficial to identify and acknowledge research constraints during the early stages of this research project. These constraints served as a constant checklist and reminder of potential shortcomings and possible weaknesses in this study. This list (Table 4.1) was used as an additional measurement of validity, thereby ensuring that proposed constraints were monitored throughout the study.

Table 4.1. Constraints of this study

Theme	Constraints
Naturalistic inquiry	This study was not restricted to specific sites. The inquiry was facilitated by means of interviews and a structured questionnaire. Interviews encouraged open discussions.

	<p>These open discussions (Tharp & Gallimore, 1988) elicited a more coherent version of followers' reasoning and relevant experiences. Structured questionnaires invited focused responses.</p>
Inductive analysis	<p>What makes single-level analysis "incomplete and unbalanced" is often, though not always, the absence of contextualised knowledge that takes into account how larger forces, structures and histories inform local social interactions and understanding (Vavrus & Bartlett, 2006: 97). A researcher must take care not to succumb to tunnel vision (Verschuren, 2003). Tunnel vision is caused by observation at a single point in time and/or observation detached from context or relationships (Verschuren, 2003). In response the researcher supplemented and supported the inductive analysis with a deductive analysis. Only one person performed data collection and interpretation. However data collected and interpreted were reviewed by an external codifier.</p>
Deductive analysis	<p>A deductive approach can assist with a need to explain causal relationships between variables and it stresses the appreciation of concepts to ensure clarity of definition (McMillan & Schumacher, 2001: 120). Following a primarily inductive analysis did not negate the use of deductive analysis. Deductive analysis assisted with interpretation of data collected by means of the Leader Trait and Behaviour Questionnaire. Only one person performed data interpretation. However data collected and interpreted were reviewed by an external codifier and statistician.</p>
Qualitative data	<p>Detail descriptions were made possible by means of qualitative data collection methods. The researcher performed this task. The researcher understood that information collected for a case study, especially through personal interviews, may not accurately reflect the situation. A biased response may result from cognitive dissonance and/or a retrospective view by the individuals</p>

	interviewed (Barkley, 2006: 11). The likelihood of biased survey responses and biased interpretations can be reduced by increasing the number of perspectives on each case and increasing the number of individuals analysing the case study data (Barkley, 2006: 11). The researcher decided not to rely solely on qualitative data and therefore introduced a mixed methods approach.
Quantitative data	Detail descriptions were prompted in terms of identified constructs. This was made possible by means of a quantitative data collection method. The goal was to enable statistical descriptions, relationships and explanations (McMillan & Schumacher, 2001: 40). This analysis allowed the researcher to tabulate and describe data. Meaning was subsequently derived from the statistical procedures employed. The researcher and a statistician performed this task. The researcher decided not to rely solely on quantitative data and therefore introduced a mixed methods approach.
Mixed methods approach	Quantitative and qualitative data collection techniques and analysis procedures each have their own strengths and weaknesses. Selecting a mixed methods approach allowed for quantitative and qualitative techniques and procedures. However qualitative techniques and procedures received precedence. The use of a case study identified an opportunity and a need to triangulate mentioned multiple sources of data. According to Saunders, Lewis and Thornhill (2007: 139) triangulation refers to the use of different data collection techniques within one study in order to ensure that the data are “telling you what you think they are telling you”. A mixed methods approach enabled triangulation to take place (Saunders, Lewis & Thornhill, 2007: 147).
Personal contact and insight	Findings may be criticised in terms of personal bias. The researcher did not identify and/or give appropriate consideration to the role of external factors (for example the political and economic environment) in the situation of

	interest (Barkley, 2006: 10).
Dynamic systems	Challenges may emanate from the diversity within the research group. The group (sample) was diverse in terms of the differences in vocational and professional backgrounds.
Unique case orientation and context sensitivity	Environmental influences and differences that could affect behaviours were not known. Arguably individuals are made up of multiple selves, personas and multiple realities. However because participants were contacted post data collection and analysis (with reference to interviews) there were opportunities to clarify ambiguous thoughts, phrases and expressions.
Empathetic neutrality	For people to be willing to share their knowledge, they must have trust because this is a prerequisite for tacit knowledge sharing (Roberts, 2000). The researcher accepted that confidentiality arrangements may not always guarantee full disclosure of information.
Design flexibility	Generalisation refers to the extent to which the results of a study apply to individuals and circumstances beyond those studied (Ryan & Bernard, 2000). This research was small-scale and context-specific. Therefore in no way can the findings be indiscriminately generalised to wider populations. However hopefully this possible concern was mitigated by the depth and variety of subject positions and perceptions and the use of triangulation.

Compiled by the researcher

These identified constraints were considered, addressed and mitigated as part of the research design and associated strategy presented as a case study. The researcher complied with the selected sample size and diversity, which in turn offset potential claims of personal bias. The proposed and structured data gathering protocol facilitated a trust relationship between the participants and the researcher. The researcher gave participants time to ponder over interview questions. The researcher used follow-up questions when required. The researcher also paid careful attention to and recorded participants' comments that were contextually and/or environmentally influenced. Furthermore the researcher allowed for member-checking opportunities (Appendix C). Member-checking is a way of

finding out whether the data analysis is congruent with the participants' experiences (Curtin & Fossey, 2007: 92). Although case studies may have various advantages, in that they present data from real-life situations and they provide better insights into the detailed behaviours of the participants of interest, they are also criticised for their inability to generalise their results (Yin, 1994). Yin (1994) warns that case studies may be criticised because they provide very little basis for scientific generalisation since they use a small number of participants and because they are contextually and temporally bound. Moreover a drawback of a single-case design may be its inability to provide a generalising conclusion (Yin, 1994). These aforementioned constraints were mitigated by means of triangulation in order to confirm the validity and reliability of the process.

4.5. Main approach to the research problem

This study required the researcher to understand the meaning people give to their world and their experiences (that is, how do people make sense of their experiences?). According to Yukl (2009: 52) progress in the research on leadership and organisational learning is limited by over-reliance on research methods that are not well suited for studying complex and dynamic processes that occur slowly over long periods of time in organisations. Yukl (2009: 52) asserts that the dominant research method in leadership has been a field survey study that includes a behaviour description questionnaire. It was observed by Yukl (2009) that the ratings of leader behaviour were strongly influenced by participant biases and attributions, resulting in high intercorrelations among scales that supposedly measured distinct and independent behaviours (Yukl, 2009: 52). The high intercorrelations encouraged a common practice of aggregating specific behaviours into broad meta-categories such as transformational leadership or supportive leadership (Yukl, 2009: 52).

Reliance on these meta-categories made interpretation of correlations with other variables very difficult, especially when all data are from the same participants (Yukl, 2009: 52). Yukl (2009: 52) admits that scholars continue to search for ways to improve leader behaviour by also considering alternative methods and measures that are likely to be more useful for understanding how leaders influence organisational learning and innovation. Yukl (2009: 52) concludes that a single case study conducted over time in one organisation can be useful. The researcher responded to the research problem by introducing a mixed methods research approach that facilitated and integrated both qualitative and quantitative investigations.

4.5.1. A qualitative research approach

The word “qualitative” implies an emphasis on the qualities of entities and on processes and meanings that are not experimentally examined or measured in terms of quantity, amount, intensity or frequency” (Denzin & Lincoln, 2000: 8 and Kohlbacher, 2005). An important characteristic of qualitative research is that the process is inductive. Qualitative research is often depicted as a research strategy whose emphasis on a relatively open-ended approach to the research process frequently produces surprises, changes of direction and new insights (Bryman, 2006: 111).

Qualitative research as a form of inquiry has grown tremendously in the last decade (Daley, 2004). The focus of qualitative research tends to be on understanding the meaning imbedded in participant experiences through an open-ended, unstructured and subjective approach (Hancock, 2002, Bogdan & Biklen, 2003, Daley, 2004 and Denzin & Lincoln, 2005). The research is most often conducted in a naturalistic setting with a purposive sample (Patton, 2002). Qualitative research is holistic, descriptive and focuses on the depth and details of reported experiences (Daley, 2004 and Denzin & Lincoln, 2005). Data collection methods include interviews, observations, field notes and document analyses (Hancock, 2002 and Daley, 2004). Data tend to be analysed through an inductive, ongoing and evolving process of identifying themes within a particular context (Daley, 2004).

Qualitative research supports an ontological foundation that defines reality as some type of projection of imagination, the point of view of at least one actor, or at best a social construction, which can be explored through a science of meanings, phenomenological insight and subjective processes. Denzin and Lincoln (2000) identify eight research strategies used in qualitative research, being case study, ethnography, phenomenology, grounded theory, biographical, historical, participatory and clinical. Qualitative research does not belong to a single discipline, nor does qualitative research have a distinct set of methods that are entirely its own (Denzin & Lincoln, 2000: 6).

Bogdan and Biklen (1998: 38) note that the goal of qualitative research is to better understand human behaviours and experiences, to grasp the processes by which people construct meaning and to describe what those meanings constitute (Creswell, 2007 & Castellan, 2010: 5). Qualitative research allows the reader to get up close and personal with the ideas, the people and the events that stimulate the researcher’s curiosity. This envisaged intimacy with the phenomenon of interest also means that the reader can see the world through the researcher’s eyes (Yin, 1994, Creswell, 2007, Teddlie & Yu, 2007, Raelin,

2008, Cunliffe, 2008 and Gergen, 2009). People and their interactions are often complex and difficult to research in meaningful ways due to embedded social constructs, social identities, organisational influences and other factors. Qualitative research methods involve the systematic collection, organisation and interpretation of textual material derived from talk or observation (Malterud, 2001: 483). Qualitative inquiry involves the investigation of uniqueness – of unique individuals, groups and phenomena – each situated within unique contextual settings (Carlson, 2010: 1104). It is used in the exploration of meanings of social phenomena as experienced by individuals themselves, in their natural context (Malterud, 2001: 483).

An objective of qualitative social research is oral narration, the impromptu storied accounts and spontaneous narratives given by individuals in interviews. A basic assumption is that in (oral) narration individuals express themselves in ways that are subjectively felt to represent the most authentic and thorough account of what they experienced in the past and think about in the present interview situation. With the aid of qualitative case study design, researchers are able to provide the necessary emphasis on workers' experiences and viewpoints. Creswell (2007) defines this method by beginning with assumptions regarding a worldview, the possible meaning of a theoretical lens and the study of research problems inquiring into the meaning individuals or groups ascribe to social or human problems or situations. To study these problems qualitative researchers use an emerging qualitative approach to inquiry, the collection of data in a natural setting that is sensitive to the people and places under study and data analysis that is inductive and establishes patterns or themes (Creswell, 2007). Yin (2003: 13-14) suggests that four circumstances are deemed appropriate for a case study: (a) when a "how" or "why" question is being asked about contemporary events; (b) when the description of a real-life context is sought, particularly if boundaries are not clearly evident; (c) when there are more variables of interest than data points and (d) when multiple data sources are necessary as evidence.

In terms of compliance with these circumstances it is observed that this specific research study aimed to find answers for "how" questions about actual events, was anchored within a specific context and acknowledged different perspectives that existed and that guided participant answers. Understanding and revealing how individuals experience and interact within defined leader-follower relationships required a descriptive interpretation of new insights, new concepts and theoretical perspectives associated with and guided by mentioned relationships. These desired and envisaged new insights relied upon freely expressed responses from followers. These responses needed to be facilitated by means of a relatively open-ended research process. Selecting an inductive, ongoing and evolving

process of identifying themes within mentioned context supported a decision to consider a qualitative research approach.

In qualitative research the aim is to make logical generalisations to a theoretical understanding of a similar class of phenomena rather than probabilistic generalisations to a population (Goeken & Borner, 2012, Yin, 2003: 10, Lee & Baskerville, 2003 and Popay, Rogers & Williams 1998: 348). Common criticism levelled at qualitative research is that the results of a study may not be generalised to a larger population because the sample group is typically small and the participants are not chosen randomly (Hancock, 2002). The context-specificity of qualitative research may limit generalisation to other situations (Creswell, 1998 and Hammersley, 1990). Other context-specific limitations applicable to this study should also be noted, including organisational culture, climate, type and managerial differences.

Organisations have unique cultures, climates, values, work practices and processes that transform visions and ideas into reality. Organisational culture refers to the patterns of beliefs, assumptions, norms, values and behaviours reflecting commonality in people working together. Organisational climate reflects on how employees in an organisation feel about the characteristics and quality of culture like morale, goodwill, employee relations, job satisfaction and commitment to the organisation, department or unit level. These may be regarded as relatively persistent perceptions held by organisational members with regard to an organisation. These individual and shared dimensions may influence relationship performance within different organisations. An organisational culture and climate may thus be regarded as being unique to an organisation, unit or group (Buono, Bowditch & Lewis, 1985). Formal leadership as part of the management function enables a process in which an individual influences other group members towards the attainment of group or organisational goals and these goals are specific to an organisation. Furthermore the type of organisation dictates specific organisational goals and managerial roles. Given the diversity of managerial work within organisations (Mintzberg, 2009), unique organisational climate and culture differences and for the purposes of analytical clarity this research project considered the development of leadership within a specific organisation. Generalisation of research results were thus considered limited due to mentioned influences and differences.

Fernie, Green, Weller and Newcombe (2003) discusses the importance of context when comparing organisations with a view of utilising knowledge gained in one sector and applying it to other sectors (Maqsood, Finegan & Walker, 2004: 299 and Griffin & Stacey, 2005). They emphasised that while doing so industry context, which involves political, economic, social, technological, legal, environmental and structural factors inherent in each

sector must not be overlooked (Maqsood, Finegan & Walker, 2004: 299). Knowledge extracted from one context can be converted and adapted to another context (Maqsood, Finegan & Walker, 2004: 299 and Griffin & Stacey, 2005). From a qualitative perspective the intention was not to generalise to another population but to contribute to a theoretical understanding and explanation. Furthermore a degree of generalisation could be achieved by ensuring that the research actions were sufficiently detailed for a reader to be able to judge whether or not the findings apply in similar settings (Mays & Pope, 2000). Based on this relationship between the reader's experience and the case study itself, Stake (1995) supports an empirically-grounded generalisation that he calls "naturalistic generalisation" (Goeken & Borner, 2012). Accordingly the case data can be understood and interpreted by readers more comprehensively if it matches their experience (Goeken & Borner, 2012). In this case the generalisation emerges when the reader recognises similarities in the case study details and finds descriptions that resonate with his/her own experience (Goeken & Borner, 2012).

Qualitative research plays an important role in explaining the social world. It can enhance, even "drive" mixed methods research, extend experimental applications and further emancipatory aims (Creswell, Shope, Plano Clark & Green, 2006: 9). Overall the value and benefit of a qualitative approach or qualitative element was acknowledged by the researcher, since mentioned approach allowed research objectives to be met and answered by the posed research questions. A qualitative approach facilitated in-depth interviews, collected data expressed as a narrative supported by field notes, suspended data assumptions (data presentation depended on data collected) and encouraged the identification of patterns used to support qualitative meanings.

4.5.2. A quantitative research approach

Generalisation of a case study so that it contributes to theory is important (Rowley, 2002: 20). Generalisation can only be performed if the case study design has been appropriately informed by theory and can therefore be seen to add to the established theory (Rowley, 2002: 20). Schwandt (1997) has argued that meanings of complex phenomena are context-specific and that there are no context-free meanings. Delmar (2010: 120) expands on this view by stating that human deliberations, experiences, decisions and actions are changeable and particulars will vary with time, space, relations and power. Delmar (2010: 120) continues by stating that the complexity of the studied context should not be eliminated or kept as constant factors. Stake (1978) and Schoefield (2002) posited that it is not feasible to apply a single case and generalise its results to a larger population, even when that case

constitutes a subset of the population (Delmar, 2010: 117). LeCompte and Goetz (1982) argued that the results of qualitative studies can be used as a basis for comparison with other situations in terms of “comparability” and “translatability” (Delmar, 2010: 117). For a study to be “translatable”, it must give a clear description of its theoretical position and the techniques or methods applied in research (Delmar, 2010: 117). In terms of this research study the theoretical position was presented in consultation with predefined and structured leadership traits and behaviours. Furthermore in order to enhance the value of this research effort an accepted and structured questionnaire was incorporated. Aforementioned is synonymous with a quantitative research approach.

The aim of a quantitative approach is to test core-determined hypotheses and produce generalised results (Hancock, 2002). Such studies are useful for answering more mechanistic 'what?' questions (Hancock, 2002). Qualitative studies aim to provide illumination and understanding of complex psychosocial issues and are most useful for answering humanistic 'why?' and 'how?' questions (Hancock, 2002 and Bogdan & Biklen, 2003). The choice between quantitative, qualitative and mixed methods research options should be determined by the research question, not by the preference of the researcher (Marshall, 1996: 522). Quantitative data include closed-ended information such as that found on attitude, behaviour or performance instruments (Greene, Caracelli & Graham, 1989 and Creswell, 2003). The analysis consists of statistically analysing scores collected on instruments, checklists or public documents to answer research questions or to test hypotheses (Greene, Caracelli & Graham, 1989 and Creswell, 2003).

Quantitative research is weak in understanding the context or setting in which people “talk” (Greene, Caracelli & Graham, 1989 and Creswell, 2003). Moreover the voices of participants are not directly heard in quantitative research (Greene, Caracelli & Graham, 1989 and Creswell, 2003). A quantitative experimental research decision did not support the desired approach aimed at discovery.

A quantitative research element was deemed beneficial in terms of allowing the researcher to use data that took one form (criteria and response options were predetermined by the questionnaire), to tabulate and describe data statistically and derive meaning from the statistical procedures employed. A quantitative research element was considered because of its potential to further create understanding in support of the research objectives and research questions. The researcher acknowledged that a quantitative element may be valuable and it was therefore included.

4.5.3 A mixed methods approach

Mixed methods, as a method focuses on collecting, analysing and mixing both quantitative and qualitative data in a single study or series of studies (Greene, Caracelli & Graham, 1989 and Creswell, 2003). Mixed methods research helps to answer questions that cannot be answered by qualitative or quantitative approaches alone (Greene, Caracelli & Graham, 1989 and Creswell, 2003). Johnson and Onwuegbuzie (2004: 17) note that the logic of mixed methods inquiry includes the use of induction (or discovery of patterns), deduction (testing of theories and hypotheses) and abduction (uncovering and relying on the best of a set of explanations for understanding one's results). Mixed methods research combines elements from both qualitative and quantitative paradigms to produce converging findings in the context of complex research questions. Yin (2011: 289) admits that mixed methods research offers an option that actually tries to take advantage of the similarities and differences in qualitative and quantitative methods. It is important to note that qualitative and quantitative inquiries involve individual people as the subject of study (Yin, 2011: 291). Lingard, Albert and Levinson (2008: 460) agree that, central to the effectiveness of a mixed methods study, is a clear relationship among the methods in order to ensure that the data converge or triangulate to produce greater insight than a single method could.

By conducting mixed methods studies, researchers are in a better position to combine empirical precision with descriptive precision (Onwuegbuzie, 2003 and Onwuegbuzie & Leech, 2004: 771). Mixed methods allow for triangulation, which increases a study's validity (Greene, Caracelli & Graham, 1989). The use of mixed methods can also increase a study's interpretability and provides for complementarily measures ("overlapping" of different facets of a phenomenon) (Greene, Caracelli & Graham, 1989: 258). The scope of inquiry can be expanded and such expansion will rely upon multiple components to "extend the breadth and range of the study" (Greene, Caracelli & Graham, 1989: 259). According to Rocco, Bliss, Gallagher and Perez-Prado (2003: 20) researchers are turning to mixed methods to conduct better research. The focus on a single study is critical to mixed methods research (Yin, 2006: 41). Yin (2011: 291) recognises that this is an essential feature. A mixed methods study must retain its identity as a single study – addressing a set of research questions that deliberately requires complementary qualitative and quantitative evidence and methods. Mixed methods research combines theoretical and/or technical aspects of quantitative and qualitative research within a particular study (Rocco, Bliss, Gallagher & Perez-Prado, 2003: 19). According to Johnson and Onwuegbuzie (2004:15) mixed methods research offers great promise for practising researchers who would like to see

methodologists describe and develop techniques that are closer to what researchers actually use in practice.

The researcher was interested in amplifying and strengthening generalisation possibilities associated with this research study. The reporting of the research therefore had to be sufficiently detailed to enable the reader to assess whether the results are applicable to similar settings (Mays & Pope, 2000 and Delmar, 2010: 117). Mixed methods research can be used to increase the generalisation of results (Johnson & Onwuegbuzie, 2004: 21). In this regard generalising assumes that a study's findings represent a "sample," and that if the sample has been properly chosen, the findings can then be generalised to the larger "population" from which the sample was drawn. In the case of this research project the original research question required insight into a specific subgroup of the population. The researcher accepted that mentioned insight would be obtained from freely expressed responses, context derived comments and structured responses. These responses and comments could be triangulated to realise and appreciate the totality of data, to contextualise the interpretations, encourage reflection, explore a variety of viewpoints, acknowledge theoretical support and clarify generalisation.

Opting for a mixed methods approach allowed for both quantitative and qualitative techniques and procedures. However the researcher acknowledged that in terms of the research objectives and questions qualitative techniques and procedures would receive precedence. Furthermore a mixed methods research approach was considered suitable for this study of leadership behaviours and qualities for several reasons. First, due to ethical considerations, manipulation of the human element was not desired, required and not acceptable because of the potential detrimental impact it may have on aviation safety outcomes and teamwork relations. Secondly, human characteristics were not subject to manipulation. Thirdly, in this study data were collected without introducing any treatment. Fourthly, a mixed methods research approach enabled triangulation to take place. Lastly, qualitative studies do not interfere with the natural behaviour of participants being studied.

With reference to mixed methods inquiry it was evident that this study did not employ and combine theory and hypothesis testing and did not seek one "reality". The purpose of hypotheses is to limit the data field to the most possible sources of information that could resolve the problem being researched. Explanations are thus added after the research is completed. In contrast, qualitative studies generate explanations, rather than conclude with them. In conclusion the rationale for using a mixed methods approach for this research study was to explore and describe followers' experiences and expectations of leadership

behaviours in a safety-critical commercial environment. A mixed methods approach was appropriate to facilitate an in-depth understanding of followers' experiences and expectations of leadership behaviours.

4.5.4. Research design

4.5.4.1. A mixed methods research design

A research design is the logic that links the data to be collected and the conclusions to be drawn to the initial questions of a study and it ensures coherence (Rowley, 2002: 18). A research design is an action plan for getting from the questions to the conclusions (Rowley, 2002: 18).

People use language, routinely and creatively, to shape and enact social realities, identities and actions in their everyday conversations and actions (Watson, 2001). This first-person perspective can be described as an embodied state that can strengthen the involvement of the participants in the interview process, helping them to attain in-depth and experiential insights in their life world where cognition is viewed as situated and concrete (Depraz & Varela, 2000, Swanson & Holton, 2005, Rosenthal & Pecci, 2006 and Stelter, 2010: 860). In terms of this study a suitable research design was required in order to identify, define, analyse, describe and report those current views (experiences and expectations) held by followers with regard to leadership behaviour qualities within the Air Traffic and Navigation Services Company (in terms of inspirational and discouraging leadership styles). Direct access to these views held by followers had to be obtained (Appendices A, E and M).

Transformation of the traditional organisation requires the transformation of the traditional leader (Ashkenas, Ulrich, Jick & Kerr, 2002). The efficacy of traditional leadership development methods has recently been called into question (Haines, 2009), with many researchers recognising the need to go beyond traditional leadership assessment methods. These typically involve evaluating leader behaviours and qualities through some sort of survey process in which followers or peers rate a leader's effectiveness (Waldman, Balthazard & Peterson, 2011: 60). Even with numerous leadership studies completed, little is known about how leadership develops or how a student's leadership voice evolves over time (Dugan & Komives, 2007 and Buschlen & Dvorak, 2011: 39). Currall and Towler (2003) found that management researchers have remained strongly oriented to employing quantitative data with statistical analyses for the purpose of theory testing, with few adopting qualitative or mixed methods approaches (Bazeley, 2008: 133). Mertens (2003)

acknowledges that mixed methods research should be considered for transformative and emancipatory intents. Bazeley (2008: 135) states that mixed methods are typically employed in applied settings where it is necessary to draw on multiple data sources to understand complex phenomena and where there is little opportunity for experimentation. The overall purpose and central premise of mixed methods is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems and complex phenomena than either approach alone (Mactavish & Schleien, 2000 and Azorín & Cameron, 2010: 95). Multiple or mixed methods might be used when complementary data are sought, either qualitative data to enhance understanding of quantitative findings, or quantitative data to help generalise or test qualitative insights (Bazeley, 2008: 134). Mixed methods researchers are therefore more able to utilise quantitative research to inform the qualitative portion of research studies and vice versa (Onwuegbuzie & Leech, 2004: 771). Qualitative research plays an important role in explaining the social world. It can enhance, even “drive” mixed methods research, extend experimental applications and further emancipatory aims (Creswell, Shope, Plano Clark & Green, 2006: 9). According to Creswell, Shope, Plano Clark and Green (2006: 9) this evidence should cause critics to pause and further reflect on the important role for qualitative research in mixed methods inquiry. Encouraging the use of multiple methods in the confines of a single study means avoiding a more traditional realm whereby separate studies have been conducted and later synthesised (Yin, 2006: 41).

In response a parallel mixed design (Teddlie & Tashakkori, 2009) was followed that made provision for two phases. One phase involved a qualitative approach (QUAL) and the other phase involved a quantitative (quan) approach. This research project adhered to a simultaneous design (QUAL + quan). It denoted a primarily qualitative orientation that encompassed simultaneous qualitative and quantitative designs. In this regard Johnson, Onwuegbuzie and Turner (2007: 124) comment by stating that “qualitative dominant mixed methods research is the type of mixed research in which one relies on a qualitative, constructivist-poststructuralist-critical view of the research process, while concurrently recognising that the addition of quantitative data and approaches are likely to benefit most research projects”. These two phases were, however, planned and carried out to answer similar aspects of the main research question.

Yin (2006: 46) suggests that the design and conduct of a single study involves an array of readily understood procedures regarding the research questions being addressed, the definition of the units of analyses, the structure of the samples being studied, the instrumentation and data collected and the analytic strategies. The more the two methods

have been integrated into each of these procedures, the stronger the “mix” of methods (Yin, 2006: 46). Since mixed methods research involves combining quantitative and qualitative approaches in some manner within the same inquiry, investigators using this paradigm are able to probe further into a dataset to understand its meaning and to use one method to verify findings stemming from the other method (Onwuegbuzie & Teddlie, 2003 and Onwuegbuzie & Leech, 2004: 771). In basic concurrent mixed methods designs both the quantitative and qualitative data are collected separately at approximately the same time. (Onwuegbuzie & Johnson, 2006: 53). Neither the quantitative nor qualitative data analysis builds on the other during the data analysis stage (Onwuegbuzie & Johnson, 2006: 53). The results from each type of analysis are not consolidated at the data interpretation stage until both sets of data have been collected and analysed separately (Onwuegbuzie & Johnson, 2006: 53). After collection and interpretation of data from the quantitative and qualitative components, a meta-inference is drawn which integrates the inferences made from the separate quantitative and qualitative data and findings (Onwuegbuzie & Johnson, 2006: 53). The researcher drew conclusions and made inferences based on the data from each phase. These conclusions and inferences were integrated to present a meta-inference.

Greene (2008: 20) explains that a mixed methods approach to social inquiry distinctively offers deep and potentially inspirational and catalytic opportunities to meaningfully engage with the differences that matter in today’s troubled world, seeking not so much convergence and consensus as opportunities for respectful listening and understanding. Bazeley (2008: 136) adds to this view and states that in order to become interesting to an academic audience, management research needs to be “counterintuitive”, to challenge established theory (Bartunik, Rynes & Ireland, 2006). Bazeley (2008: 136) concludes that skilful employment of mixed methods can significantly contribute to creating such a challenge. In the case of this research project the researcher identified a need to understand processes, be aware of ratings, describe phenomena, understand differences between people and discover unspecified contextual variables. The researcher noted that a research design was required which would provide an efficient method to assess implicit social cognitions in order to ascertain implicit tendencies to frame events and to draw inferences about causation through primarily inductive reasoning (Greenwald & Banaji, 1995 and Mouton, 2001: 117). In further support of a research design decision it is found that this research project is feasible (a convincing research need was identified), affordable (no impeding financial constraints were identified) and achievable (within the limits of what the researcher can do). It was decided that a mixed methods research design may be appropriate in order to understand and uncover valuable information regarding leader-follower phenomena within a defined context.

4.5.4.2. Limitations of a mixed methods research design

Mixed methods research is not intrinsically superior to research that relies on a single method (Azorín & Cameron, 2010: 97). Johnson and Onwuegbuzie (2004) suggest that it may be difficult for one researcher to carry out a mixed methods study if the qualitative and quantitative phases are to be undertaken concurrently (Doyle, Brady & Byrne, 2009: 183). Within a mixed methods study there is also a requirement that the researcher has at least sufficient knowledge of both quantitative and qualitative methods independently, and how to mix these methods appropriately to achieve good study outcomes (Doyle, Brady & Byrne, 2009: 184). Mixed methods studies are a challenge because they are perceived as requiring more work and financial resources and they take more time (Azorín & Cameron, 2010: 97). Generally this design takes more time, both at the beginning for preplanning and negotiation (because of the mix of researcher skills needed) and at the end for coming to an agreement as to how the findings fit together (or not) and what they ultimately mean (Giddings & Grant, 2006: 5 & 6 and Schutz, Chambless & DeCuir, 2004: 279).

4.5.4.3. Benefits of a mixed methods research design

Mixed methods designs can provide pragmatic advantages when exploring complex research questions (Driscoll, Appiah-Yeboah, Salib & Rupert, 2007: 26). The qualitative data provide a deep understanding of survey responses and statistical analysis can provide detailed assessment of patterns of responses (Driscoll, Appiah-Yeboah, Salib & Rupert, 2007: 26). By involving both qualitative and quantitative measures, one can expand the breadth and depth of a study to examine different aspects (Schutz, Chambless & DeCuir, 2004: 278). Jick (1979: 602) affirms that organisational researchers can improve the accuracy of their judgements by collecting different kinds of data bearing on the same phenomenon. Mixed methods provide an opportunity to look for corroboration in the results from different methods (Schutz, Chambless & DeCuir, 2004: 277). One of the exciting results of mixed methods research is that in a single study practical questions can be addressed, different perspectives can be examined and if well documented, practitioners can obtain some sense of what might be useful in their local situations (Onwuegbuzie & Johnson, 2006: 48 & 49). The use of different methods allows for the opportunity to look for compatible findings between the methods (Mactavish & Schleien, 2000 and Schutz, Chambless & DeCuir, 2004: 277). The idea is that if one comes to the same or similar conclusion using different methods, it lends credibility to the theory being developed and used to investigate the problem (Schutz, Chambless & DeCuir, 2004: 277).

What makes mixed methods design most attractive to researchers is its pragmatism, which is its usefulness in a work setting to collect comprehensive information about a phenomenon that can then guide decisions about practice (Giddings & Grant, 2006: 5). This assertion supported the research design decision as applicable to this specific research study because a context detailed investigation was vital. Mixed methods research facilitates understanding of complex issues within naturally occurring contexts, enhances confidence in the trustworthiness and credibility of research findings and provides a greater breadth and depth of information than would otherwise be possible with a single approach (Mactavish & Schleien, 2000: 160).

4.5.4.4. Ethics

The protection of human participants or participants in any research study is imperative. Research studies are frequently conducted in settings involving the participation of people in their daily environments (Orb, Eisenhauer & Wynaden, 2000: 93). Therefore any research that includes people requires an awareness of the ethical issues that may be derived from such interactions (Orb, Eisenhauer & Wynaden, 2000: 93).

The difficulties inherent in research can be alleviated by awareness and use of well-established ethical principles, specifically autonomy, beneficence and justice (Orb, Eisenhauer & Wynaden, 2000: 95). Autonomy emphasises respect for people as the recognition of participants' rights, including the right to be informed about the study, the right to freely decide whether to participate in a study and the right to withdraw at any time without penalty (Orb, Eisenhauer & Wynaden, 2000: 95). In this research study this principle was honoured by ensuring informed notice and consent (Appendix B). A second ethical principle closely linked with research is beneficence (doing well for others and preventing harm) (Orb, Eisenhauer & Wynaden, 2000: 95). The researcher supported the principle of beneficence by mitigating potential consequences associated with revealing participants' identities. Pseudonyms were used. One of the crucial and distinctive features of the justice principle is avoiding exploitation and abuse of participants (Orb, Eisenhauer & Wynaden, 2000: 95). The researcher ensured that justice was demonstrated by recognising vulnerability of the participants and their contributions to the study. The researcher protected the rights of human participants, including not causing emotional harm and not infringing on their rights to maintain self-respect and human dignity.

Furthermore data were collected, analysed and reported by providing all information without distortion or misrepresentation, not knowingly ascribing greater confidence than the measurements warranted and reporting conflicting evidence. No reasons could be cited as necessary for disclosing the identity of participants (confidentiality was achieved by not disclosing the identity of participants) and the research sites (sites were numbered not named). Workplaces had to be entered after obtaining consent from corporate and unit management. No unprofessional behaviours were required from participants. The researcher agreed to provide the participants with an opportunity to learn from their participation. Therefore the overall outcome of this study will be made available to participants and will be communicated by means of arranged internal organisational means. Finally, it should be noted that questionnaires and interviews were executed with consideration of confidentiality, informed consent (Appendix B) and privacy.

4.6. Research strategy

4.6.1. An ethnographic research case study strategy

Selecting an appropriate research strategy is a key to ensuring that research questions are addressed in a way which has value and is congruent with the overall topic, questions and purpose of the research (Walshe, Caress, Chew-Graham & Todd, 2004: 677). The researcher considered that a phenomenological study is an attempt to fully understand the essence of some phenomenon (McMillan, 2000) while a case study, according to Stake (1994), is not a methodological choice, but a choice of object to be studied (Castellan, 2010: 5). Case studies are of value in refining theory and suggesting complexities for further investigation (Castellan, 2010: 5, Swanson & Holton, 2005 and Stake, 1994). Ethnographic methods rely on participant observation to explore the nature of cultural or social phenomena while working with unstructured data usually on a small number of cases involving explicit interpretation of the meanings of human actions (Castellan, 2010: 5 and McMillan, 2000).

The researcher realised that confusion could result when the term “ethnography” is used interchangeably with case study. Ethnographic studies focus on the production and reproduction of everyday life by often “othered” people, revealing meaning, social structure, power relations and history (Chambers, 2000, Lather, 2001: 481 and Schwandt, 2001). An ethnographic element of this study refers to a socio-cultural interpretation of the data. Mentioned element was aimed at facilitating understanding of organisational climate, culture and/or views held by followers. Therefore, ethnography was not defined by how data will be

collected, but rather by the lens through which the data would be interpreted. Methods which ethnographers use to collect data during their fieldwork are usually diverse and multiple (Case & Light, 2011: 195). Case and Light (2011: 195) suggest that, in addition to the researcher's own field notes which may include records of discussions, chance conversations, interviews, overheard remarks and observational notes, the researcher may also employ audio and video recordings and quantitative data gathered from surveys or structured observation. An ethnographic interview requires respectful listening, which means listening for shifts in verbal inflection, contradictions, topics avoided and hesitations (Heyl, 2001). The nature of ethnographic research means that the quality of the research may be difficult to judge given more traditional evaluation criteria (Case & Light, 2011: 195). Furthermore researchers are also required to take note of the broader context than that of the interview itself (Heyl, 2001). Baxter and Jack (2008: 554) and Noor (2008) suggest that mentioned broader context may add strength to the findings as the various strands of data are braided together to promote a greater understanding of a case. Mentioned contextual orientation needed to be understood from an organisational perspective. This decision allowed for a context-specific research focus and boundary, which resulted in the need for a supportive case study consideration. A case study is not a method but a research strategy (Hartley, 2004: 323 and Van Wynsberghe & Khan, 2007: 82). Thus a case study is not a methodological choice; but a choice of what is to be studied (Kohlbacher, 2005 and Stake, 2005).

A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident (Yin, 2003: 13, 14 & 19, Walshe, Caress, Chew-Graham & Todd, 2004: 677 and Kohlbacher, 2005). A case study is a strategy for selecting a topic rather than a technique for conducting research (Stake, 2005: 443). Detailed qualitative accounts found in case studies may not only help to explore or describe the data in a real-life environment, but also help to explain the complexities of specific real life situations (Yin, 2008 & Swanborn, 2010). A case study is a problem to be studied, which will reveal an in-depth understanding of a "case" or bounded system, which involves understanding an event, activity, process or one or more individuals (Creswell, 2002: 61 and Yin, 2003). The case study inquiry copes with a technically distinctive situation in which there will be many more variables of interest than offered by data (Yin, 2003: 13 & 14 and Kohlbacher, 2005). Case study research is used to describe an entity that forms a single unit such as a person, an organisation or an institution (Hancock, 2002).

One of the common pitfalls associated with a case study is that there is a tendency for researchers to attempt to answer a question that is too broad or a topic that has too many objectives for one study (Baxter & Jack, 2008: 546 & 547). Yin (2003) and Van Wynsberghe and Khan (2007: 84) suggest that limiting a case may avoid this problem. Mentioned boundaries will ensure that a study remains reasonable in scope (Charmaz, 2000). Baxter and Jack (2008: 546 & 547) suggest that a boundary can be identified by means of time and place and by definition and context. A focused research question detailed by specific boundaries was presented for this study. The research problem applicable to this research study (an uncertainty regarding an understanding of the nature of influences shaping the mental models of followers relating to leadership behaviours) was limited to an in-depth understanding of leader-follower relationships within a specific organisation. Furthermore qualitative accounts were supported by quantitative data that helped to explain the complexities of the real-life situations and encounters.

According to Yin (2003: 2) the distinctive need for case studies arises out of the desire to understand complex social phenomena. The case study method allows investigators to retain the holistic and meaningful characteristics of real-life events (such as organisational and managerial processes). An ultimate goal of the case study is to uncover patterns, determine meanings, construct conclusions and build theory (Patton & Appelbaum, 2003: 67, Kohlbacher, 2005 and Noor, 2008). Case studies are appropriate to study complex social situations or interventions, where multiple views may exist (Walshe, Caress, Chew-Graham & Todd, 2004: 677 and Baxter & Jack, 2008: 544). The researcher acknowledges that multiple realities emerge as a result of the desired in-depth understanding of leader-follower relationships within a specific organisation. Understanding these realities within a case study framework allowed the researcher to discover patterns, determine meanings, construct conclusions and contribute towards theory development.

Case studies are widely used in organisational studies and across the social sciences (Hartley, 2004: 323 and Kohlbacher, 2005). A case study has no particular disciplinary orientation and it can be used in social science, science, applied science, business, fine arts and humanities research (Van Wynsberghe & Khan, 2007: 81). There is some suggestion that the case study method is increasingly being used and there is a growing confidence in the case study as a rigorous research strategy in its own right (Hartley, 2004: 323 and Kohlbacher, 2005). Flyvbjerg (2006: 223) proposes that social science has not succeeded in producing general and context-independent theory and thus has nothing else to offer than concrete and context-dependent knowledge. The case study is especially well suited to produce this knowledge (Flyvbjerg, 2006: 223). Flyvbjerg (2006: 223) advises that the

closeness of the case study to real-life situations and its multiple wealth of details are important for the development of a nuanced view of reality. Flyvbjerg (2006: 223) considers the view that human behaviour cannot be meaningfully understood as simply the rule-governed acts found at the lowest levels of the learning process. Case studies are one approach that supports deeper and more detailed investigation of the type that is normally necessary to answer how and why questions (Rowley, 2002: 17). A case study method is best applied when research addresses descriptive or explanatory questions and aims to produce a first-hand understanding of people and events (Yin, 2003). Case study research is good for contemporary events when the relevant behaviour cannot be manipulated (Rowley, 2002: 17). Knowledge production in support of patterns in leadership behaviours as well as general perceptions of leadership held by followers was essential. Soklaridis (2009: 724) has found that most interviewees are willing to provide the kind of information the researcher wants, but they need to be given clear guidance on the amount of detail required. In response the researcher decided to utilise interviews (Appendices A and E), since the intent of the interviews was to explore certain themes. Interview data were juxtaposed with questionnaire data (Appendix M) by means of triangulation. This decision facilitated a deeper and more detailed investigation required to answer the research questions. The perceptions of the followers were therefore examined within the framework of a case study.

Case study research is described as a qualitative alternative paradigm where the objective is not to find the “truth” but to find “meaning”; a representation (of reality) from one particular point of view in contrast to the quantitative understanding of reality as truth; a social and physical reality which exists independently of our experiences of it (Avis, 1995: 1206 and Akella, 2011: 124). Case study method enables a researcher to closely examine the data within a specific context (Das & Singha, 2011: 2). Cases are narratives of a real-life situation that can be analysed (Akella, 2010). Generally a case study method selects a small geographical area or a very limited number of individuals as the subjects of study (Das & Singha, 2011: 2). Case studies, in their true essence, explore and investigate contemporary real-life phenomena through detailed contextual analysis of a limited number of events or conditions and their relationships (Das & Singha, 2011: 2). Yin (1994: 23) defines the case study research method “as an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used” (Das & Singha, 2011: 2). The goal of the case study method is to present the actual meaning of action and behaviour (Avis, 1995 and Stake, 1995). The researcher elected to enhance the

impact of qualitative findings with quantitative findings. This decision motivated a need for a larger sample and the use of multiple sources of evidence.

Case studies are a strategy for selecting a topic more than a technique for conducting research (Djurić, Nikolić & Vuković, 2010: 176). Case study methodology involves the investigation of a small number of naturally occurring social situations or “cases” and the collection and analysis of a large amount of detailed information about each case. Case studies are designed to bring out the details from the viewpoint of the participants by using multiple sources of data (Djurić, Nikolić & Vuković, 2010: 175). Narrative analyses of storied accounts have the potential to explore the standpoints, preoccupations and concerns of participants, both as individuals and as communities of interest (Akella, 2010). Therefore, (oral) narration is considered the prime resource for anyone aiming to understand how individuals operate in their subjectively organised worlds. Flyvbjerg (2006: 240) points out that narratives not only give meaning to experiences that participants have already lived through, but also provide a forward glance, helping participants to anticipate situations even before they encounter them and allowing participants to envision alternative futures. Narrative inquiries do not start from explicit theoretical assumptions (Flyvbjerg, 2006: 240). Instead narrative inquiries begin with an interest in a particular phenomenon that is best understood as narrative (Flyvbjerg, 2006: 240). Narrative inquiries then develop descriptions and interpretations of the phenomenon from the perspective of participants and researchers (Flyvbjerg, 2006: 240). Participants may tell something through narratives that the researcher did not ask, but that is relevant for the focal research topic and thus these new emerging themes may transpire (Dubois & Gadde, 2002). Following a case study format allowed the researcher to embark upon an in-depth investigation within a specific context.

A case study allowed the researcher to seek a deeper understanding of a process which has already been accepted within the discipline as significant (Djurić, Nikolić & Vuković, 2010: 176). One practical advantage of conducting a case study is that there is sure to be some interest in the findings (Djurić, Nikolić & Vuković, 2010: 176). Events or real-life episodes can be interpreted in various ways by many people (Akella, 2011: 124). All interpretations are true and valid meanings of the real-life episode (Akella, 2011: 124). This is in contrast to quantitative research which states that research exists to find the “truth” which is objective in nature and devoid of any social or physical, emotional interpretation (Akella, 2011: 124). Case studies provide intellectual gearing, making a contribution to a wider debate as well as offering a rounded account of a particular subject (Djurić, Nikolić & Vuković, 2010: 176). Case studies have the power to present convincing portraits of “reality”, rather than glib generalisations (Van der Mescht, 2004: 12). They can ring with authenticity so that readers

recognise themselves and their working contexts (Van der Mescht, 2004: 12). They also cumulatively construct larger pictures and different facets of a multifaceted phenomenon (Van der Mescht, 2004: 12). A case study was selected and considered appropriate for this study because it allowed for a study of the phenomena in a non-threatening setting, facilitated understanding of the nature and complexity of the processes taking place and the research was conducted in an area where limited previous studies had been undertaken.

A case study can be described as an in-depth study or examination of a distinct, single instance of a class of phenomena such as an event, an individual, a group, an activity or a community (Abercrombie, Hill & Turner, 1984; Shepard & Greene, 2003). Case study inquiry is based on the view that knowledge is not absolute or devoid of any subjectivity (Akella, 2011: 124). Knowledge is relative and is a creation of the interaction between researcher and the researched (Akella, 2011: 124, Avis, 1995, Reed, 1995 and Strubert & Carpenter, 1999). Stake (1995) and Djurić, Nikolić and Vuković (2010: 176) emphasise that, by nature the subject matter of management is data-rich and theory-poor. For this reason cases are and will remain the major route to understanding. This research study required that a typical and standard example of a wider category be studied. A valid reason for conducting a case study is to collect information on the topic in question, especially while the case is still in progress (Djurić, Nikolić & Vuković, 2010: 177). The type of case suggested is a representative case (Djurić, Nikolić & Vuković, 2010: 177).

It is known to the researcher that the use of a case study has been critiqued for its assumed limitations. These critiques are concerned with the issue of generalisation of the empirical results attained by a case study (Case & Light, 2011: 191). Flyvbjerg (2006) considers these critiques as possible misunderstandings of the use and value of case studies (Case & Light, 2011: 191). These include the positivist view that “general, theoretical (context independent) knowledge is more valuable than concrete, practical (context dependent) knowledge”; that it is not possible to develop “general propositions and theories” from a single case study and, as such, a “case study cannot contribute to scientific development” (Case & Light, 2011: 191). Case and Light (2011: 191) suggest that the concrete, context dependent nature of the knowledge which case studies unearth and on which these critiques focus, is precisely the source of its methodological strength. A case study can therefore also be particularly appropriate to address research questions concerned with the specific application of initiatives or innovations to improve or enhance learning and teaching (Case & Light, 2011: 191). The researcher noted mentioned criticism and subsequently decided upon a mixed methods research design and approach which meticulously and systematically addressed the research questions.

Baxter and Jack (2008: 547) agree that once it has been determined that the research question is best answered using a case study and the case and its boundaries have been determined, the researcher must consider what type of case study will be conducted (Baxter & Jack, 2008: 547 and Yin, 2003). The selection of a specific type of case study design will be guided by the overall study purpose (Baxter & Jack, 2008: 547). This research project considered a hybrid of two types, being explanatory and exploratory. An explanatory case study allowed the researcher to seek an answer to a question that aims to explain the presumed causal links in real-life interventions that are too complex for the survey or experimental strategies (Yin, 2003, Levy, 2008 and Noor, 2008). An exploratory case study allowed the researcher to explore those situations in which the intervention being evaluated had no clear, single set of outcomes (Yin, 2003 and Noor, 2008).

In addition to identifying the “case” and the specific “type” of case study to be conducted, researchers must consider whether it is sensible to conduct a single case study or whether a better understanding of the phenomenon will be gained through conducting a multiple case study (Baxter & Jack, 2008: 549). This research project examined the same issue, but the researcher desired to understand the different views held by followers at different units and different vocational groupings within one organisation. Therefore a holistic case study with embedded units enabled the researcher to explore the case while considering the findings of the various units and reported attributes. A summary of this ethnographic research and use of a case study is presented in Table 4.2.

Table 4.2. A summary of ethnographic research criteria (integrating the use of a case study) as applicable to this empirical study

Criteria	Requirement	Applicability to this empirical study
Description/definition	Studies are qualitative in nature and aims to provide an in-depth description of a small number (less than 50) of cases.	This study is primarily qualitative (supported by a quantitative element) and aims to provide in-depth understanding of defined phenomena. All sites were included. Three vocational groups were considered.

Design classification	Empirical, text and numeric, hybrid data and low control.	This study is empirical. Data from participants were obtained by means of interviews and a questionnaire.
Nature of the key research question	Exploratory and descriptive questions.	Exploratory research questions allowed for inferences to be drawn from collected data and consequently permitted research questions to be answered credibly and honestly.
Application	Case studies of companies and organisations.	The aim of this research was to discover multiple realities assumed to be present in a specific organisation.
Meta-theory	Various sociological theories and other more humanistic-interpretive traditions are intellectually linked to ethnographic case studies.	An emergent inquiry that required complex, interconnected terms, concepts and assumptions that were indicative of interpretive studies was evident. This study supports a more humanistic interpretive tradition (phenomenology).
Conceptualisation/mode of reasoning	Inductive; a-theoretical. No hypothesis is formulated. In some cases “general ideas” or “expectations” act to guide the empirical research.	Inductive reasoning was the key. No hypothesis was formulated.

Selection of cases/sampling	Theoretical or judgement sampling.	Participants were included according to pre-selected criteria relevant to this research study. A non-probability convenient sample was used.
Source of data	Semi-structured interviewing.	Individual interviews, focus group interviews, field notes and a structured questionnaire were used.
Analysis	Analytical induction.	Contents were analysed inductively on two levels – (1) a descriptive account of the data and (2) an interpretative analysis.
Strengths	High construct validity, in-depth insights and establishing rapport with research participants.	Also applicable to this study.
Limitations	Lack of generalisation of results, non-standardisation of measurement, data collection and analysis can be very time-consuming.	Also applicable to this study.
Main source of error	Potential bias of the researcher and lack of rigour in analysis.	Tansey (2007) states that interviews can contribute towards the research goal of triangulation, where collected data is cross-checked through other sources to increase the robustness of the findings. Triangulation was used to mitigate potential bias.

Source: Mouton, J. 2001. *How to succeed in your Master and Doctoral studies*. Pretoria: Van Schaik Publisher.

The relevance of a case study was apparent once the researcher posed the research question and derived sub-questions. The researcher realised that descriptive research was preferred which would allow access to individuals and small group participants. In this case a need existed to facilitate the collection and presentation of detailed information about particular participants and representative small groups. This study necessitated scrutiny of individual and small group experiences and expectations of leadership within a specific context; thereby drawing conclusions only about those participants and groups in that specific context. The researcher subsequently considered and accepted a case study because a case study refers to the gathering and submission of specific information about a particular participant or small group, frequently including the accounts of subjects themselves. Furthermore the researcher elected not to focus on the discovery of a universal, generalisable truth, nor did he typically look for cause-effect relationships; instead, emphasis was placed on exploration and description. The case selected is indicative of a current quandary. It was used to narrow down a very broad field of research into one researchable topic. Accordingly a case study provided information in terms of identifying and describing a current state, analysing collected information and presenting findings.

The combination of qualitative and quantitative approaches is well established in case studies (Yin, 2003). A holistic case study enabled the researcher to explore the case by considering the responses of the participants from various units and vocational groupings regarding leadership.

4.6.2. Target population

Recognising and examining follower views that describe motivating and dispiriting leadership behaviours rely upon an analysis of aspects shaping mental models of followers and accounts, descriptions, comments and perceptions from followers pertaining to leadership behaviours.

Leadership proposed in this context included all operations organisational management levels. The Air Traffic and Navigation Services Company organisation structure served as further reference in this regard. Context parameters were noted in terms of existing appointments and job descriptions. A leader, for the purpose of this study, is someone who is formally appointed and responsible for the performance of a group of employees/followers who report directly to him/her and for the achievement of organisational goals through the group's performance.

Follower-boundaries proposed and applicable to this research study excluded Air Traffic and Navigation Services Company management and non-operations personnel. The Air Traffic and Navigation Services Company organisation structure served as reference in this regard. These followers were identified as all temporary, contract and permanent employees that are not appointed in formal organisational management positions. The target population comprised all non-management operations employees employed by the Air Traffic and Navigation Services Company (defined and described as “followers”). These positions were limited to operations personnel constituting Air Traffic Control Officers (ATCO), Air Traffic Service Officers (ATSO) and Aeronautical Information Management Officers (AIMO). These positions were representative of the follower description and population. A precondition was that these followers were acknowledged as being qualified in terms of their respective job descriptions. The levels of knowledge and skills required for “expertise” were stipulated in job descriptions.

The target population comprised 293 Air Traffic Control Officers, 123 Air Traffic Service Officers and 43 Aeronautical Information Management Officers employed by the Air Traffic and Navigation Services Company (Reid, 2013). The entire population amounted to 459 Air Traffic and Navigation Services Company employees.

Followers function within an epistemological system that is viewed as a social system which is characterised by social practices, procedures, institutions and/or patterns of interpersonal influence that affect the epistemological outcomes of its members. This follower-population was defined and viewed as experts, especially within the scope of this study, being operational air traffic service experts. Expertise is defined as the possession, at high level, of knowledge and skills in a limited subject area, typically in a professional field (Steinkamp, Gordijn & Ten Have, 2008: 174). Flyvbjerg (2006: 222) states that context-dependent knowledge and experiences are at the very heart of expert activity. Furthermore experts possess an ability to pick up important underlying patterns using intuitive processes and pattern recognition (Hamm, 2003). Expertise in a field can be claimed if an expert's propositions meet a predefined standard of truth and that this standard needs to be based either on the correspondence between propositions and factual conditions, or on the consensus among practitioners in the field (Steinkamp, Gordijn & Ten Have, 2008: 175). A presupposed standard of truth may be correspondence between a proposition and a factual condition in the real world (Steinkamp, Gordijn & Ten Have, 2008: 175). A proposition is determined as true if and only if it corresponds with a condition in reality (Steinkamp, Gordijn & Ten Have, 2008: 175). Epistemological expertise refers to someone's capacity to provide

strong justifications for theoretical claims (Weinstein, 1993: 69 and Steinkamp, Gordijn & Ten Have, 2008: 177 & 178). In this case epistemological sources included followers' perceptions, memories, reasoning and introspections. A justification is strong when it substantiates a claim with sound reasons (Weinstein, 1993: 69 and Steinkamp, Gordijn & Ten Have, 2008: 177 & 178). Klausen (2009: 222) agrees that knowledge is the product of concrete and real-world processes that should be open to empirical investigation and practical evaluation. A statement may be regarded as an expert statement when it is made within a limited domain for which the expert has exposure, experience and understanding.

Followers have expert authority in an epistemological sense, by being better situated than anyone else to assess evidence or to make relevant observations on leadership behaviours within a specific and known context. Mentioned followers also had authority by being better situated than other people to determine and judge leadership behaviours within an operational setting within a defined context. Such expert authority could be ascribed to followers whose judgements or behaviours were highly valued and accepted as undoubtedly correct. This concept of knowledge needed to be supplemented by a stronger justification that involved several different concepts of knowledge (Klausen, 2009: 234). A process whereby multiple justifications were collected from experts was accordingly desirable and possible. In this case multiple justifications were motivated and facilitated by a data collection process that incorporated questionnaire, individual interview and focus group results. Such a practice was judged not only by its propensity for producing true beliefs, but by its propensity for producing true stable beliefs (Klausen, 2009: 235).

4.6.3. Sites

Higginbottom (2004: 17) and Koerber and McMichael (2008: 464) suggest that in purposeful/convenient sampling, the most important guiding principle is maximum variation; that is, researchers should seek to include people who represent the widest variety of perspectives possible within the range specified by their purpose. In response the researcher opted to include participants from more than one Air Traffic Control Centre. This decision allowed for a convenience sample to be drawn, which in turn supported described generalisation. Davies (2007) advises that it is useful to select cases that represent a variety of geographic regions, a variety of size parameters (such as different business unit sizes) and different segments (such as different business units and vocational groupings). Baxter and Jack (2008: 550) agree that the ability to look at subunits that are situated within a larger case is powerful when considering that data can be analysed within the subunits separately,

between the different subunits or across all the subunits. The ability to engage in such rich analysis served to illuminate the case better.

The researcher considered all twenty-two Air Traffic and Navigation Services Company Air Traffic Control Operational Centres as accessible research sites. A sample from these Air Traffic and Navigation Services Company Air Traffic Control Operational Centres (sub-units) was selected (with due consideration of the impact of data saturation needs). These units supported the Air Traffic and Navigation Services Company business strategy by providing air traffic and navigation operational services. These units are found in different geographical regions and have different staff complement dimensions and dissimilar business offerings (air traffic and navigational operational region specific services). The researcher thus ensured compliance with views held by Davies (2007) and Baxter and Jack (2008) with reference to site selection. Approval was obtained from the Air Traffic and Navigation Services Company to carry out data collection with followers from the sites presented in Table 4.3.

Table 4.3. An illustration of selected Air Traffic and Navigation Services Company sites

Bhisho	Mthatha
Bloemfontein	O.R. Tambo
Cape Town	Pietermaritzburg
East London	Pilanesberg
George	Polokwane
Grand Central	Port Elizabeth
Kimberley	Rand
King Shaka	Richards Bay
Kruger Mpumalanga	Virginia
Lanseria	Upington
Mafikeng	Wonderboom

Compiled by the researcher

Data collection took place at the various airports and at the Air Traffic and Navigation Services Company's Aviation Training Academy (Johannesburg). The actual site of data collection in each case depended on the location and availability of participants. The researcher had access to Air Traffic and Navigation Services Company employees from the sites mentioned above that attend training courses at the Air Traffic and Navigation Services Company's Aviation Training Academy. The researcher also had access to interview facilities at the Air Traffic and Navigation Services Company's Aviation Training Academy.

This arrangement allowed the researcher access to followers/participants who happened to be available and representative of the population.

This data collection plan was aligned to the case study approach being followed. This plan facilitated an investigation of naturally occurring social situations or “cases” and the collection and analysis of detailed information about each case. In terms of site selection, the most important guiding principle was to ensure maximum variation. The researcher wanted to include people who represent the greatest variety of perspectives possible within the range specified by their purpose (Higginbottom, 2004: 17). The researcher had to ensure that data collected from each site would be compared with data collected from other sites and across vocational groups (Air Traffic Control Officers, Air Traffic Service Officers and Aeronautical Information Management Officers).

Using mixed methods within the confines of a single study can simultaneously broaden and strengthen the study (Yin, 2006: 41). However a challenge is to maintain the integrity of the single study, compared with inadvertently permitting the study to fall into two or more parallel studies (Yin, 2006: 41). Yin (2006) suggests that the units of analysis remain related in order to contribute to the integrity of the single study. Tansey (2007) proposes the use of a within-case analysis. Within-case analysis requires the collection of much data, ideally from different locations/sources. Within-case analysis entails exploring contributory relationships with reference to multiple features of individual cases (Tansey, 2007). The site selection explained above allowed the researcher to balance representation of participants from various locations and thereby avoided bias and encouraged within-case analysis. Benefits in this regard included the creation of opportunities to corroborate what was established from a variety of sources, established what people thought and allowed inferences to be made about a larger population’s characteristics, decisions, experiences and expectations. Tansey (2007) suggests that when considering sampling in the context of a within-case analysis, the goal will ultimately be to consider non-probability sampling approaches as the most appropriate.

4.6.4. Sampling

Sampling techniques considered may be classified as probability and non-probability sampling. Probability sampling avoids selection bias and enables generalisations from the sample to the wider population (Tansey, 2007). Probability sampling, however, risks omitting important participants through chance (Tansey, 2007). Probability sampling consisting of random, stratified and cluster sampling was not selected because probability

sampling is based on underlying theoretical distributions of observations, or sampling distributions, the best known of which is the normal curve (Teddlie & Yu, 2007: 79). Mentioned theoretical distributions of observations were not aligned with the intent of the research questions.

Non-probability sampling provides for control over a selection process and permits inclusion of important political actors (Tansey, 2007). Non-probability sampling presents a greater scope for selection bias and provides a limited potential to generalise from the sample to the wider population (Tansey, 2007). The distinguishing character of non-probability sampling is that subjective judgements play a role in the selection of the sample in that the researcher decides which units of the population will be included in the sample (Tansey, 2007: 14). Whereas there are no closely defined rules for sample size (Tuckett, 2004, Baum 2000 and Patton 1990), sampling in qualitative research usually relies on small numbers with the aim of studying in-depth and in detail (Miles & Huberman 1994a & 1994b, Patton 1990, Ezzy 2002 and Tuckett, 2004). Probability sampling techniques that are primarily used in quantitatively oriented studies involve selecting a relatively large number of units from a population, or from specific subgroups (strata) of a population, in a random manner where the probability of inclusion for every member of the population is determinable (Tashakkori & Teddlie, 2003: 713 and Teddlie & Yu, 2007: 77).

Mixed methods research can be used to increase the generalisation of results (Johnson & Onwuegbuzie, 2004: 21). In this regard generalising assumes that a study's findings represent a "sample" and that if the sample has been properly chosen the findings can then generalise to the larger "population" from which the sample was drawn. There are typically multiple samples in a mixed methods study and these samples may vary in size (dependent on the research strand and question) from a small number of cases to a large number of units (Teddlie & Yu, 2007: 85). There are thus multiple sample possibilities available in a mixed methods study. Importantly, both qualitative and quantitative data should be collected from the same individual people (Yin, 2011: 291).

4.6.4.1. Qualitative sampling

Qualitative sampling techniques are concerned with seeking information from specific groups and subgroups in the population (Hancock, 2002). Giacomini and Cook (2000: 480) suggest that the purpose of qualitative studies is to offer a "window-like" or a "mirror-like" view on the specific situation or phenomenon being studied (Koerber & McMichael 2008: 462). The case study calls for an intensive and in-depth focus on the specific unit of analysis and generally

requires a much smaller sample size than survey research (Gomm, Hammersley, & Foster, 2002, Yin, 2004 and Van Wynsberghe & Khan, 2007: 83). Hancock (2002) also affirms that the intensive and time-consuming nature of data collection necessitates the use of small samples. Efforts to perform broad analyses with large numbers of participants can reduce the effectiveness of a case study as it might come at the expense of detailed description (Van Wynsberghe & Khan, 2007: 83). Furthermore Daly and Lumley (2002: 299) aptly describe sampling in an interview study to be like collecting a slice of life and taking it into a laboratory for dissection and analysis. It thus makes sense to select a slice in which the topic under investigation is present in high concentration (Daly & Lumley, 2002: 299).

A resulting narrative analysis is thus suitable for the study of how particular identities are constructed, achieved, sustained and sometimes changed during social interaction (Benincasa, 2010: 1148, Potter & Wetherell, 1987 and Wood & Kroger, 2000). These narratives should provide for rich accounts of situations that portray the people, places and artefacts involved in a structured manner with a beginning, middle and an ending and, through use of a plot, offer a particular point of view on a situation (Garud, Dunbar & Bartel, 2010: 2, Bruner 1986 and Polkinghorne, 1987). Narratives provide organisational actors with a vital means of making sense of everyday work contexts (Garud, Dunbar & Bartel, 2010: 2 and Weick, 1995). Selectivity, which is built into a non-probability sample, derives from the researcher's targeting a particular group, in the full knowledge that it does not represent the wider population; it simply represents itself (Cohen, Manion, & Morrison, 2000: 102). Purposive sampling is a non-probability sample type (Cohen, Manion, & Morrison, 2000: 102), designed to understand certain select cases in their own right rather than to generalise results to a population (Isaac & Michael, 1995: 223, Tashakkori & Teddlie, 2003: 713 and Teddlie & Yu, 2007: 78). The most important potential pitfall in using this technique is that because the subject matter or population being studied is likely to be quite familiar, the researcher might be tempted to generalise beyond a narrow population. A researcher using a convenience sample should be especially careful not to over-generalise (Koerber & McMichael, 2008: 463). Purposive sampling techniques are primarily used in qualitative (QUAL) studies and may be defined as selecting units based on specific purposes associated with answering a research study's questions (Teddlie & Yu, 2007: 77). The researcher ensured that the sample selected exposed the differences within the population as much as possible. Interviews contributed towards the research goal of triangulation; where collected data were cross-checked through multiple sources to increase the robustness of the findings (Davies, 2001 and Tansey, 2007). By ensuring that data were not collected only from one source, or one type of source, the triangulation strategy increased the credibility of findings that were supported across multiple sources.

Qualitative data collection relied upon a sampling decision that supported the purpose of this study. A subgroup of the accessible population was investigated (comprising non-management operations employees employed by the Air Traffic and Navigation Services Company). Mentioned decision influenced the type of sample drawn – being a non-probability convenient sample. Focus group interviews (three participants per focus group) were planned to include different disciplines. Three focus group interviews were conducted. Fifteen individual interviews were conducted with available participants from various Air Traffic and Navigation Services Company sites. Interviews continued until the researcher recognised that no new data were forthcoming. This signified a point of data or information redundancy/saturation (Lincoln & Guba, 1985 and Ohman, 2005: 276).

4.6.4.2. Quantitative sampling

Quantitative sampling techniques are typically concerned with ensuring and achieving representativeness, which is the degree to which the sample accurately represents the entire population (Teddlie & Yu, 2007: 77). A probability sample is useful if it is necessary to make generalisations (Cohen, Manion, & Morrison, 2000: 99). A non-probability sample deliberately avoids representing a wider population. It seeks only to represent a particular group or a particular named section of a wider population (Cohen, Manion, & Morrison, 2000: 99). According to Saunders, Lewis and Thornhill (2007: 207) non-probability sampling is more frequently used when adopting a case study strategy. In the case of this research project (considering the nature of the case study) the section of a potentially wider population (all Air Navigation Service Providers) consisted of a representative organisation, being the Air Traffic and Navigation Services Company. Factors that influenced a sample decision in this regard included the mixed methods research approach selected, the predominance of a qualitative analysis and Yin's (2011: 291) statement that both qualitative and quantitative data should be collected from the same individual people. A probability sample that constituted randomised controlled trials (Cohen, Manion, & Morrison, 2000: 99) was thus not selected. A non-probability sample that is more regularly used when following a case study strategy was selected.

Quantitative data collection also relied upon a sampling decision that supported the purpose of this study. A subgroup of the accessible population participated (145 non-management employees employed by the Air Traffic and Navigation Services Company). This subgroup consisted of 85 Air Traffic Control Officers, 46 Air Traffic Service Officers and 14 Aeronautical Information Management Officers. The researcher decided which units of the

population to include in the sample. This decision was based on the availability of participants and willingness of the participants to voluntarily participate. Mentioned decision influenced the type of sample drawn – being a non-probability convenient sample.

4.6.4.3. Sampling summary

Koerber and McMichael (2008: 462) suggest that the perceived close relationship between researcher and research site that makes a sample convenient often grants the researcher a level of access to and familiarity with the sample that guarantees a richness of data that could not be attained if the sample were less familiar and therefore less convenient, to the researcher. The samples for the quantitative and qualitative components were parallel (thus the samples for the qualitative and quantitative components of the research were different, but were drawn from the same population). A non-probability convenient sample drawn to aid qualitative data collection resulted in fifteen individual interviews and three focus group interviews. A non-probability convenient sample drawn to facilitate quantitative data collection (using the Leader Trait and Behaviour Questionnaire) consisted of 145 participants. The researcher was satisfied that the subgroups of the accessible population not only provided the desired samples, but also ensured the quality, quantity and richness of data collected.

4.7. Data collection methods

4.7.1. Introduction to data collection

Data collection refers to the sequence that the researcher uses to collect both quantitative and qualitative data (Azorín & Cameron, 2010: 98). Data collection was done by means of the Leader Trait and Behaviour Questionnaire, individual interviews, focus group interviews and field notes.

Quantitative and qualitative data were collected at the same time. In terms of the non-probability convenience sample participant selection was guided by ease of accessibility and convenience. Data collection commenced with individual face-to-face interviews and field notes, followed by focus group interviews and field notes. Once completed participants completed the Leader Trait and Behaviour Questionnaire. Participants not selected to partake in the individual face-to-face interviews and focus group interviews only completed the Leader Trait and Behaviour Questionnaire. Mentioned resulted in fifteen individual interviews, three focus group interviews and 145 completed Leader Trait and Behaviour

Questionnaires. Strengths and weaknesses of the main data collection methods were noted (Table 4.4), discussed and mitigated.

Table 4.4. Strengths and weaknesses of the main data collection methods

	Strengths	Weaknesses
Case Study	<p>In-depth contextual and holistic view of the phenomena, themes and activities selected is possible.</p> <p>Triangulation is possible, since many sources of evidence are used.</p> <p>Allows for longitudinal analysis.</p>	<p>It is difficult to take a broad view on the basis of case studies only.</p> <p>Many contextual factors may not allow the establishment of clear causal links.</p> <p>Case studies are heavily influenced by the quality and results of interviews.</p>
Interviews and Field Notes	<p>Interviews provide detailed and comparable information and insight.</p> <p>An interviewer can explain or clarify the question, thereby minimising the chances of misinterpretation.</p> <p>A methodological tool for collecting subjective assessments and opinions of different stakeholders.</p>	<p>Interviews capture standpoints of the individual interviewees.</p> <p>Answers are given from a particular point of view and may be influenced/shaped by the interests of a particular person, institution or team.</p>
Survey	<p>Good method to collect quantitative data about a large population.</p> <p>Statistical analysis of the survey data is possible.</p> <p>Surveys allow for comparisons.</p>	<p>Surveys measure perceptions of the individual at a particular point of time.</p> <p>An administrative burden on the respondents participating in the survey is noted.</p>

Compiled by the researcher

The data collection options considered by the researcher consisted of gathering the information at the same time (concurrent, simultaneous or parallel design) or introducing the information in phases (sequential or two-phase design) (Azorín & Cameron, 2010: 98). Concurrent mixed method data collection strategies have been employed to validate one form of data with the other form, to transform the data for comparison or to address different types of questions (Creswell & Plano Clark 2007: 118). In concurrent mixed analyses,

quantitative and qualitative data are collected at the same time and the data analysis typically occurs after all the data have been collected (Onwuegbuzie & Leech, 2004: 780). Unlike the case for parallel mixed analyses, integration usually occurs at the data analysis stage (Onwuegbuzie & Leech, 2004: 780). By concurrently gathering both quantitative and qualitative data the researcher was able to compare findings and search for congruent findings. Ostlund, Kidd, Wengstrom and Rowa-Dewar (2010: 370) note that when qualitative and quantitative methods are mixed in a single study, one method is usually given priority over the other. In such cases the aim of the study, the rationale for employing mixed methods and the weighting of each method, determine whether and how the empirical findings will be integrated (Ostlund, Kidd, Wengstrom & Rowa-Dewar, 2010: 370).

4.7.2. Data collection by means of individual interviews and field notes

Donaldson and Grant-Vallone (2002: 256) suggest that a minimum of two data sources are needed to help rule out the validity threats of self-report and mono-method bias in business psychology research. Data collection methods are time-consuming and consequently data are collected from smaller numbers of people than would usually be the case in quantitative approaches (Hancock, 2002). The benefits of using these methods include richness of data and deeper insight into the phenomena under study (Hancock, 2002).

Interviewing is one of the major ways qualitative researchers generate and collect data for their research studies (Gubrium & Holstein, 2003, Rubin & Rubin, 2006, Seidman, 2006, Kvale & Brinkmann, 2008 and Leech & Onwuegbuzie, 2008). In-depth qualitative interviews are generally flexible and exploratory (Soklaridis, 2009). The primary advantages of qualitative interviews are the flexibility they offer and the rich, detailed data they can provide (Soklaridis, 2009). A guided interview is a common qualitative, one-on-one, data collection technique. This method allows for focused exploration of individual perceptions of events relating to a limited number of topics or themes. Semi-structured interviews involve a series of open-ended questions based on the topic areas the researcher wants to cover (Hancock, 2002). The open-ended nature of the question defines the topic under investigation, but provides opportunities for both interviewer and interviewee to discuss some topics in more detail (Hancock, 2002). If an interviewee has difficulty answering a question or provides only a brief response, the interviewer can use cues or prompts to encourage the interviewee to consider the question further (Hancock, 2002). In a semi-structured interview the interviewer also has the freedom to probe the interviewee to elaborate on the original response or to follow a line of inquiry introduced by the interviewee (Hancock, 2002).

The researcher acknowledged that knowledge could be acquired by transactional means and created by personal experiences that resulted in individual cognition. Individual interview questions were formulated on the basis of identifying recurring themes that surfaced during the literature review. Mentioned questions related directly to the constructs being investigated. This contributed to face and content validity. Reflexivity was also important to this methodological approach, since the approach itself recognised that participants' knowledge claims were ideological, political and permeated with values (Schwandt, 2000, Hargadon & Bechky, 2006, Suddaby, 2006, Schwandt, 2007 and Frosh & Saville Young, 2008). The researcher used individual interviews to allow participants to discuss their interpretations of the world in which they work and to express how they regarded situations from their own point of view (Cohen, Manion, & Morrison, 2000: 267). A non-probability convenient sample was used. Interviews were also used to intensively explore issues arising from the questionnaire data while being flexible enough to accommodate emerging issues and questions.

Individual interviews were supported by field notes compiled by the researcher during each interview. Mouton (2001: 107) suggests that main decisions and events during the fieldwork process be documented as field notes. The researcher found that non-verbal communication was also important for attaining a deeper shared meaning, in which both the interviewer and interviewee increased their awareness of the contextual nature of the voice (Onwuegbuzie, Leech & Collins, 2010: 699). Non-verbal communication was therefore viewed as an additional method for obtaining information and helping to increase communication (Bull, 2001 and Denzin & Lincoln, 2005). Because communication included more than the spoken words, when participants utilised (a) proxemic (use of interpersonal space to communicate attitudes); (b) chronemic (use of pacing of speech and length of silence in conversation); (c) kinesic (body movements or postures) and (d) paralinguistic (all variations in volume, pitch and quality of voice) modes (Gorden, 1980, Fontana & Frey, 2005 and Onwuegbuzie, Leech & Collins, 2010: 700), they were recorded by the researcher. This record provided a historical record of the entire data collection process and also supported overall reliability. Mouton (2001: 108) asserts that the keeping of field notes is essential in order to help capture the information provided within a specific context and setting. In support of this initiative and as an endeavour to encourage overall validity the researcher decided to meticulously keep a record of all those who participated in the interviews (mindful of confidentiality and ethical assurances), documented the dates when access was gained to the research site, noted the dates and times when interviews were conducted and summarised insights that became apparent to the researcher during the interviews.

4.7.3. Data collection by means of focus group interviews and field notes

Qualitative research methodology focuses on individuals' lived experiences as they are presented in thoughts, ideas, feelings, attitudes and perceptions (Creswell, 2007 and Litosseliti, 2003). In addition, mentioned research approach emphasises human behaviour and social interaction (Creswell, 2007). A participant group, which "constitutes the social context in which the investigated behaviours occur", may provide valuable insight into and understanding of the locus of the interactions of a collective (Hargadon & Bechky, 2006). Such collective cognisance reflects a qualitative shift in the nature of the investigative process, as the critical comprehension of a situation and the generation of responses draw from and reframe past experiences of participants in ways that lead to new and valuable insights (Hargadon & Bechky, 2006). A guided group discussion method such as focus groups is especially well suited for uncovering and documenting the "why" behind opinions and in obtaining much more depth and breadth of analysis from participants than are available from individual data collection methods (McMillan & Schumacher, 2001, Hesse-Biber & Leavy, 2006 and Krueger, 1994). Focus groups can also be a powerful tool in the exploration of people's frameworks of understanding (Creswell, 2007). Focus group discussion is a research methodology in which a small group of participants gather to discuss a specified topic or an issue to generate data (Wong, 2008: 256).

Focus group techniques permitted insights into viewpoints held and addressed by those being studied. This was beneficial because the researcher was confronted with cognitive aspects of collaboration that were expected within interviews and focus group discussions. The meta-cognitive aspects that allowed people to verbalise their thinking when they talk were also of value (Wetherell, Taylor & Yates, 2001). Reflection through verbalisations and discussions helped to identify gaps in reasoning and supported overall understanding. Mentioned cognition in social settings, where argumentation and reflection acted as "scaffolds" for understanding, is aligned with Vygotsky's social constructivist learning theory (Vygotsky, 1978). Weick and Roberts (1993) outline the concept of collective mind as a means for understanding how individuals working together perform effectively in safety-critical organisations. Collective mind resides in the conscious interrelations between individuals in a social system (Hargadon & Bechky, 2006: 486). One person's action or comments, when considered by others, shapes theirs, which in turn (when heeded), shapes the next (Hargadon & Bechky, 2006: 486). A benefit associated with the focus group technique is that it allowed for an extensive group discussion of issues that benefited from complementary insights (Ohman, 2005: 273 & 274). Wong (2008: 256) states that there is a tendency that during group discussions, attitudes and perceptions are developed through

interaction with others in the groups. In this sense focus groups can show dimensions of understanding that often remain untapped or inaccessible by other forms of data collection (Wong, 2008: 256).

Mouton (2001: 108) asserts that the keeping of field notes is essential in order to help capture the information provided within a specific context and setting. A non-probability convenient sample was used. Focus group questions were prepared by identifying frequent themes that transpired during the literature review. These questions related directly to the constructs being investigated. This contributed to face and content validity. Focus group interviews were supported by field notes compiled by the researcher during each focus group session. These field notes permitted the researcher to note certain aspects of communication including occasions, when participants utilised (a) proxemic (use of interpersonal space to communicate attitudes); (b) chronemic (use of pacing of speech and length of silence in conversation); (c) kinesic (body movements or postures) and (d) paralinguistic (all variations in volume, pitch and quality of voice) modes (Gorden, 1980, Fontana & Frey, 2005 and Onwuegbuzie, Leech & Collins, 2010: 700). These field notes allowed the researcher to formulate immediate understanding/insight that was later compared with the results of the data analysis from the actual focus group interview transcripts. This technique assisted at the data synthesis stage and also supported triangulation. In order to ensure validity the researcher decided to meticulously keep a record of all those who participated in the focus group interviews (mindful of confidentiality and ethical assurances), documented the dates when access was gained to the research site, noted the dates and times when focus group interviews were conducted and summarised insights that became apparent to the researcher during the focus group sessions.

4.7.4. Data collection by means of the Leader Trait and Behaviour Questionnaire

With changing technologies and related human interaction issues, there is an increased need for timely evaluation of systems with distributed users in varying contexts (Adams & Cox, 2008). This has led to the increased use of questionnaires, in-depth interviews and focus groups in commercial usability and academic research contexts (Adams & Cox, 2008). Questionnaires offer an objective means of collecting information on people's knowledge, beliefs, attitudes and behaviours (Oppenheim, 1992 and Sapsford, 1999).

Questionnaires can be an invaluable tool when usability data is needed from large numbers of disparate users (Adams & Cox, 2008). Questionnaires can also be both cost-effective

and easier to analyse than other methods (Adams & Cox, 2008). A questionnaire is a tool and as such it must be usable so that the reader can easily understand, interpret and complete it (Adams & Cox, 2008). The researcher required the use of a questionnaire that would assist with data gathering. The desired questionnaire had to provide an objective research tool that could produce generalised results because of a larger sample size. A non-probability convenient sample was used.

Researchers may find it challenging to obtain a questionnaire that supports the objectives of a specific research study. The researcher was fortunate to source a suitable leader questionnaire that emphasised criteria identified and regarded as appropriate for this study. Said questionnaire comprised Wilson's (2004) Effective Developmental Leader Trait Instrument (EDLTI) and the Effective Developmental Leader Behaviour Instrument (EDLBI). The focus of Wilson's (2004: 3) study was on effective developmental leadership. His research attempted to identify the key traits and key behaviours that enable a manager to become an effective developmental leader of employees and the organisation (Wilson, 2004: 5). The suitability of this questionnaire was found in terms of its focus (leader performance), its specific areas of interest (leader trait and behaviours) and its leader development emphasis. Leader performance (identified from follower perspectives), desired leader behaviours (inclusive of leader traits and behaviours) and a need to use research findings in pursuit of leadership training and development were areas of interest for this study. The researcher concluded that aspects identified by Wilson (2004) were supportive in terms of follower experiences and expectations of leadership behaviours as applicable to this study.

Wilson (2004: 69) identified 63 traits that met the established criteria for inclusion in the Effective Developmental Leader Trait Instrument. This was accomplished using a factor analysis statistical procedure to determine whether each key construct was a trait of an effective developmentally oriented leader (Wilson, 2004: 69). This analysis included the measured traits rated as "agree" (3.51) or higher, as perceived by study participants (Wilson, 2004: 69). The results of the factor analysis, including the factor, its label based on the content of the items included in the factor, the percentage of variance explained by each factor and factor loadings for each of the items in each of the factors (Wilson, 2004: 69) are presented in Table 4.5. Six traits that were factored were labelled as "Dedicated", "Practical", "Cooperative", "Assertive", "Personable" and "Analytical" (Wilson, 2004: 72). Wilson's (2004) Effective Developmental Leader Trait Instrument (EDLTI) was considered suitable for this study because the term "leader traits" refers to personality factors that are observable both within and outside the context of work (Wilson, 2004: 8). These traits are

the inner qualities or abilities that enable a leader to function effectively in fostering growth and organisational effectiveness (Wilson, 2004: 8).

Table 4.5. Factor Analysis of Traits of an Effective Developmental Leader (Wilson, 2004: 70)

List of Traits	Trait labels					
	Dedicated	Practical	Cooperative	Assertive	Personable	Analytical
<i>Dedicated % of Variance explained = 22.42%</i>						
Hard-working	0.67					
Productive	0.65					
Focused	0.61					
Efficient and effective	0.61					
Dedicated	0.60					
Efficient	0.60					
Disciplined	0.60					
Prepared	0.58					
Dependable	0.58					
Willingness	0.58	0.30				
Helpful	0.50					
Coherent	0.49					
Organised	0.48					
Able to organise	0.46					
Consistent	0.43		0.31			
Teach by doing	0.41	0.37				
Persistent	0.39	0.30				
<i>Practical % of Variance explained = 6.87%</i>						
Not a micro-manager		0.61				
Non-abrasive tone		0.60				
Perceptive	0.40	0.52				
Pragmatic		0.51				
Practical	0.42	0.50				
Tact		0.41				
#Realistic (1)	0.54	0.40				
Down-to-earth		0.38				
Enduring		0.30				
Active	0.30	0.30				
#Rational (1)	0.47	0.30				
#Well-spoken (1)	0.37	0.30				
<i>Cooperative % of Variance explained = 3.99%</i>						
Loyal	0.32		0.70			
Loyalty	0.30		0.70			

Justice			0.58			
Cooperative	0.35		0.49			
Patient demeanour		0.36	0.45			
Contemporary thinking		0.39	0.40			
Patient	0.38		0.39			
Agreeable			0.33			0.30
#Honest (1)	0.50		0.33			
Calm/poised speech			0.30			
<i>Assertive % of Variance explained = 2.58%</i>						
Powerful/strong		0.35		0.61		
Competitive				0.56		
Authoritative				0.55		
Strong		0.32		0.55		
Control			0.32	0.51		
Outspoken				0.49	0.33	
Assertive				0.45		
Opportunistic				0.44	0.42	
Fast-thinking				0.39		
Bold				0.39		
#Driven (5)	0.37			0.34	0.45	
Poise		0.42		0.31		
<i>Personable % of Variance explained = 2.51%</i>						
Engaging personality		0.23			0.59	
Charismatic		0.17			0.55	
Passionate					0.53	
Sociable		0.30	0.36		0.48	
Energetic	0.30				0.45	
Personable		0.40	0.31		0.40	
Interesting		0.39			0.37	
Eloquent		0.49			0.32	
<i>Analytical % of Variance explained = 2.37%</i>						
Complex-thinker						0.64
Analytical						0.55
Concentrated						0.47
Broad skills			0.33			0.33
Note: (#) denotes initial output factor number: (1 = Dedicated, 2 = Practical and 5 = Personable)						

Source: Wilson, M.S. 2004. Effective developmental leadership: A study of the traits and behaviours of a leader who develops both people and the organization. Ph.D. thesis. Louisiana State University, Louisiana.

Wilson (2004: 75) identified 94 behaviours. The term “leader behaviours” refers to the activities engaged in by the leader, including his or her characteristic approach, that relate to his or her effectiveness (Wilson, 2004: 9). After the 94 behaviours that met the established

criteria for inclusion in the final analysis were identified, the accumulated data were further analysed to accomplish the third objective of the study; to identify the key behaviours of an effective developmentally oriented leader (Wilson, 2004: 75). This was accomplished using a factor analysis statistical procedure to determine whether each key construct was a behaviour aspect of an effective developmentally oriented leader (Wilson, 2004: 75). This analysis included the measured behaviours rated as “agree” (3.51) or higher, as perceived by study participants (Wilson, 2004: 75).

The results of the factor analysis for behaviours of an effective developmental leader illustrate the factor that was labelled based on the content of the items included in the factor, the percentage of variance explained by each factor and factor loadings for each of the items in each of the factors (Table 4.6) (Wilson, 2004: 75). The seven behaviours that were factored are labelled as “Focused”, “Supportive”, “Developer”, “Advisor”, “Competitive”, “Delegator” and “Charismatic” (Wilson, 2004: 79). Similarly, this study identified mentioned leader traits and behaviours to also be applicable when investigating follower experiences and expectations of leadership behaviours.

Table 4.6. Factor Analysis of Behaviours of an Effective Developmental Leader (Wilson, 2004: 76)

List of Behaviours	Behaviour labels						
	Focused	Supportive	Developer	Delegator	Advisor	Competitive	Charismatic
<i>Focused % of Variance explained = 35.16%</i>							
Strives for success	0.64						
Sees opportunities	0.61					0.31	
Sets clear goals	0.61						
Sets the vision	0.59						
Focused	0.58						
Shares vision and knowledge	0.57		0.34				
Follows through	0.56						
Strategic	0.56					0.30	
Organised	0.55						
Hard-working	0.52						0.32
Thorough	0.51			0.39			
Seeks to understand	0.48		0.40				
Seeks knowledge	0.46		0.30				

Timely	0.46	0.33		0.31			
Straightforward	0.45						
Thinks outside the box	0.42						
Promotes cooperation	0.40	0.30	0.31		0.33		
<i>Supportive % of Variance explained = 3.65%</i>							
Approachable		0.61					
Courteous		0.60					
Always willing to help others		0.58					
Asks for feedback		0.55					
Cares about others' welfare		0.55	0.44				
Admits mistakes		0.55					
Has an open-door policy		0.54					
Respectful	0.35	0.54					
Cooperative		0.53					0.37
Creates a comfortable working atmosphere		0.53					0.31
Gives and solicits feedback	0.42	0.51	0.30				
Humble		0.48				0.38	
Trusting		0.48	0.36				
Shows genuine concern		0.48	0.35				
Communicates openly		0.47					0.32
Lends a helping hand/voice		0.46			0.34		
Willingly supports employees		0.46	0.46				
Open-minded	0.41	0.43					
Acts professionally		0.41		0.39			
Helps to resolve conflicts	0.30	0.41			0.36		
Learns about others		0.40	0.32		0.22	0.34	
#Informs (1)	0.43	0.38			0.28		
#Stays positive (1)	0.39	0.36				0.32	
<i>Developer % of Variance explained = 2.85%</i>							
Develops others			0.63				
Empowers others			0.60				
Positions individuals for success			0.56		0.35		
Builds leaders			0.54				
Acknowledges achievement & effort		0.32	0.50				
Fosters growth	0.33		0.48				
Advocates the "we" and not the "I" in team		0.38	0.45				
Improves morale of employees		0.34	0.43				
Inspires others	0.36		0.43				
#Motivates (1)	0.44		0.42				
Energises			0.39			0.32	0.30
#Team-oriented (1)	0.38	0.32	0.34				
<i>Delegator % of Variance explained = 2.67%</i>							
Determines needs				0.60	0.32		

Directs				0.59			
Appears in charge				0.57			0.16
Decisive	0.34			0.56			0.16
Delegates authorities				0.53			
Develops strategies and actions				0.50			
Creates solutions				0.50	0.31		
Allocates resources				0.50			
Appears confident	0.31			0.45		0.35	
Aware of company culture and leads in that direction				0.40			
Adaptive to changing environments			0.33	0.38			
#Uses resources effectively (1)	0.37		0.33	0.35			
Addresses other team member's issues or problems		0.34		0.33			
Establishes goals				0.30			
Efficient				0.30			
<i>Advisor % of Variance explained = 2.30%</i>							
Gathers all information					0.53		
Removes barriers			0.31		0.50	0.32	
Evaluates talent					0.49		
Solves problems	0.33				0.48		
Facilitates			0.36		0.48		
Gets involved		0.43			0.48		
Provides advice	0.30	0.35			0.47		
Provides the necessary resources for the team to succeed			0.31		0.47		
Proactive	0.31		0.30		0.40		
Predicts needs					0.39	0.33	
Recognises talent			0.42		0.38		
Evaluates all options	0.35			0.31	0.38		
<i>Competitive % of Variance explained = 1.93%</i>							
Risk-taker						0.65	
Keeps a competitive edge						0.59	0.25
Involved in the community		0.45				0.53	0.20
Speaks out	0.30					0.50	
Is creative and innovative	0.41					0.44	0.20
Reflective	0.31	0.38			0.31	0.43	
Passionate	0.34					0.43	0.22
#Shows sense of urgency					0.45	0.42	
Not afraid of failure						0.36	
<i>Charismatic % of Variance explained = 1.60%</i>							
Convincing							0.60
Charismatic						0.44	0.47

Assertive				0.40		0.35	0.46
Challenges others			0.32				0.41
Assumes responsibility				0.37			0.41
Role model			0.31			0.30	0.35
Note: (3) denotes SPSS output factor number: (1=Focused for success and 5=Competitive)							

Source: Wilson, M.S. 2004. Effective developmental leadership: A study of the traits and behaviours of a leader who develops both people and the organization. Ph.D. thesis. Louisiana State University, Louisiana.

Internal validity of the instruments was assured by using expert panels (Wilson, 2004). Reliability of the instruments was assured by administering the instruments to full-time employees of approximately 30 different organisations (Wilson, 2004). The two instruments were administered and the resulting data analysed using factor analysis to determine leader trait factors and behaviour factors. According to Wilson (2004: 96) leadership development programmes can apply these traits and behaviours through effective training, mentoring and coaching, with the expectation of producing substantial results.

Wilson's (2004) Effective Developmental Leader Trait Instrument (EDLTI) and the Effective Developmental Leader Behaviour Instrument (EDLBI) was adopted by the researcher and adapted in terms of the piloting initiative (Appendix G) and the content validity initiative (Appendix F). The Leader Trait and Behaviour Questionnaire (Appendix M) was the result.

4.7.5. Individual interviews - data collection instrument and process

Qualitative research is aimed at understanding emergent realities. Qualitative methods are regarded as useful to attain a deep and detailed understanding of a specific group or sample. Qualitative data collection methods should allow for flexibility during data collection and analysis. Following a case study approach required from the researcher to first follow a wide field of focus (multiple sites), and thereafter by a narrower field of focus (data collection and analysis) and finally interpretation and member-checking (Cohen, Manion & Morrison, 2000).

The researcher was determined to delve into the organisation, its workplaces and employees to ensure accurate data collection. Interviewing allows researchers to ask questions and enables the participant to talk freely without the constraint of having to answer according to fixed or predefined categories (Tansey, 2007). One of the strongest advantages of interviews is that they enable researchers to interview first-hand participants

of the topic under investigation, thus allowing researchers to obtain accounts from direct witnesses of the topic in question (Tansey, 2007). Researchers can thus gather rich detail on the thoughts, experiences, testimonies and attitudes of participants concerning the central issues of the research project (Tansey, 2007). It was intended to keep the interview questionnaire as short as possible without compromising focus, quality, quantity, value and usefulness of data. Essential demographic information was collected during interviews. Mentioned demographic criteria were part of the interview protocol (Appendix A) and such data were collected during each interview. Interview topics and issues covered were sourced from the literature review.

Interview questions formulated were intended to permit gathering of information required and allowed for sensible processing of information collected and alignment of understanding of the research questions. Formulated interview questions relied upon and allowed for insight into participant experiences, behaviours, values, opinions, feelings, knowledge and backgrounds. The researcher used a standard sequence of questions that increased the comprehensiveness of the data and made data collection systematic for each participant (Table 4.7 and Appendix A). With reference to Table 4.7 questions 1 and 2 provided insight into the participant's mental model used when discussing leadership and followership. Questions 3 and 4 allowed the participants to describe the setting that was used for further questions and discussions. Questions 5 to 8 aimed to encourage participants to juxtapose effective and less effective leadership behaviours. Questions 9 and 10 allowed for deeper insight by utilising a pragmatic approach that encouraged scenario-based responses.

The use of field notes corresponds to Mouton's (2001: 107 & 108) and Yin's (2003: 83, 97-105) views that interviews can be maximised when additional sources of evidence are used in case study research. The researcher also utilised field notes to record summaries, new discoveries, verifications, contradictions and confirmations that resulted from each interview. These field notes allowed the researcher to formulate immediate understanding/insights that were later compared with the results of the data analysis from the actual interview transcripts. This technique assisted at the data synthesis stage and also supported triangulation.

Table 4.7. Formulated interview questions, interview focus areas and the value of these interview questions

Question	Question 1	Focus	Definition/conceptualisation of leadership as a construct.
Question posed			Provide your own definition of leadership.
Value and relevance to this study			
<p>Understanding of the perspective held regarding leadership.</p> <p>Definition/conceptualisation of preferred leadership style(s).</p> <p>Definition/conceptualisation of leadership style(s) not preferred.</p> <p>Description of emotional bonds between follower and leader.</p> <p>Understanding followers' introspection/cognition regarding leadership.</p> <p>Describing the impact of followership on leadership.</p>			
Question	Question 2	Focus	Definition/conceptualisation of followership as a construct.
Question posed			Provide your own definition of followership.
Value and relevance to this study			
<p>Description of emotional bonds between follower and leader.</p> <p>Understanding followers' introspection/cognition regarding leadership.</p> <p>Definition/conceptualisation of followership as a construct.</p> <p>Description of follower motivations/assumptions held.</p> <p>Description of needs/wants/desires of followers.</p> <p>Description of the nature of the leader-follower relationship.</p> <p>Describing the impact of followership on leadership.</p>			
Question	Question 3	Focus	Contextualised leadership role and responsibilities.
Question posed			Explain the responsibilities of ATNS leaders.
Value and relevance to this study			
<p>Views held regarding roles and responsibilities of the leader.</p> <p>Understanding how the leader manages/conducts him/herself.</p> <p>Understanding followers' introspection/cognition regarding leadership.</p> <p>Understanding aspects of information collection, content management and dissemination.</p> <p>Describing what knowledge is held as business knowledge.</p> <p>Describing what knowledge is held as personal knowledge.</p> <p>Describing how knowledge is shared (information managed).</p>			

Describing the impact of the leader's ability to manage his/her network(s).			
Question	Question 4	Focus	Description of the nature of the leader-follower relationship.
Question posed			Describe your relationship with ATNS leadership.
Value and relevance to this study			
<p>Description of characteristics of leadership competence.</p> <p>Definition/conceptualisation of preferred leadership style(s).</p> <p>Definition/conceptualisation of leadership style(s) not preferred.</p> <p>Description of emotional bonds between follower and leader.</p> <p>Understanding followers' introspection/cognition regarding leadership.</p>			
Question	Question 5	Focus	Description of behaviour imperatives synonymous with effective leadership from a team perspective.
Question posed			What do leaders of <u>effective</u> work teams within ATNS do?
Value and relevance to this study			
<p>Description of leader's action logic.</p> <p>Description of emotional bonds between follower and leader.</p> <p>Understanding followers' introspection/cognition regarding leadership.</p> <p>Understanding how the leader manages the team.</p> <p>Understanding how leadership behaviour is identified and cognitively evaluated (with reference to inspiring behaviours).</p> <p>Understanding the nature of positive leader-follower exchanges and relationships.</p> <p>Understanding the follower's current individual mental model in use (with reference to inspiring behaviours).</p> <p>Understanding the changes of the follower's individual mental model (conceptions) in use (with reference to inspiring behaviours).</p> <p>Understanding the current shared mental model in use (with reference to inspiring behaviours).</p> <p>Understanding the impact of the work environment on positive follower perceptions.</p> <p>Describing items used by followers to assess inspiring leadership behaviours.</p> <p>Understanding the follower's implicit theory/theories of leadership.</p> <p>Understanding what leader behaviours will allow for increased follower performance.</p> <p>Understanding leadership behaviour qualities that evoke positive followership.</p> <p>Understanding critical emotional competencies of effective leadership.</p> <p>Understanding the impact of role modelling.</p>			

Understanding leader's motives that contribute to desired leadership.			
Question	Question 6	Focus	Description of behaviour imperatives synonymous with less effective leadership from a team perspective.
Question posed		What do leaders of <u>less</u> effective work teams within ATNS do?	
Value and relevance to this study			
<p>Description of leader's action logic.</p> <p>Description of emotional bonds between follower and leader.</p> <p>Understanding followers' introspection/cognition regarding leadership.</p> <p>Understanding how the leader manages the team.</p> <p>Understanding how leadership behaviour is identified and cognitively evaluated (with reference to discouraging behaviours).</p> <p>Understanding the nature of negative leader-follower exchanges and relationships.</p> <p>Understanding the follower's current individual mental model in use (with reference to discouraging behaviours).</p> <p>Understanding the changes of the follower's individual mental model (conceptions) in use (with reference to discouraging behaviours).</p> <p>Understanding the current shared mental model in use (with reference to discouraging behaviours).</p> <p>Understanding the impact of the work environment on negative follower perceptions.</p> <p>Describing items used by followers to assess discouraging leadership behaviours.</p> <p>Understanding what leader behaviours will allow for decreased follower performance.</p> <p>Understanding leadership behaviour qualities that do not evoke positive followership.</p> <p>Understanding critical emotional competencies of ineffective leadership.</p> <p>Understanding the impact of role modelling.</p> <p>Understanding self-imposed leadership barriers.</p> <p>Understanding leader's motives that contribute to undesired leadership.</p>			
Question	Question 7	Focus	Description of behaviour imperatives synonymous with effective leadership from a follower mental model perception.
Question posed		What leadership behaviours come to mind when you think of an effective ATNS leader?	
Value and relevance to this study			
<p>Description of emotional bonds between follower and leader.</p> <p>Understanding followers' introspection/cognition regarding leadership.</p>			

Understanding how the leader manages the team.

Understanding how leadership behaviour is identified and cognitively evaluated (with reference to inspiring behaviours).

Understanding the nature of positive leader-follower exchanges and relationships.

Understanding the follower's current individual mental model in use (with reference to inspiring behaviours).

Understanding the changes of the follower's individual mental model (conceptions) in use (with reference to inspiring behaviours).

Understanding the current shared mental model in use (with reference to inspiring behaviours).

Understanding the impact of the work environment on positive follower perceptions.

Describing items used by followers to assess inspiring leadership behaviours.

Understanding the follower's implicit theory/theories of leadership.

Understanding what leader behaviours will allow for increased follower performance.

Understanding leadership behaviour qualities that evoke positive followership.

Understanding critical emotional competencies of effective leadership.

Understanding the impact of role modelling.

Understanding leader's motives that contribute to desired leadership.

Question	Question 8	Focus	Description of behaviour imperatives synonymous with less effective leadership from a follower mental model perception.
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Question posed	What leadership behaviours come to mind when you think of a <u>less</u> effective ATNS leader?
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Value and relevance to this study

Description of leader's action logic.

Description of emotional bonds between follower and leader.

Understanding followers' introspection/cognition regarding leadership.

Understanding how the leader manages the team.

Understanding how leadership behaviour is identified and cognitively evaluated (with reference to discouraging behaviours).

Understanding the nature of negative leader-follower exchanges and relationships.

Understanding the follower's current individual mental model in use (with reference to discouraging behaviours).

Understanding the changes of the follower's individual mental model (conceptions) in use (with reference to discouraging behaviours).

Understanding the current shared mental model in use (with reference to discouraging

behaviours).

Understanding the impact of the work environment on negative follower perceptions.

Describing items used by followers to assess discouraging leadership behaviours.

Understanding what leader behaviours will allow for decreased follower performance.

Understanding leadership behaviour qualities that do not evoke positive followership.

Understanding critical emotional competencies of ineffective leadership.

Understanding the impact of role modelling.

Understanding self-imposed leadership barriers.

Understanding leader's motives that contribute to undesired leadership.

Question	Question	Focus	Description of behaviour imperatives synonymous with effective leadership in a specific context.
	9		
Question posed			Recall a specific situation within the ATNS workplace that serves as an example of effective leadership.

Value and relevance to this study

Description of leader's action logic.

Description of emotional bonds between follower and leader.

Understanding followers' introspection/cognition regarding leadership.

Understanding how the leader manages the team.

Understanding how leadership behaviour is identified and cognitively evaluated (with reference to inspiring behaviours).

Understanding the nature of positive leader-follower exchanges and relationships.

Understanding the follower's current individual mental model in use (with reference to inspiring behaviours).

Understanding the changes of the follower's individual mental model (conceptions) in use (with reference to inspiring behaviours).

Understanding the current shared mental model in use (with reference to inspiring behaviours).

Understanding the impact of the work environment on positive follower perceptions.

Describing items used by followers to assess inspiring leadership behaviours.

Understanding the follower's implicit theory/theories of leadership.

Understanding what leader behaviours will allow for increased follower performance.

Understanding leadership behaviour qualities that evoke positive followership.

Understanding critical emotional competencies of effective leadership.

Understanding the impact of role modelling.

Understanding leader's motives that contribute to desired leadership.

Question	Question	Focus	Description of behaviour imperatives synonymous with less effective leadership in a specific context.
	10		
Question posed			Recall a specific situation within the ATNS workplace that serves as an example of <u>less</u> effective leadership.
Value and relevance to this study			
<p>Description of leader's action logic.</p> <p>Description of emotional bonds between follower and leader.</p> <p>Understanding followers' introspection/cognition regarding leadership.</p> <p>Understanding how the leader manages the team.</p> <p>Understanding how leadership behaviour is identified and cognitively evaluated (with reference to discouraging behaviours).</p> <p>Understanding the nature of negative leader-follower exchanges and relationships.</p> <p>Understanding the follower's current individual mental model in use (with reference to discouraging behaviours).</p> <p>Understanding the changes of the follower's individual mental model (conceptions) in use (with reference to discouraging behaviours).</p> <p>Understanding the current shared mental model in use (with reference to discouraging behaviours).</p> <p>Understanding the impact of the work environment on negative follower perceptions.</p> <p>Describing items used by followers to assess discouraging leadership behaviours.</p> <p>Understanding what leader behaviours will allow for decreased follower performance.</p> <p>Understanding leadership behaviour qualities that do not evoke positive followership.</p> <p>Understanding critical emotional competencies of ineffective leadership.</p> <p>Understanding the impact of role modelling.</p> <p>Understanding self-imposed leadership barriers.</p> <p>Understanding leader's motives that contribute to undesired leadership.</p>			

Compiled by the researcher

4.7.6. Focus group interviews - data collection instrument and process

In focus group discussions the questions or themes are concentrated on a few topics and the aim is to create a focussed discussion among the participants in the group (Barbour & Kitzinger, 1999 and Ohman, 2005: 277). In the literature on focus group discussions, one can see different kinds of advice on how many participants there should be in the groups to be able to start a reflective discussion among the participants (Barbour & Kitzinger, 1999

and Ohman, 2005: 277). Through emergent conversations, participants collectively tell each other about and make sense of their experiences (Garud, Dunbar & Bartel, 2010: 6 and Taylor & Van Every, 2000). This type of process underlies Weick and Robert's (1993) "heedful interrelating", facilitating consensual understanding and real-time coordination as participants navigate an unusual experience (Garud, Dunbar & Bartel, 2010: 6). Real-time sense-making occurs through the connections, reactions and responses that emerge as people tell and listen to narratives in conversations with one another (Garud, Dunbar & Bartel, 2010: 6, Hatch and Weick 1998 and Weick 1995). The use of smaller groups is usually more suitable as they can facilitate closer interaction and communication (Barbour & Kitzinger, 1999 and Ohman, 2005: 277). For the moderator, smaller groups may also be easier to manage (Barbour & Kitzinger, 1999 and Ohman, 2005: 277).

Focus group members were determined by means of purposive sampling. Smaller groups were preferred because the participants had extensive experiences to share on the topic and the researcher wanted participation from each subject (Appendix E). It was assumed that homogeneity within the group would help to capitalise on the participants' shared experiences as they were more likely to talk freely and share experiences if they felt that they had a lot in common (Saunders, Lewis & Thornhill, 2007). Within a focus group, colleagues were possibly more comfortable in voicing opinions in each other's company than on their own with the researcher. Moreover focus groups allowed for a quick way of obtaining valuable data and provided opportunities to reflect on and react to the opinions of others.

In conducting the focus group the emphasis should be placed on the interaction among group members (Kitzinger, 1994, McMillan & Schumacher, 2001 and Wong, 2008: 256). The group members need to be encouraged to communicate with one another, exchanging ideas and comments on each other's experiences or points of view (Kitzinger, 1994 and Wong, 2008: 256). The dynamic interaction among participants may stimulate thoughts on the research topic and provide opportunities to build on each other's responses. The process that was followed by the researcher involved formulating questions (questions were open-ended, simple, unbiased and non-threatening), developing a protocol (Appendix E), soliciting participants, arranging venues, facilitating focus groups, transcribing, analysing data and reporting the findings.

The researcher served as focus group moderator and was also responsible for the focus group field notes. As moderator and discussion leader the researcher was responsible not only for guiding the participants through the discussion, but also for facilitating the group

dynamics to ensure that all participants joined in the discussion. The researcher acted in cases when some participants attempted to dominate the discussion and the researcher posed questions to individuals who were reluctant to talk, in order to balance participation. The researcher recorded what was said and expressed, noting the tone of discussion as part of the field notes, the order in which people spoke (by participant number or name), as well as phrases or statements made by each participant. The contexts noted within words were especially important in the focus groups because of the interactive nature of focus groups. Such a narrative analysis uncovered the underlying subjective meaning structures that formed the basis of how people come to understand and evaluate the world over time (Frank, 2000). The focus was not just on what happened, but what was revealed by the way a “story was told” (Frank, 2000). Non-verbal expressions, such as facial expressions or hand movements, were also noted as part of the field notes.

Focus group interview questions formulated were intended to permit gathering of the data required, allowed for sensible processing of information collected and alignment of understanding to the research questions. Demographic information was collected during focus group interviews. Focus group interview questions relied upon and allowed for insight into participants’ experiences, behaviours, opinions, values, feelings, knowledge and backgrounds (Saunders, Lewis & Thornhill, 2007). The researcher used a standard sequence of questions to increase the comprehensiveness of the data and to make data collection systematic for each focus group (Table 4.8 and Appendix E). With reference to Table 4.8 question 1 provided insight into the shared mental models used when discussing leadership and followership. Questions 2 and 3 encouraged participants to juxtapose effective and less effective leadership behaviours. Question 4 allowed for deeper insight by utilising a pragmatic approach that encouraged scenario-based responses.

Table 4.8. Formulated focus group interview questions, focus group interview focus areas and the value of these focus group interview questions

Question	Question	Focus	
	1		Definition/conceptualisation of leadership and followership a constructs.
Question posed			Explain the differences between leadership and followership within ATNS.
Value and relevance to this study			
Understanding of the perspective held regarding leadership. Definition/conceptualisation of preferred leadership style(s).			

Definition/conceptualisation of leadership style(s) not preferred.

Description of emotional bonds between follower and leader.

Understanding followers' introspection/cognition regarding leadership.

Describing the impact of followership on leadership.

Description of emotional bonds between follower and leader.

Understanding followers' introspection/cognition regarding leadership.

Definition/conceptualisation of followership as a construct.

Description of follower motivations/assumptions held.

Description of needs/wants/desires of followers.

Description of the nature of the leader-follower relationship.

Describing the impact of followership on leadership.

Views held regarding roles and responsibilities of the leader.

Understanding how the leader manages/conducts him/herself.

Understanding followers' introspection/cognition regarding leadership.

Understanding aspects of information collection, content management and dissemination.

Describing what knowledge is held as business knowledge.

Describing what knowledge is held as personal knowledge.

Describing how knowledge is shared (information managed).

Describing the impact of the leader's ability to manage his/her network(s).

Description of characteristics of leadership competence.

Definition/conceptualisation of preferred leadership style(s).

Definition/conceptualisation of leadership style(s) not preferred.

Description of emotional bonds between follower and leader.

Understanding followers' introspection/cognition regarding leadership.

Question	Question	Focus	Description of behaviour imperatives synonymous with effective leadership from a team perspective.
	2		

Question posed	What do leaders of <u>effective</u> work teams within ATNS do?
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Value and relevance to this study

Description of leader's action logic.

Description of emotional bonds between follower and leader.

Understanding followers' introspection/cognition regarding leadership.

Understanding how the leader manages the team.

Understanding how leadership behaviour is identified and cognitively evaluated (with reference to inspiring behaviours).

Understanding the nature of positive leader-follower exchanges and relationships.

Understanding the follower's current individual mental model in use (with reference to inspiring behaviours).

Understanding the changes of the follower's individual mental model (conceptions) in use (with reference to inspiring behaviours).

Understanding the current shared mental model in use (with reference to inspiring behaviours).

Understanding the impact of the work environment on positive follower perceptions.

Describing items used by followers to assess inspiring leadership behaviours.

Understanding the follower's implicit theory/theories of leadership.

Understanding what leader behaviours will allow for increased follower performance.

Understanding leadership behaviour qualities that evoke positive followership.

Understanding critical emotional competencies of effective leadership.

Understanding the impact of role modelling.

Understanding leader's motives that contribute to desired leadership.

Question	Question 3	Focus	Description of behaviour imperatives synonymous with less effective leadership from a team perspective.
Question posed			What do leaders of <u>less</u> effective work teams within ATNS do?

Value and relevance to this study

Description of leader's action logic.

Description of emotional bonds between follower and leader.

Understanding followers' introspection/cognition regarding leadership.

Understanding how the leader manages the team.

Understanding how leadership behaviour is identified and cognitively evaluated (with reference to discouraging behaviours).

Understanding the nature of negative leader-follower exchanges and relationships.

Understanding the follower's current individual mental model in use (with reference to discouraging behaviours).

Understanding the changes of the follower's individual mental model (conceptions) in use (with reference to discouraging behaviours).

Understanding the current shared mental model in use (with reference to discouraging behaviours).

Understanding the impact of the work environment on negative follower perceptions.

Describing items used by followers to assess discouraging leadership behaviours.

<p>Understanding what leader behaviours will allow for decreased follower performance.</p> <p>Understanding leadership behaviour qualities that do not evoke positive followership.</p> <p>Understanding critical emotional competencies of ineffective leadership.</p> <p>Understanding the impact of role modelling.</p> <p>Understanding self-imposed leadership barriers.</p> <p>Understanding leader's motives that contribute to undesired leadership.</p>			
Question	Question 4	Focus	<p>Description of behaviour imperatives synonymous with effective leadership from a follower mental model perception.</p> <p>Description of behaviour imperatives synonymous with less effective leadership from a follower mental model perception.</p> <p>Description of behaviour imperatives synonymous with effective leadership in a specific context.</p> <p>Description of behaviour imperatives synonymous with less effective leadership in a specific context.</p>
Question posed		Provide examples of leadership behaviours that come to mind when you think of ATNS leaders?	
Value and relevance to this study			
<p>Description of emotional bonds between follower and leader.</p> <p>Understanding followers' introspection/cognition regarding leadership.</p> <p>Understanding how the leader manages the team.</p> <p>Understanding how leadership behaviour is identified and cognitively evaluated (with reference to inspiring behaviours).</p> <p>Understanding the nature of positive leader-follower exchanges and relationships.</p> <p>Understanding the follower's current individual mental model in use (with reference to inspiring behaviours).</p> <p>Understanding the changes of the follower's individual mental model (conceptions) in use (with reference to inspiring behaviours).</p> <p>Understanding the current shared mental model in use (with reference to inspiring behaviours).</p> <p>Understanding the impact of the work environment on positive follower perceptions.</p> <p>Describing items used by followers to assess inspiring leadership behaviours.</p> <p>Understanding the follower's implicit theory/theories of leadership.</p> <p>Understanding what leader behaviours will allow for increased follower performance.</p> <p>Understanding leadership behaviour qualities that evoke positive followership.</p>			

Understanding critical emotional competencies of effective leadership.

Understanding the impact of role modelling.

Understanding leader's motives that contribute to desired leadership.

Description of leader's action logic.

Description of emotional bonds between follower and leader.

Understanding the nature of negative leader-follower exchanges and relationships.

Understanding the follower's current individual mental model in use (with reference to discouraging behaviours).

Understanding the changes of the follower's individual mental model (conceptions) in use (with reference to discouraging behaviours).

Understanding the current shared mental model in use (with reference to discouraging behaviours).

Understanding the impact of the work environment on negative follower perceptions.

Describing items used by followers to assess discouraging leadership behaviours.

Understanding what leader behaviours will allow for decreased follower performance.

Understanding leadership behaviour qualities that do not evoke positive followership.

Understanding critical emotional competencies of ineffective leadership.

Understanding self-imposed leadership barriers.

Understanding leader's motives that contribute to undesired leadership.

Compiled by the researcher

Focus group data analysis followed an accepted protocol as suggested by Wong (2008: 259), Basit (2003), McMillan and Schumacher (2001) and Saunders, Lewis and Thornhill (2007). Analysing focus group data relied on the actual words and behaviours of the participants. The researcher produced a verbatim transcript of the entire discussion. The complete transcript was compared with the handwritten field notes taken during the focus group sessions. Once the transcribing was done, the next step involved the coding of the data in the transcripts. This activity involved sorting the data and assigning them to categories. This coding activity allowed the researcher to establish a connection of the data that facilitated data analysis. The actual data analysis process was classified into two levels. The basic level of analysis was a descriptive account of the data; that is an explanation of what was said without any assumption being made. The second level of analysis was interpretative, which involved the comprehension of the themes (or perspectives), creation of links between the themes, demonstration of how those themes emerged and generation of a theory grounded in the data.

4.7.7. Leader Trait and Behaviour Questionnaire - data collection instrument and process

As previously mentioned Wilson's (2004) Effective Developmental Leader Trait Instrument (EDLTI) and the Effective Developmental Leader Behaviour Instrument (EDLBI) were adapted for this study. A self-administered questionnaire (Leader Trait and Behaviour Questionnaire) comprising closed questions was formulated (Appendix M).

The Leader Trait and Behaviour Questionnaire was constructed using the Likert Scale. This mode of preference indication was deemed most preferable because the Likert Scale is easy to construct and could easily be understood by the participants. Closed questions restricted the participants to a finite and more manageable set of responses. These closed questions were easy and quick to answer and they presented response categories that were easy to codify. The prepared Leader Trait and Behaviour Questionnaire was previewed to check the vocabulary, consistency and ambiguity concerns (Appendices F, G and H).

The researcher accepted that the general layout and organisation of the Leader Trait and Behaviour Questionnaire was very important. Format rules suggested by McMillan and Schumacher's (2001: 266 & 267) were observed by the researcher. In terms of preparation of the Leader Trait and Behaviour Questionnaire the researcher ensured that the printing was clear and easy to read. Instructions were brief, compliant with specific academic requirements and easy to understand. The researcher avoided cluttering the questionnaire by using different font sizes and a convenient format. No abbreviated items were used. Adequate spaces for answers were provided. Furthermore a logical sequence was used and related items were grouped in the various sections of the Leader Trait and Behaviour Questionnaire. Response scales were printed on each new page. Pages and items were numbered. Examples were provided in terms of completion requirements.

The Leader Trait and Behaviour Questionnaire was administered at the various airports and at the Air Traffic and Navigation Services Company's Aviation Training Academy (Johannesburg). Prior access to participants was arranged. In each case voluntary participation and confidentiality was emphasised. In every case the purpose of the research study and questionnaire was explained to participants (as per cover letter) prior to completion. In each case the respondent was thanked for his/her participation and completed questionnaires were placed and stored in a collection box.

4.7.8. Pilot testing of the questionnaire

McMillan and Schumacher (2001: 267) state that it is highly recommended that researchers conduct a pilot test of their questionnaires before using them in studies. According to McMillan and Schumacher (2001: 267) it is best to locate a sample of participants with characteristics similar to those that will be used in the study. Saunders, Lewis and Thornhill (2007: 386) explain that the purpose of a pilot test is to refine the questionnaire so that participants will have no problem in answering the questions and there will be no problems in recording the data.

Four participants representative of the sample participated in the pilot testing of this questionnaire. The purpose was to principally increase the reliability, validity and practicability of the Leader Trait and Behaviour Questionnaire (Appendix G). Mentioned initiative was supported by the content validity initiative presented in Appendix F.

4.7.9. Data integrity

The researcher accepted that all research studies have limitations and these limitations need to be identified, acknowledged and as far as possible be mitigated. The researcher avoided common errors associated with the design of data collection instruments. Common errors and mitigation actions employed by the researcher are presented in Table 4.9.

Table 4.9. Common errors and mitigation actions employed by the researcher

Most Common Errors	Mitigation actions employed by the researcher.
No piloting of the interview.	The interview questions were submitted to the external codifier for review.
Use of undefined words.	Simple language was used to define concepts and contexts.
Use of questions that combine two or more questions in one.	Literature foci were combined in order to produce few interview questions.
Use of leading questions.	Leading questions were avoided and thus excluded.
Use of negatively phrased questions.	Negatively phrased questions were avoided and thus excluded.
Use of sensitive or threatening questions.	Sensitive questions may be assumed, however, guarantees of confidentiality served as appropriate

	<p>recourse. Threatening questions were avoided and excluded.</p> <p>Questions were clearly constructed and these were not subject to different cultural interpretations.</p>
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Source: Mouton, J. 2001. *How to succeed in your Master and Doctoral studies*. Pretoria: Van Schaik Publisher.

Qualitative interviews should be fairly informal and interviewees should feel as though they are participating in a conversation or discussion rather than in a formal question and answer situation (Hancock, 2002). Reflexivity requires researchers to openly acknowledge and address the influence that the relationship among the research topic and participants may have on the results (Green & Thorogood, 2004.). The data collection process required from the researcher to plan to allow for enough time to complete the questionnaire. During individual and focus group interviews the researcher allowed enough time to adequately discover what had transpired at organisational and individual levels. Furthermore the researcher ensured that rapport with the interviewees was established at the beginning of each data collection session. During the interviews the researcher demonstrated attentive listening skills and periodically tested his understanding by summarising an explanation provided by the interviewees. The researcher took care that his questioning technique did not encourage bias, was not offensive, was not misleading and did not digress beyond the scope of the interview and interview questions. Interviews remained conversational and situational. Extensive use was made of open-ended questions to impose no limitations on the interviewee's responses. Free-narration questions were also used in order to allow the participants to formulate feedback in terms of a story/structured recollection. Appendices A and E provide insight into the interview protocols that were used.

Data integrity in terms of the Leader Trait and Behaviour Questionnaire relied upon compliance with specific questionnaire design requirements. Saunders, Lewis and Thornhill (2007: 356) agree that the design of a questionnaire influences the response rate, reliability and validity of data collected. The Leader Trait and Behaviour Questionnaire was designed with due consideration of integrity requirements. Specific questionnaire design considerations and mitigation actions employed by the researcher are presented in Table 4.10.

Table 4.10. Questionnaire design considerations and mitigation actions employed by the researcher

Design consideration	Design action
No question without objective	Each question clearly highlighted the construct under investigation, being leadership traits and leadership behaviours.
No complex language	This questionnaire was not too complicated to understand. The vocabulary and language proficiencies of the participants were considered in the questionnaire design.
No ambiguous concepts	Ambiguous concepts were not incorporated in the questions.
No leading and embarrassing questions	Leading and embarrassing questions may lead biased answers; therefore, these were avoided.
No long questions	Every question is short and presented in only one phrase. By keeping questions as short and simple as possible the likelihood that they were understood as well as the accuracy of responses was increased.
No merging of two questions into one	Merging of two questions into one was avoided because merging would possibly confuse participants.
No double negative	Double negatives were avoided in the language of questions.
No unfounded grouping	Questions were grouped together under a common themed heading and lead-in question, which helped participants contextualise the questions.
Limitations	It was important to understand that this questionnaire was limited to the questions asked.

Source: Adams, A. & Cox, A.L. 2008. "Questionnaires, in-depth interviews and focus groups". In: Cairns, P. & Cox, A.L. eds. *Research Methods for Human Computer Interaction*. Cambridge, UK: Cambridge University Press. 17-34.

The researcher designed and utilised the questionnaire, individual and focus group interviews as a means of exploring phenomena identified in the literature review, while also ensuring compliance with data integrity decisions.

4.7.10. Data analysis technique

The aim of data analysis is to understand the various constitutive elements of data through an inspection of the relationships between concepts and constructs, and to see whether there are any patterns or trends that can be identified or isolated, or to establish themes in the data (Mouton, 2001: 108). An inductive analysis was favoured in order to analyse and create meaning from interview data collected. Inductive reasoning was primarily used to draw conclusions following a logical process of establishing a general proposition on the basis of particular data. Contents were analysed on two levels. The basic level of analysis consisted of a descriptive account of the data, what was actually said with nothing assumed. A higher level of analysis was interpretative. It was concerned with what was meant by the response, what was inferred or implied. This approach allowed the researcher to check that the post-coding schemata met the criterion of mutual exclusiveness in order to avoid overlapping in classification categories. Furthermore this approach prevented the researcher from drawing inferences from data if inferences were not supported by the data. This approach allowed the researcher to avoid biased interpretation of the interview data through selectivity.

Strategies commonly integrated into qualitative studies to establish validity, reliability and credibility include the use of reflection or the maintenance of field notes and peer examination of the data (Krefting, 1991 and Baxter & Jack, 2008: 556). Analysing qualitative data involved a study of the interview transcripts and field notes, developing codes, coding the data and drawing connections between discrete parts of the data. Content analysis involved coding and classifying data (Hancock, 2002). Findings inductively derived from data in a qualitative study can typically be presented and reported in the form of themes, categories, codes, concepts and even substantive theory (Hancock, 2002). A typology that relied upon patterns and themes was identified and explained below in order to define and describe mutually exclusive and exhaustive categories. The process employed to delineate categories required that the researcher first needed to study his field notes, identify indicators of categories in events and behaviours (these were named and coded), compare codes to find consistencies and differences (consistencies between codes revealed categories) and then to note comparisons and emerging categories. These codes and categories were presented to the external codifier for critical comment, discussion and changes where required. This process was followed until categories became saturated (when no new codes related to them are formed).

The researcher analysed qualitative data using transcribed records of interview data. Coding was used in order to gain an understanding of the inquiry issues, how participants perceived the issues under review and the nature and types of relationships involved. Coding is a process of reducing the data into smaller groupings so that they are more manageable. This process also helped the researcher to see relationships between categories and patterns of interaction. Coding was used to mark the segments of data with symbols, descriptive words or category names. The researcher developed codes during the coding of data. These codes were inductive codes, developed by the researcher by directly examining the data. This approach allowed him to identify the themes, patterns and relationships that emerged across data. The researcher then identified similarities and differences in different sets of data and critically noted what different groups were saying. Data synthesis was accomplished by means of reflective thinking and dichotomy (considering both leadership behaviour qualities that inspire followership and leadership behaviour qualities that do not inspire followership).

As interview data are collected and analysed, researchers may also wish to integrate a process of member checking, in which the researcher's interpretations of the data are shared with the participants, and the participants have the opportunity to discuss and clarify the interpretation and contribute new or additional perspectives on the issue under study (Krefting, 1991 and Baxter & Jack, 2008: 556). This technique of member checking was subsequently used during this study (Appendix C).

The researcher employed common statistical procedures to report data that originated from the Leader Trait and Behaviour Questionnaire. McMillan and Schumacher (2001: 205) state that quantitative research relies on numbers in reporting results. Descriptive statistics were used to summarise, organise and reduce large numbers of responses. Scales of measurement had to allow for identification of vocational groups, leader traits, leader behaviours and leader trait and behaviour factors. In this case a nominal scale was employed. The researcher required categories that needed to be rank-ordered. An ordinal scale provided opportunities for each value to be related to others (McMillan & Schumacher, 2001: 208). In terms of measures of central tendency a need for and use of means was required (presented in Appendix I). McMillan and Schumacher (2001: 216) agree that the mean is normally reported in quantitative research reports and is vital to the interpretation of results in which groups are compared with each other. Standard deviations are typically associated with means in order to indicate the average variability of scores (McMillan & Schumacher, 2001: 221). Means were calculated for data sets as well as associated standard deviations. In support of the research questions and research objectives the

researcher set specific goals. The first goal was to determine noteworthy leader traits and behaviours from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups separately and combined). A second goal was to determine leader trait and behaviour factors that were rated noteworthy (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups separately and combined). A third goal was to determine negligible leader traits and behaviours from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups separately and combined).

Parametric and nonparametric tests were also performed. Howell (1995: 379) states that parametric tests should be used when statistical tests are required that involve assumptions about or estimations of population parameters. Howell (1995: 379) furthermore states that nonparametric tests should be used when statistical tests are required that do not rely on parameter estimation or precise distributional assumptions. Parametric (one-way ANOVA) and nonparametric (Kruskal-Wallis) tests were used. A statistical technique for testing differences in the means of the defined vocational groups was essential. A need for an analysis of variance (ANOVA) was thus highlighted. An analysis of variance (a one-way ANOVA) where the groups are defined on only one independent variable was required (Howell, 1995: 285). The Kruskal-Wallis one-way analysis of variance is suited when three or more independent groups are considered. According to Howell (1995: 390) the Kruskal-Wallis one-way analysis of variance is a distribution-free analogue of the one-way ANOVA. It tests the hypothesis that all samples were drawn from identical populations and is sensitive to differences in central tendency (Howell, 1995: 390).

Yin (2011: 291) suggests that quantitative and qualitative elements need to be analysed and interpreted together, before arriving at a study's main conclusion(s). During the data analysis stage, quantitative data can facilitate the advancement of generalisation of the qualitative data and shed new light on qualitative findings (Johnson, Onwuegbuzie & Turner, 2007: 115). This is aligned to Yin's (2006: 45) view that a counterpart relationship is required (where two or more methods address common/similar descriptive variables) for a single study. Mixed methods researchers are more able to utilise quantitative research to inform the qualitative portion of research studies and vice versa (Onwuegbuzie & Leech, 2004: 771). Bryman (2007) suggests that by combining qualitative and quantitative findings, an overall or negotiated account of the findings can be forged which is not possible by using a singular approach (Ostlund, Kidd, Wengstrom & Rowa-Dewar, 2010: 370). According to Bernardi, Kleim and von der Lippe (2007) mixed methods can also help to highlight the

similarities and differences between particular aspects of a phenomenon (Patton, 2002 and Ostlund, Kidd, Wengstrom & Rowa-Dewar, 2010: 370).

The practicalities of mixed methods research are such that it cannot be driven by theory or data exclusively and a process of abduction is recommended which enables one to move back and forth between induction and deduction through a process of inquiry (Morgan, 2007 and Doyle, Brady & Byrne, 2009: 178). Mactavish and Schleien (2000: 159) explain that data from questionnaires and interviews can be used in tandem as they complement and extend one another. Pluye, Gagnon, Griffiths and Johnson-Lafleur (2009: 532) state that the production of mixed methods research involves moving back and forth between the different types of evidence in an iterative process, described as “spiralling” in mixed methods research (Caracelli & Greene, 1993 and Mendlinger & Cwikel, 2008). In line with Hacking’s constructionist theory in philosophy of sciences (Hacking, 1999), the production of mixed evidence can be conceived as loops between qualitative evidence and quantitative evidence (“mixed kinds” produced by “looping effects”) (Pluye, Gagnon, Griffiths & Johnson-Lafleur, 2009: 532). Yin (2006: 45) refers to this process as a cross-walking relationship when using different methods within the confines of a single study. Onwuegbuzie and Leech (2004: 787) and Onwuegbuzie and Teddlie (2003) confirm that a concurrent mixed analysis, either in a primarily quantitative or qualitative investigation, can be used for the purposes of triangulation. However in this study quantitative data analyses preceded the qualitative data analyses. The intent was to classify leader traits and behaviours with a large sample followed by a more in-depth exploration of a few cases during the qualitative phase. Although the measures were not exactly the same within each instrument, the researcher deliberately tried to create directly comparable items to assure the desired common scopes of data collection and variables.

The aim of the concurrent mixed methods data analysis was to look for convergences resulting from merging or embedding the results from different datasets. Concurrent data analysis involved conducting a separate initial analysis for each of the quantitative and qualitative datasets. Following that the researcher merged the two data sets, so that a complete picture could be developed from both data sets (with reference to triangulation). Data were merged by comparing the results of quantitative and qualitative data through a matrix. This allowed for a comparison between the results from the datasets. Finally, emphasis was placed on both quantitative deductive and qualitative inductive inference processes by means of triangulation (to find out to what extent, how and why the quantitative and qualitative data converge).

4.8. Triangulation

The ability to look at subunits that are situated within a larger case is powerful when considering that data can be analysed within the subunits separately (within case analysis), between the different subunits (between case analysis), or across all of the subunits (cross-case analysis) (Baxter & Jack, 2008: 550). The ability to engage in such rich analysis only serves to illuminate the case better (Baxter & Jack, 2008: 550).

When seeking to answer complex questions the ability to draw from multiple inputs can provide a wider range of information and a significantly broader insight into the issues underlying these complex questions. One of the great strengths of case studies as compared with other methods is that evidence can be collected from multiple sources (Rowley, 2002: 23). This study followed a case study approach and collected data from various sites using three data collection methods. The intention was to decrease the deficiencies and biases that come from any single method. The rationale was that the strengths of one method may compensate for the weaknesses of another. It was an invaluable way to confirm findings in one study with findings from other sources, methods, investigators and theories. Patton (2002) clarifies the notion that the purpose of triangulation is to test for consistency rather than to achieve the same result using different data sources or inquiry approaches (Rocco, Bliss, Gallagher & Perez-Prado, 2003: 20). The ability to compare and contrast different findings and perspectives on the same situation and/or phenomenon was a very effective way to find inconsistencies in data and opportunities for further investigation. Findings were corroborated and any weaknesses in the data were compensated for by the strengths of other data, thereby increasing the validity and reliability of the results. Such an approach provided a more complete and comprehensive perspective on a given situation and generated new insights into that situation. Establishing mentioned desired structural corroboration, which was a process of gathering data and using it to establish links that eventually created a whole that was supported by the bits of evidence that constituted it, was greatly enhanced by using triangulation (Eisner, 1979: 215). Patton (2001) advocates the use of triangulation by acknowledging that triangulation strengthens a study by combining methods. In this regard triangulation served as a useful tool to deepen the researcher's understanding of the issues and maximised confidence in the findings of this study.

Triangulation is a methodological approach that contributes to the validity of research results when multiple methods, sources, theories and/or investigators are employed (Barbour, 2001, Schwandt, 2001 and Farmer, Robinson, Elliott & Eyles, 2006: 377). Much of the literature

dealing with qualitative modes of investigation within the social sciences cites the importance of triangulation (Flick, 2002). Triangulation can be applied to studies producing complementary findings, convergent findings and divergent findings (Ostlund, Kidd, Wengstrom & Rowa-Dewar, 2010: 378). Triangulation encourages the use of two or more comparable processes within research to enhance the comprehensiveness of data, to contextualise the interpretations and to explore a variety of similar and dissimilar viewpoints (Rock, 2001: 34). Data triangulation is an inductive process and can involve qualitative data. This study relied upon both quantitative and qualitative data and triangulation was subsequently enhanced.

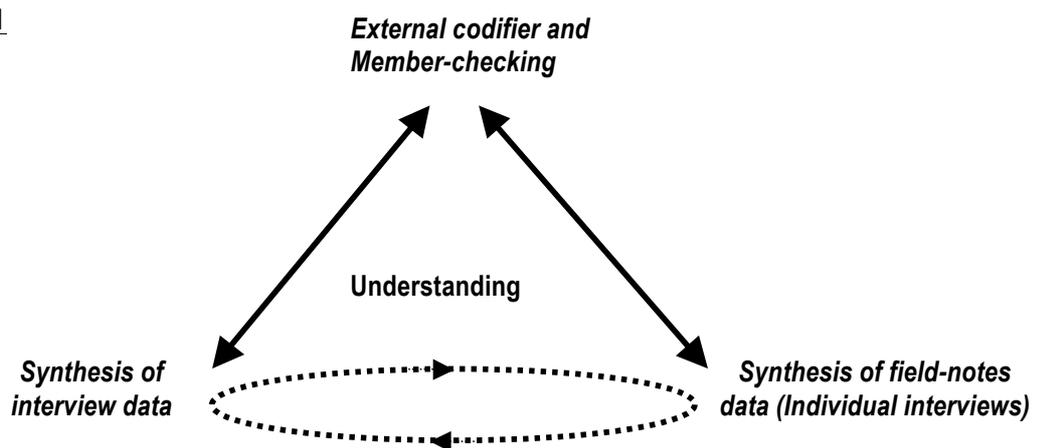
Denzin and Lincoln (1998 & 2003) identify four main triangulation types. These are data triangulation, investigator triangulation, theory triangulation and methodological triangulation. Data triangulation refers to different data sources which should be distinguished from the use of different methods for producing data (Denzin & Lincoln, 1998 & 2003). Investigator triangulation is used to minimise bias resulting from the researcher as person (Denzin & Lincoln, 1998 & 2003). Theory triangulation requires that data are approached with different perspectives and hypotheses in mind (Denzin & Lincoln, 1998 & 2003). Methodological triangulation is evident when researching within methods and among methods (Denzin & Lincoln, 1998 & 2003). Contextual validity can be enhanced by means of data, method and investigator triangulation (Eriksson & Kovalainen, 2008: 293). In terms of investigator triangulation several researchers investigate the empirical materials and cross-check their interpretations and conclusions. Researchers should assess the validity of their own interpretations, for example by using a number of researchers with different academic backgrounds, areas of interest and research experience. This method of triangulation was not implemented due to only one researcher participating in this study.

Data and method triangulation were implemented and considered useful in this study. In terms of data triangulation, evidence from multiple empirical sources was used to cross-check information. The validity of each part of the evidence was assessed by comparing it with other kinds of evidence on the same issue, for example by interviewing other participants, making observations or checking archives. This method was used with reference to data collected at different sites (data sets) being compared. In terms of method triangulation several methods and techniques of analysis were used to validate findings. The validity of particular sources of evidence was assessed by collecting other evidence on those sources using different research methods, for example by using questionnaires and interviews. This method was used with reference to data collected by means of different methods (questionnaire, individual interviews and focus group interviews) being compared.

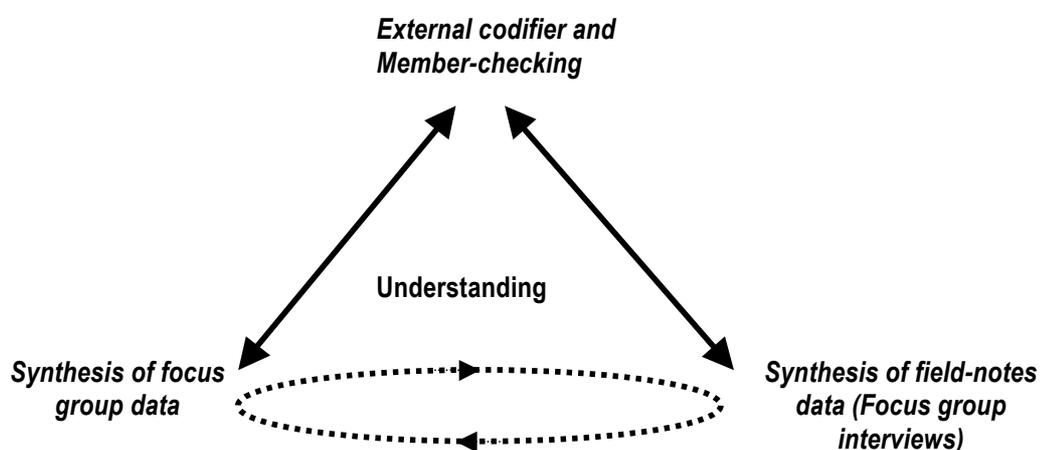
Triangulation, when used, means that multiple sources of evidence are collected and compared. The criteria used to guide the researcher during the interpretations phase included the following: (a) cross-checking to make sure that all the evidence was reviewed; (b) developing all possible rival interpretations; (c) making sure that the most significant aspects of the case study were addressed and (d) using prior and expert knowledge in the case study (Yin, 2003: 137). Triangulation as a technique was used to determine whether multiple sources of data agreed, and to obtain better cross-checked insights. The value of data triangulation is that it results in a “thick description” of the phenomenon of interest (Hassard, 1993: 109 and Johnstone, 2004: 264). Triangulation allowed the researcher to test and support claims that were inherently qualitative. Figure 4.1 captures the essence of triangulation as planned for this study.

Figure 4.1. Triangulation phases

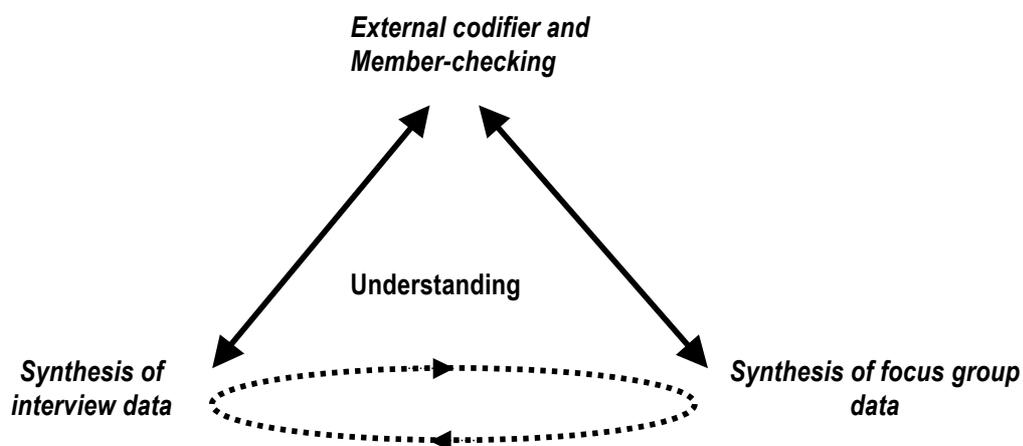
Phase 1



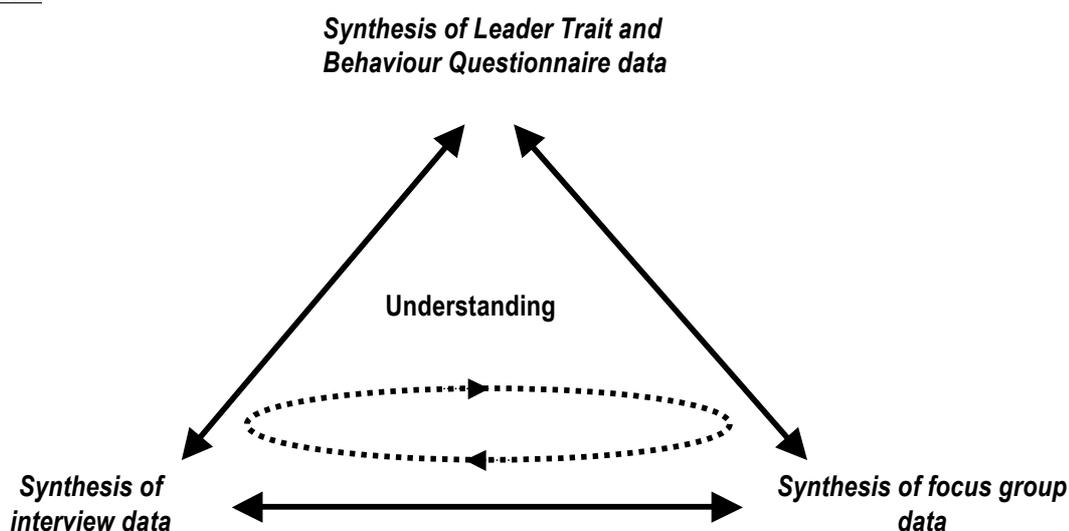
Phase 2



Phase 3



Phase 4



Compiled by the researcher

4.9. Data saturation

Krueger and Casey (2000: 26) describe “saturation” as a term used to describe the point when you have heard the range of ideas and are not obtaining new information (Teddlie & Yu, 2007: 87). Accordingly evidence of saturation must be given in the presentation of the data and discussed via the forms in which it was recognised during the analysis. Data collection should continue until redundancy or saturation is reached, which means that no additional information is obtained from the last informants (Lincoln & Guba, 1985 and

Ohman, 2005: 276). If the researcher is really sure about saturation, he can conduct a few additional interviews (Lincoln & Guba, 1985 and Ohman, 2005: 276). The last interviews will then become a validation of the emerging result (Lincoln & Guba, 1985 and Ohman, 2005: 276). Data saturation was considered an important condition applicable to the individual and focus group interviews.

Sampling and data collection continued until theoretical saturation became evident. Theoretical saturation means that with the collection and analyses of additional data, no new concepts are developed and additional data do not require changes in conditions, characteristics or consequences of the existing categories (Bitsch, 2005: 80 and Strauss & Corbin, 1990). In terms of this research project a number of participants were estimated. However focus group sessions and interviews were performed until saturation point was evident, where there was repetition of themes and no new information was shared. It was accepted that at this point, nothing new would emerge from the data, merely repetitions of the theoretical relationships which had already been discovered.

4.10. Data validation

Patton (2002) states that validity and reliability are two factors which any researcher should be concerned about while designing a study, analysing results and judging the quality of the study. Researchers using a case study method should ensure enough detail is provided so that the validity and credibility of the work can be assessed (Baxter & Jack, 2008: 556). As a basic foundation to achieve this, researchers have a responsibility to ensure that the case study research question is clearly written, the case study design is appropriate for the research question, that purposeful sampling strategies appropriate for a case study have been applied, that data are collected and managed systematically and the data are analysed correctly (Russell, Gregory, Ploeg, DiCenso & Guyatt, 2005). Flyvbjerg (2006: 226) cautions that formal generalisation, whether on the basis of large samples or single cases, is considerably overrated as the main source of scientific progress. However when knowledge cannot be formally generalised it does not mean that it cannot enter into the collective process of knowledge accumulation in a given field or in a society (Flyvbjerg, 2006: 226). Flyvbjerg (2006: 228) concludes that one can often generalise on the basis of a single case and the case study may be central to scientific development via generalisation as supplement or alternative to other methods.

The researcher accepted the responsibility to ensure that the required aspects of validity, reliability and trustworthiness were addressed throughout this study. These required

aspects were aimed at internal and external acceptance of the research process and results as applicable to this case study.

4.11. Validity

Validity is a requirement for both quantitative and qualitative research (Cohen, Manion & Morrison, 2000: 105). From a quantitative perspective it was noted that the Leader Trait and Behaviour questionnaire needed to enable accurate data to be collected. The internal validity of Wilson's (2004) Effective Developmental Leader Trait Instrument (EDLTI) and the Effective Developmental Leader Behaviour Instrument (EDLBI) was assured by means of expert panels. Internal validity of the Leader Trait and Behaviour questionnaire relied upon control of extraneous variables. In this regard the researcher ensured that the questionnaire was administered only to the defined sample; thus ensuring respondent control. Furthermore aspects such as history (incidents or events affecting results) were not observed, the questionnaire was not changed/alterd during the research period and diffusion of treatment was not a concern because a control group scenario was not incorporated. External validity with reference to generalisation has been dealt with and it was accepted that the research results will preferably not be generalised outside the predetermined parameters. Content validity of the Leader Trait and Behaviour questionnaire was established by making use of an expert panel (Appendix F). Construct validity of the Leader Trait and Behaviour questionnaire was rooted in the literature review with reference to a summary list of leader trait and behaviour clusters (Chapter 2 Table 2.6).

The concept of validity is described by a wide range of terms in qualitative studies. This concept is not a single, fixed or universal concept, but "rather a contingent construct, inescapably grounded in the processes and intentions of particular research methodologies and projects" (Winter, 2000: 1). Some qualitative researchers have argued that the term validity is not applicable to qualitative research, but at the same time, they have realised the need for some kind of qualifying check or measure for their research (Golafshani, 2003). Qualitative data validity may be addressed through the honesty, depth, richness and scope of the data achieved, the participants approached, the extent of triangulation and the disinterestedness or objectivity of the researcher (Cohen, Manion & Morrison, 2000: 105). Maxwell (2009: 244 & 245) offers a seven-point checklist to be used in combating the threats to validity in qualitative research. The first is to ensure intensive long-term (field) involvement in order to produce a complete and in-depth understanding of field situations, including the opportunity to make repeated observations and interviews. This is followed by a need to collect "rich" data with the aim to cover fully the field observations and interviews

with detailed and varied data. Thirdly, a need for respondent validation is required whereby feedback is obtained from the people studied to lessen the misinterpretation of their self-reported behaviours and views. A search for discrepant evidence and negative cases should follow that will test rival or competing explanations. Triangulation follows, thereby providing an opportunity to collect converging evidence from different sources. A need to use quasi-statistics is emphasised in order to use actual numbers instead of adjectives. Finally it is necessary to compare explicitly the results across different settings, groups or events. Based on suggestions by Maxwell (2009) and McMillan & Schumacher (2001) the researcher identified a strategy checklist to enhance validity (Table 4.11).

Validity of interviews was dealt with by complying with McMillan and Schumacher's (2001: 408) proposed strategies to enhance validity. The researcher used this framework (Table 4.11) to provide a description of actions planned in response to each strategy.

Table 4.11. Enhancing validity

Strategy	Description of researcher actions
Prolonged and persistent field work	Data collection took place during defined phases, whereas data analysis and triangulation was used to ensure a match between findings and participant reality.
Participant language; verbatim accounts	Interviews were recorded and transcribed in a verbatim manner. One language (English) was used.
Low-inference descriptors	Detailed descriptions of explanations and situations were recorded and transcribed.
Multiple researchers	Testing for understanding of data collected and reviewed was facilitated by an external codifier.
Mechanically recorded data	Use was made of audio tape recordings.
Participant researcher	Recorded perceptions and assumptions (noted during interviews as field notes) were tested during the data analysis phase to ensure understanding and intended meaning.
Member checking	The researcher checked formally with participants for accuracy of data collected and transcribed.
Participant review	
Review by an external codifier	

Negative cases or discrepant data	The researcher actively searched for and recorded, analysed and reported negative cases or discrepant data that were an exception to patterns or that modified patterns found in data.
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Adapted from McMillan & Schumacher (2001: 408) and Maxwell (2009: 244 & 245).

Sources:

Maxwell, J.A. 2009. "Designing a qualitative study". In: Bickman, L. & Rog, D.J. eds. *The Sage handbook of applied social research methods, 2nd edition*, Thousand Oaks, CA: Sage. 214-253.

McMillan, J.H. & Schumacher, S. 2001. *Research in education: A conceptual introduction*. 5th ed. New York: Addison Wesley Longman, Inc.

The value of the case study will depend on the validity claims that the researcher can place on the study and the status these claims obtain in dialogue with other validity claims in the discourse to which the study is a contribution (Flyvbjerg, 2006: 233). Interpreting the research findings in accordance with the reviewed literature thus supported validity claims. Checking the findings with the case study participants was a valuable part of the analysis and enhanced validity (Hartley, 2004: 330). Validity was advanced by convergence with other sources of data by means of triangulation and comparisons with the literature. Extensive quotations from field notes and transcripts of interviews were included and integrated to ensure validity.

This mixed methods research design made use of accepted validity requirements as applicable to both quantitative and qualitative approaches. However actions to ensure validity were also inadvertently consolidated and intensified during triangulation.

4.12. Reliability

Reliability of Wilson's (2004) Effective Developmental Leader Trait Instrument (EDLTI) and the Effective Developmental Leader Behaviour Instrument (EDLBI) was assured by administering the instruments to full-time employees of approximately 30 different organisations. The resulting data were analysed using factor analysis to determine leader trait factors and behaviour factors. Reliability in quantitative research refers to consistency (Cohen, Manion & Morrison, 2000: 117). Stability as a principal type of reliability (Cohen, Manion & Morrison, 2000: 117) served as reference. It should further be noted that the reliability of an instrument is closely associated with its validity (Tavakol & Dennick, 2011: 53). An instrument cannot be valid unless it is reliable (Tavakol & Dennick, 2011: 53). Cronbach's alpha is widely used as an objective measure of reliability and to provide a

measure of the internal consistency of a test or scale (Tavakol & Dennick, 2011: 53). Alpha is an important concept in the evaluation of assessments and questionnaires (Tavakol & Dennick, 2011: 54). Cronbach's alpha determines the internal consistency or average correlation of items in a survey instrument to gauge its reliability (Santos, 1999). Cronbach's alpha was used to confirm internal consistency and to determine good inter-item correlation. Additional specific actions that were taken to enhance reliability (McMillan & Schumacher, 2001: 247 & 248) are presented in Table 4.12.

Table 4.12. Actions taken to enhance reliability of the Leader Trait and Behaviour Questionnaire

Requirement	Actions taken
All participants should be given the same directions.	Directions were similar in all cases.
Participants must be motivated to answer the questionnaire.	A precondition for completion of the questionnaire was voluntary participation.
Duration for completion should not exceed one hour.	Questionnaire completion did not exceed one hour.
The same person administers the questionnaire.	The researcher administered the questionnaire aided by a comprehensive cover letter and instructions to participants.
No unusual circumstances should occur during data collection.	No unusual circumstances were noted by or reported to the researcher during data collection.

Source: McMillan, J.H. & Schumacher, S. 2001. *Research in education: A conceptual introduction*. 5th ed. New York: Addison Wesley Longman, Inc.

Since there can be no validity without reliability a demonstration of validity is sufficient to establish reliability with regard to the researcher's ability and skill in any qualitative research (Patton, 2002 and Golafshani, 2003). Despite this assertion the researcher aimed to satisfy reliability issues and concerns. Patton (2001) states that validity and reliability are two factors which any qualitative researcher should be concerned about while designing a study, analysing results and judging the quality of the study (Golafshani, 2003: 601). This corresponds to the question "How can an inquirer persuade his or her audiences that the research findings of an inquiry are worth paying attention to?" (Lincoln & Guba, 1985: 290 and Golafshani, 2003: 601). To answer this question Healy and Perry (2000) assert that the

quality of a study in each paradigm should be judged by its own paradigm's terms (Golafshani, 2003: 601). To widen the spectrum of conceptualisation of reliability and revealing the congruence of reliability and validity in qualitative research, Lincoln and Guba (1985: 316) state that: "Since there can be no validity without reliability, a demonstration of the former is sufficient to establish the latter (Golafshani, 2003: 601). Patton (2001) also states that reliability (with regard to a researcher's ability and skill in qualitative research) is a consequence of the validity in a study (Golafshani, 2003: 602).

Carlson (2010: 1103) states that among the most often used procedures to increase trustworthiness in qualitative inquiry are audit trails, reflexivity (Creswell & Miller, 2000), thick and rich description, triangulation and member checking (Creswell & Miller, 2000 and Merriam, 1998). In terms of this study mentioned procedures were used to meet "reliability" requirements as applicable to a qualitative study.

In terms of consistency another person should be able to examine the work and come to similar conclusions (Eriksson & Kovalainen, 2008). In partial response to this requirement the researcher considered reflexivity. Reflexivity is the recognition by researchers that they may have a significant influence on the development of the research and the engagement of the participants (Curtin & Fossey, 2007: 92-93) and that they have a duty to be transparent about that influence (Carlson, 2010: 1104). In this case the researcher explicitly disclosed his biases that could possibly influence the interpretations he made. Furthermore the researcher incorporated triangulation, which allowed him to substantiate various data sets with each other; thereby ensuring that the interpretations and conclusions drawn were trustworthy.

Carlson (2010: 1103) states that qualitative researchers are often, by nature, scrupulous note-takers as they tend to see everything as important or potentially so. Careful documenting and reporting should allow the reader to assess how the researcher has collected, produced and interpreted the data (Eriksson & Kovalainen, 2008). Yin (2003) encourages the use of a case study database to increase the reliability of the case study. The term database is used loosely to mean a formal organisational method for the data collected (Yin, 2003). The intention of the record-keeping tool in the case study approach is to provide a strong chain of evidence to support research findings (Yin, 2003). The researcher introduced a process of member-checking, whereby participants were given transcripts of the narratives they contributed during interview sessions and were asked to verify their accuracy. Due to the problems of reliability, the coding of texts is usually assigned to multiple coders so that the researcher can see whether the constructs being

investigated are shared and whether multiple coders can reliably apply the same codes (Mayring, 2003: 110 and Kohlbacher, 2005). Qualitative research is more defensible when multiple coders are used and when high inter- and intra-coder reliability are obtained. Inter-coder reliability requires consistency among different coders and intra-coder reliability necessitates consistency within a single coder. This requirement motivates the use of an external codifier. The researcher also made provision for an audit trail. This decision required that the researcher had to keep records of all components of the study. Records available for scrutiny are field notes, completed transcripts, interview notes, audiotapes and associated supporting documents.

Procedural reliability also requires a good case study design including clear research questions, a comprehensive research plan, a coherent set of field notes on all evidence and a documented case analysis (Eriksson & Kovalainen, 2008). The researcher provided detailed descriptions of settings, participants, data collection and analysis procedures as a way of making accounts more credible and to show that he was diligent in his attempts to conduct acceptable research.

Detailed descriptions of the procedures followed and decisions made during the research process may also aid replication of the case study in another setting (Eriksson & Kovalainen, 2008). Carlson (2010: 1104) acknowledges that although qualitative researchers are not concerned with study replication, they are concerned with corroborating or substantiating findings over time across similar situations. Corroboration is not possible without in-depth understanding of commonalities that may exist among situations (Carlson, 2010: 1104). The researcher ensured compliance in this regard by documenting thick and rich descriptions and by providing understanding of relevance in the selected setting. These detailed descriptions and coupled understanding should aid future replication to other settings. In summary, reliability was assured by satisfying measures contained in Table 4.13.

Table 4.13. Ensuring reliability

Reliability criteria	Researcher actions
Interview response items/questions are aligned to the outcome of the literature review of this study.	All interview questions were derived from the literature review.
All participants will receive similar pre-briefings.	Defined interview protocols were followed.

The purpose of the interview and any misunderstandings will be dealt with in a face-to-face manner by the researcher, thus ensuring comprehension.	Use of field notes satisfied this criterion.
The same interview (including the standard sequence of questions) will be presented to all participants.	Defined interview protocols were followed.
All participants will be literate and representative of the population.	Ensured sampling criteria were met.
Each interview will be completed in an anonymous manner, thus encouraging honesty.	Confidentiality requirements and ethical compliance was observed.

Compiled by the researcher

This mixed methods research design made use of accepted reliability requirements as applicable to both quantitative and qualitative approaches. However actions to ensure reliability were also inadvertently consolidated and intensified during triangulation. Finally, the researcher noted that the circumstances applicable to this study were complex, flexible and dynamic. A future attempt to replicate this research may not be feasible or realistic without undermining the strength of this type of research (Saunders, Lewis & Thornhill, 2007).

4.13. Trustworthiness

To ensure reliability in qualitative research, examination of trustworthiness is crucial (Golafshani, 2003: 601). The researcher noted that a study's trustworthiness can be increased when data analysis and conclusions are triangulated, participants' perceptions are verified in a systematic manner and the project's data chain of evidence is established (Gall, Borg & Gall, 1996). The researcher selected trustworthy evidence for pattern-seeking by qualitatively assessing data. Selecting trustworthy data involved an awareness of the researcher's assumptions, predispositions and influence on the research site and setting. Trustworthiness strategies selected by the researcher complied with Gall, Borg and Gall's (1996) recommendations to use triangulation, member checking and to illustrate a logical relationship between research questions, research procedures, raw data and results. In response the researcher observed specific trustworthiness strategies – as described in Table 4.14.

Table 4.14. Ensuring trustworthiness

Strategies	Researcher actions
Credibility	Used a member-checking technique.
Applicability	Interpreted data in accordance with research questions and derived criteria. Used a member-checking technique.
Consistency	Used an interview approach, with the same format, sequence and questions for each participant. Presented detailed descriptions of participants, sample drawn, data collection methods and data analysis strategies. Ensured detailed descriptions/transcripts of information collected.
Neutrality	Ensured non-involvement by the researcher in workplace activities. Recorded phenomena as faithfully as possible, while also raising additional questions, checking out hunches and moving deeper into analysis of the phenomena. Encouraged participants to present examples in order to demonstrate their unique way of viewing the world. Did not exert power-based influences during interviews.

Adapted from Krefting (1991: 215)

In summary, to establish confidence in the trustworthiness of the findings, multiple approaches to triangulation were used. Data and method triangulation were implemented and considered supportive of trustworthiness. In terms of trustworthiness and consistency the emphasis was on ensuring that the results were consistent with the data and that the research process and participants were described in sufficient detail for readers to evaluate the appropriateness of extrapolations to other situations and settings.

4.14. Role of the researcher

Flyvbjerg (2006: 236) advises that if one assumes that research can be described by the phenomenology for human learning, then it is evident that the most advanced form of understanding is achieved when researchers place themselves within the context being studied. Only in this way can researchers understand the viewpoints and the behaviour which characterises social phenomena. In this role the researcher acknowledges that

research constraints were present and that these constraints required specific and predetermined actions.

The researcher formulated a checklist (Table 4.15) to remind him of appropriate actions in order to address research constraints.

Table 4.15. Researcher's checklist

Constraint	Researcher's actions
Inquiry	<p>Did not allow own neutrality to influence the data collection.</p> <p>Did not appear distant or show interest in the operational activities of the site and did not voice site comparisons/observations to the participants during data collection.</p> <p>Complied with the Interview Protocols (Appendices A and E) and Participant Agreement criteria (Appendix B).</p> <p>Administered the Leader Trait and Behaviour Questionnaire without undue interference by the researcher.</p>
Perspective and effect	<p>Did not hint towards sought-after or expected data during conversation with participants.</p> <p>Encouraged participants to be honest and fair when providing data/sharing information. Encouraged participants to provide examples in order to support responses and awareness.</p> <p>Complied with the Interview Protocols (Appendices A and E) and Participant Agreement criteria (Appendix B).</p> <p>Administered the Leader Trait and Behaviour Questionnaire without undue interference by the researcher.</p>
Data collection task	<p>Realised and was aware that data presented were absolute; did not attempt to manipulate data (only to ensure understanding and clarification).</p> <p>Complied with the Interview Protocols (Appendices A and E), Participant Agreement criteria (Appendix B) and data analysis techniques.</p> <p>Administered the Leader Trait and Behaviour Questionnaire without undue interference by the researcher.</p>

Focus/attention	<p>Ensured participants were aware that observations would not be used to collect data and refrained from providing comments relating to such occurrences.</p> <p>Complied with the Interview Protocols (Appendices A and E) and Participant Agreement criteria (Appendix B).</p> <p>Administered the Leader Trait and Behaviour Questionnaire without undue interference by the researcher.</p>
Empathy	<p>Ensured that participants understood what was expected from them in terms of data collection focus areas before commencing with data collection.</p> <p>Complied with the Interview Protocols (Appendices A and E) and Participant Agreement criteria (Appendix B).</p> <p>Administered the Leader Trait and Behaviour Questionnaire without undue interference by the researcher.</p>
Emotion	<p>Continually engaged in self-examination to be certain that own biases and stereotypes did not influence the data collection and interpretation of the findings.</p> <p>Complied with the Interview Protocols (Appendices A and E) and Participant Agreement criteria (Appendix B).</p>
Results	<p>Did not generalise the research results outside the predetermined parameters.</p> <p>Complied with described data validation activities.</p>

Compiled by the researcher

The researcher may be faced with allegations of biasness within the researcher role because of his current employment with the Air Traffic and Navigation Services Company. Carlson (2010: 1104) states that all researchers, quantitative as well as qualitative, have personal biases that can influence their interpretation of data (Creswell, 1998, Creswell & Miller, 2000 and Strauss & Corbin, 1990). The researcher had to disclose his biases and assumptions that could influence the interpretations he made. Researcher biases included own subjective perceptions, personal motivations, desired leadership actions, own leadership experiences and the impact of these experiences. The researcher accepted the presence of his own subjectively perceived thoughts and opinions regarding leadership behaviours and qualities. The researcher acknowledged a build-up of personal motivations that could influence leadership views. The researcher has been in leadership positions and own leadership experiences could favour and highlight specific intentions to act in response

to a situation. Moreover the researcher has had past opportunities to implement and reflect upon own leadership actions. The researcher was aware that own biases had to be suspended during data collection, analysis and reporting of findings.

The researcher also had to disclose his defences in response to his biases and assumptions that could influence the interpretations he made. Data collectors who are more friendly and personable will tend to elicit a greater amount of information and better quality information from participants (Miyazaki & Taylor, 2008: 781). The researcher adopted a friendly, person-centred holistic and humanistic perspective to understand human lived experiences. Participants may react more favourably, or more “ethically,” when the person of interest has characteristics (in this case knowledge of air traffic management) similar to those of the researcher (Miyazaki & Taylor, 2008: 785). The researcher focused on experiences from the participants’ perspective. Moreover the use of multiple data sources (as in the case of this research study) should oppose researcher bias (Miyazaki & Taylor, 2008: 790). Researchers who interact more with their participants may arrive at a level of trust and understanding such that participants are more forthcoming and their responses are more honest (Miyazaki & Taylor, 2008: 789 & 790). The researcher became involved and immersed in the study. However the researcher’s participation in the study added to the uniqueness of data collection and analysis. The researcher accepts and unequivocally states that in this research study complete objectivity (subjectivity arises when the effect of the researcher is ignored) were unattainable and the methodology was possibly not completely precise because human beings do understandably not always act logically or predictably. In response the researcher suspended any preconceptions, prejudices and beliefs so that they did not interfere or influence the participants’ experiences. Furthermore the researcher complied with accepted practices that involved member-checking and use of an external codifier.

4.15. Conclusion

The research design provides detailed descriptions of all planning and execution elements, while also providing an integrated and complete outlook of work planned and performed. The functional research activities that were performed by the researcher are summarised in Table 4.16.

Table 4.16. Summary of research activities

Activity sequence	Activity description
1	Obtaining permission from the Air Traffic and Navigation Services Company to conduct this research.
2	Preparing and structuring interviews.
3	Preparing and structuring the questionnaire.
4	Arranging access to sites and participants.
5	Conducting interviews.
6	Administering questionnaires.
7	Completing a first analysis of data.
8	Ensure member-checking.
9	Reporting of initial findings.
10	Review by an external codifier.
11	Triangulating data.
12	Final report of findings.

Compiled by the researcher

This ethnographic research case study approach allowed the researcher to probe deeply and to analyse intensively the multifarious phenomena that constitute the current views (experiences and expectations) held by followers with regard to leadership behaviour qualities within the Air Traffic and Navigation Services Company (in terms of inspirational and discouraging leadership styles). This research design thus served as the overall “road map” for the actual research effort. In the next chapter the analyses of the data collected will be discussed.

CHAPTER 5: RESEARCH RESULTS

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CHAPTER 5: RESEARCH RESULTS

5.1. Introduction

The aim of this analysis was to understand the various constitutive elements of the data (Mouton, 2001: 108). Follower experiences and expectations of leadership behaviours in a safety-critical commercial environment were collected, analysed, understood, structured and utilised to aid leadership development. Emphasis was placed on the presentation and inspection of the relationships between identified concepts and constructs and to determine the existence of patterns or trends. These were identified to establish themes in the data. Results, both positive and negative, were highlighted and presented.

Tables and text summaries were used to present main and noteworthy trends and results. Summaries presented in this chapter detailed the experiences and expectations of followers with regard to leadership behaviour qualities within the Air Traffic and Navigation Services Company in terms of inspirational and discouraging leadership.

Data gathered by means of individual interviews, focus group interviews and the Leader Trait and Behaviour Questionnaire provided insight into perspectives, cognitive frames and logic (collectively referred to as mental models) held by followers. Analyses were aimed at presenting and detailing definitions describing the truth about leadership, leadership performance, how one measures success in the leadership activity and how followership is experienced. Analyses also satisfied a need to offer a comprehensive inventory of leadership behaviours, styles and qualities that enthused, motivated and promoted followership. Discovery and understanding of leadership behaviours, styles and qualities that depressed, diminished and discouraged followership were also analysed. The culmination of mentioned data analyses had to result in an informed leadership training and development needs analysis within the Air Traffic and Navigation Services Company.

Following a mixed methods research design (primarily guided by a qualitative investigative view) sanctioned a thorough exploration and discovery of an emergent reality supported by an inductive paradigm. Favouring a constructivist assumption (that knowledge is context-bound) allowed participants to present their unique experiences and varied reports (thus viewing personal epistemology through a constructivist lens). This allowed the researcher to identify and report the core aspects of participants' experiences.

5.2. Orientation

This research project employed a simultaneous design (QUAL + quan). It denoted a primarily qualitative orientation that encompassed simultaneous qualitative and quantitative designs. Quantitative results, which relied upon the Leader Trait and Behaviour Questionnaire data, were reported during the first segment. Qualitative results, which relied upon individual interview data and focus group interview data, were reported during the second segment. Triangulation was used during the third segment to support a comprehensive analysis, provide a holistic narrative description and to guide further interpretation.

5.2.1. Chapter structure

5.2.1.1. Quantitative research results

Quantitative research results are presented first. The research sites considered and selected are presented in order to illustrate compliance with the sample drawn. Participants partaking in the data collection by completing the Leader Trait and Behaviour questionnaires are identified and described. A description of the sample characteristics presents insights into gender, race/ethnicity, age, nationality and work experience aspects.

Leader trait findings are presented first in terms of noteworthy leader trait items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined), noteworthy leader trait items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups separately), common leader trait items considered noteworthy and leader trait factors that were rated noteworthy (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined). This discussion is continued with reference to negligible leadership trait qualities by findings of negligible leader trait items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined), negligible leader trait items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups separately), common leader trait items considered negligible and leader trait factors that were rated negligible (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined).

Quantitative research results pertaining to leader behaviours follow. Mentioned discussion is inclusive of findings identifying noteworthy leader behaviour items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined), Noteworthy leader behaviour items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups separately), common leader behaviour items considered noteworthy and leader behaviour factors that were rated noteworthy (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined). This discussion is continued with reference to negligible leader behaviour items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined), negligible leader behaviour items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups separately), common leader behaviour items considered negligible and leader behaviour factors that were rated negligible (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined).

Statistical analysis of the Leader Trait and Behaviour Questionnaire is then discussed with reference to factor analysis, internal consistency and reliability statistics. Differences between all the groups were also tested in order to make accurate probability statements.

5.2.1.2. Qualitative research results

Qualitative results emanating from individual interviews are presented and discussed. Associated demographic details are also presented. In addition information from individual interview field notes (verbal and non-verbal) are critically analysed, discussed and presented (with reference to codes, emerging categories and associated designators). Individual interview results present sites and demographic details followed by two levels of analysis including key descriptive terms, specific codes, associated subcategories and categories. Member checking feedback and external codifier comments are also presented.

Qualitative results emanating from focus group interviews are presented and discussed. Associated demographic details are also presented. In addition information from focus group field notes (verbal and non-verbal) are critically analysed, discussed and presented (with reference to codes, emerging categories and associated designators). Focus group results present sites and demographic details followed by two levels of analysis including key descriptive terms, specific codes, associated subcategories and categories. Member checking feedback and external codifier comments are also presented.

5.2.1.3. Mixed methods results

An overview of mixed methods data is presented. Mentioned is supported by triangulation results.

5.3. Quantitative results

5.3.1. Sites

Frequencies were used in order to illustrate descriptive statistics for these categorical variables. The researcher considered all 22 Air Traffic and Navigation Services Company Air Traffic Control Operational Centres as accessible research sites. The researcher also ensured to include participants from more than one Air Traffic Control Centre, thereby adhering to the purposeful/convenient sampling decision. 21 Air Traffic Control Centres were represented, thus ensuring inclusion of participants who represented the majority of perspectives possible within the scope specified. Mentioned 95,45% representation is presented in Table 5.1.

Table 5.1. Represented Air Traffic Control Centres

Air Traffic Control Centres	Frequency	Percent	Valid Percent	Cumulative Percent
Bhisho	1	.7	.7	.7
Bloemfontein	5	3.4	3.4	4.1
Cape Town	24	16.6	16.6	20.7
East London	2	1.4	1.4	22.1
George	2	1.4	1.4	23.4
Grand Central	4	2.8	2.8	26.2
Kimberley	2	1.4	1.4	27.6
King Shaka	18	12.4	12.4	40.0
Kruger Mpumalanga	1	.7	.7	40.7
Lanseria	3	2.1	2.1	42.8
Mafikeng	3	2.1	2.1	44.8
Mthatha	1	.7	.7	45.5
O.R. Tambo	54	37.2	37.2	82.8

Pietermaritzburg	2	1.4	1.4	84.1
Polokwane	1	.7	.7	84.8
Port Elizabeth	12	8.3	8.3	93.1
Rand	2	1.4	1.4	94.5
Richards Bay	2	1.4	1.4	95.9
Virginia	1	.7	.7	96.6
Upington	1	.7	.7	97.2
Wonderboom	4	2.8	2.8	100.0
Total	145	100.0	100.0	

Compiled by the researcher

5.3.2. Completed questionnaires

A total of 175 Leader Trait and Behaviour questionnaires were distributed. The entire reported population amounted to 459 Air Traffic and Navigation Services Company employees. Based on questionnaire distribution the sample drawn constituted 38% of the defined population.

Completion of questionnaires took place at the various airports (Air Traffic Control Centres) and at the Air Traffic and Navigation Services Company's Aviation Training Academy (Johannesburg). This arrangement allowed the researcher access to followers/participants who were available and representative of the population.

Leader Trait and Behaviour questionnaires were specifically made available to followers (defined as all temporary, contract and permanent employees that were not appointed in formal organisational management positions). Distribution of these questionnaires was limited to qualified operations personnel constituting Air Traffic Control Officers, Air Traffic Service Officers and Aeronautical Information Management Officers. In total 145 completed questionnaires were received (Table 5.2). Frequencies were used in order to display descriptive statistics for these categorical variables. A return rate of 82.85% was noted. Based on questionnaire completion the respondent sample constituted 31,5% of the defined population.

Table 5.2. Completed questionnaires received (Vocational groups)

Vocational Groups	Frequency	Percent	Valid Percent	Cumulative Percent
Air Traffic Services Officers (ATSO)	46	31.7	31.7	31.7
Aeronautical Information Management Officers (AIMO)	14	9.7	9.7	41.4
Air Traffic Control Officers (ATCO)	85	58.6	58.6	100.0
Total	145	100.0	100.0	

Compiled by the researcher

5.3.3. Sample characteristics

A non-probability convenient sample allowed the researcher to decide which units of the population to include in the sample. This decision was based on the availability of participants and willingness of the participants to voluntarily participate. This decision sanctioned the context-specific research focus and boundary associated with this study. This sample also supported the ethnographic research case study strategy by providing variety and diversity in aid of production and reproduction of everyday life by “othered” people (in support of views held by Chambers, 2000, Lather, 2001: 481 and Schwandt, 2001). A requirement to include participants who represent the widest variety of perspectives possible within the range specified by their purpose (Higginbottom, 2004: 17) was observed. An arrangement of gender, race/ethnicity, age and nationality differences was consolidated and presented below in support of mentioned variety and diversity needs and assertions (Table 5.3). Frequencies were used in order to explain descriptive statistics for these categorical variables.

Table 5.3. Gender, race/ethnicity, age and nationality characteristics

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	89	61.4	61.4	61.4
Female	56	38.6	38.6	100.0
Total	145	100.0	100.0	

Race/ethnicity	Frequency	Percent	Valid Percent	Cumulative Percent
Black African	54	37.2	37.2	37.2
White	58	40.0	40.0	77.2
Coloured	15	10.3	10.3	87.6
Indian or Asian	18	12.4	12.4	100.0
Total	145	100.0	100.0	
Age	Frequency	Percent	Valid Percent	Cumulative Percent
20 years or less	1	.7	.7	.7
21 - 30 years	91	62.8	62.8	63.4
31 - 40 years	45	31.0	31.0	94.5
41 – 50 years	7	4.8	4.8	99.3
Older than 50 years	1	.7	.7	100.0
Total	145	100.0	100.0	
Nationality	Frequency	Percent	Valid Percent	Cumulative Percent
South African	143	98.6	98.6	98.6
Non-South African	2	1.4	1.4	100.0
Total	145	100.0	100.0	

Compiled by the researcher

The sample consisted of qualified experts that offered a high level of knowledge and skills in three defined vocational areas (Air Traffic Control Officers, Air Traffic Service Officers and Aeronautical Information Management Officers). The 145 participants were able to determine and judge leadership behaviours within an operational setting in a defined context. This assisted to classify the representative case and its boundaries. As a further benefit it may be concluded that 53,8% of participants (Table 5.4) extended context-dependent knowledge and experience that served as evidence of expertise (thus more than 5 years of work experience). Frequencies were used in order to explain descriptive statistics for these categorical variables.

Table 5.4. Participants' work experience with ATNS

Years of work experience with ATNS	Frequency	Percent	Valid Percent	Cumulative Percent
5 or less	67	46.2	46.2	46.2
6 – 10	44	30.3	30.3	76.6
11 – 20	31	21.4	21.4	97.9
21 – 30	3	2.1	2.1	100.0
Total	145	100.0	100.0	

Compiled by the researcher

5.3.4. Leader traits

A research objective was to determine leadership traits that inspired followership within the Air Traffic and Navigation Services Company. A further research objective was to determine leadership traits that discouraged followership within the Air Traffic and Navigation Services Company. Identifying and understanding leadership trait differences relied upon responses presented by followers (Appendix I). Six traits (factored as “Dedicated”, “Practical”, “Cooperative”, “Assertive”, “Personable” and “Analytical”) were considered (Appendix H). This information was used to describe specific characteristics of the sample. Descriptive statistics were used to explain these continuous variables. Information for each variable is summarised below. It should be noted that the researcher determined limits (termed “noteworthy” and “negligible”) with reference to the Likert-style rating scale interpretation. This arrangement made it easier to standardise and interpret the data in terms of developed and desired leader traits “(noteworthy)” and emerging/undeveloped, but desired leader traits (“negligible”).

5.3.4.1. Noteworthy leadership trait qualities

Responses were analysed in order to determine noteworthy leader trait items (Tables 5.5 and 5.6) from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined and separately). A mean of more than 3,50 was considered in this regard. A further analysis identified the leader trait factors that were rated noteworthy (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined and separately). A mean of

more than 3,50 (intrafactor) was considered in this regard. Refer to Appendix H and Appendix I.

Table 5.5. Noteworthy leader trait items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined)

ATCO, AIMO and ATSO combined			
Factors (Leader trait items)	N	Mean	Std. Deviation
Dedicated	145	3.61	.907
Practical	145	3.56	.879
Cooperative	145	3.52	.958
Assertive	145	3.67	.909
Personable	145	3.57	.872
Analytical	145	3.53	.882

Compiled by the researcher

Information presented above illustrates that all factors (leader traits) were represented. This analysis took account of data structured in terms of noteworthy leader trait items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined). This description of the method of analysis is clear and complete, with reference to these factors (leader traits). Account has been taken of a clear grouping of these factors. From a statistical perspective it was concluded that Dedicated (B33, B19, B32, B21, B11, B34, B48, B63, B54, B1, B42 & B55), Practical (B27, B2, B62, B57 & B47), Cooperative (B9), Assertive (B5, B6, B43, B23, B17, B12, B59, B51, B31 & B7), Personable (B44, B49 & B26) and Analytical (B14 & B4) factors (and associated specific trait elements) were noteworthy.

Table 5.6. Noteworthy leader trait items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups separately)

Air Traffic Control Officers			
Factors (Leader trait items)	N	Mean	Std. Deviation
Dedicated	85	3.67	.859
Practical	85	3.59	.842

Cooperative	85	3.58	.905
Assertive	85	3.68	.850
Personable	85	3.61	.825
Analytical	85	3.59	.855
Air Traffic Service Officers			
Factors (Leader trait items)	N	Mean	Std. Deviation
Dedicated	46	3.58	.989
Practical	46	3.54	.953
Assertive	46	3.67	1.000
Personable	46	3.51	.982
Analytical	46	3.52	1.027
Aeronautical Information Management Officer			
Factors (Leader trait items)	N	Mean	Std. Deviation
Dedicated	14	3.67	.885
Practical	14	3.63	.809
Cooperative	14	3.57	.948
Assertive	14	3.63	.887
Personable	14	3.61	.940
Analytical	14	3.52	.877

Compiled by the researcher

Information presented above illustrates represented factors (leader traits). This analysis took account of data structured in terms of noteworthy leader trait items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups separately). This description of the method of analysis is clear and complete, with reference to these factors (leader traits). Account has been taken of a clear grouping of these factors for each group. From a statistical perspective it was concluded that Dedicated (B33, B19, B32, B48, B21, B34, B11, B1, B54, B55, B63 & B42), Practical (B27, B2, B57, B56 & B62), Cooperative (B9), Assertive (B5, B6, B12, B23, B43, B17, B51, B31, B41 & B7), Personable (B44, B49 & B28) and Analytical (B4 & B14) factors (and associated specific trait elements) were noteworthy in the case of Air Traffic Control Officers. From a statistical perspective it was concluded that Dedicated (B19, B34, B21, B33, B11, B32, B63 & B48), Practical (B27, B47, B62, B39 & B22), Assertive (B5, B59, B43, B17, B6, B23, B7, B12, B51 & B31), Personable (B44 & B26) and Analytical (B4) factors (and associated specific trait

elements) were noteworthy in the case of Air Traffic Service Officers. No noteworthy items were forthcoming for the Cooperative factor. From a statistical perspective it was concluded that Dedicated (B33, B61, B19, B11, B55, B21, B54 & B32), Practical (B62, B60, B27, B57 & B2), Cooperative (B45, B46, B9 & B30), Assertive (B17, B59, B51, B43, B6, B5, B31, B50 & B23), Personable (B49, B44, B58, B26 & B28) and Analytical (B14, B8 & B4) factors (and associated specific trait elements) were noteworthy in the case of Aeronautical Information Management Officers.

From the leader trait items identified in the table above it was found that common trait items were identified by the three vocational groups (Table 5.6). A mean of 3,50 was applied in order to regard these common leader trait items as noteworthy. These common leader trait items are presented in the table below (Table 5.7). It was also noted that all these leader trait items (Table 5.7) were also part of the common trait items that were identified by the three vocational groups collectively (as per Table 5.5). Refer to Appendix H and Appendix I.

Table 5.7. Common leader trait items considered noteworthy

Leader traits	ATCO	ATSO	AIMO
B5 Assertive (showing a strong and confident personality)	✓	✓	✓
B43 Outspoken (saying openly exactly what one thinks)	✓	✓	✓
B19 Dedicated (devoted to a task or purpose)	✓	✓	✓
B17 Control (power to influence people's behaviour or events)	✓	✓	✓
B6 Authoritative (being reliable and showing authority)	✓	✓	✓
B23 Driven (motivated by a specific factor/feeling)	✓	✓	✓
B21 Disciplined (showing a controlled form of behaviour or working)	✓	✓	✓
B27 Enduring (the ability to see something through)	✓	✓	✓
B33 Hard-working (working with energy and care)	✓	✓	✓
B11 Coherent (able to communicate clearly, consistently and logically)	✓	✓	✓
B51 Powerful/strong (having great power-basis, having a strong effect on people)	✓	✓	✓
B62 Well-spoken (speaking correctly or in an elegant way)	✓	✓	✓
B32 Focused (directing a great deal of attention or activity towards a particular aim)	✓	✓	✓
B4 Analytical (using or involving analyses or logical reasoning)	✓	✓	✓

B31 Fast-thinking (able to decide on an action quickly)	✓	✓	✓
B44 Passionate (having, showing, or caused by strong feelings or beliefs)	✓	✓	✓

Compiled by the researcher

The common leader trait items presented in Table 5.7 provided insight into trait items only. From a qualitative analysis perspective these common leader trait items were considered to some extent to be similar to narrative codes and key descriptive terms (with reference to the individual and focus group interviews) derived from noted and reported events and behaviours (with reference to the individual and focus group interview field notes). The researcher also required insight into the intrafactor distribution (Table 5.8). Mentioned information indicated which items within each factor (only viewed collectively) were rated and considered noteworthy. From a qualitative analysis perspective these common leader trait factor items were considered to some extent to be similar to subcategories (with reference to the individual and focus group interviews) and derived codes (with reference to the individual and focus group interview field notes).

Table 5.8. Leader trait factors that were rated noteworthy (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined)

ATCO, AIMO and ATSO combined			
Factor	N	Mean	Std. Deviation
Dedicated	145	3.61	.907
Practical	145	3.56	.879
Cooperative	145	3.52	.958
Assertive	145	3.67	.909
Personable	145	3.57	.872
Analytical	145	3.53	.882

Compiled by the researcher

Information presented above illustrates that all factors (leader traits) were represented. This analysis took account of data structured in terms of leader trait factors that were rated noteworthy (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined). This description of the method of analysis is clear and complete, with reference to these factors (leader traits). Account has been taken of a clear grouping of these factors. From a statistical perspective it was

concluded that Dedicated (B33, B19, B32, B21, B11, B34, B48, B63, B54, B1, B42 & B55), Practical (B27, B2, B62, B57 & B47), Cooperative (B9), Assertive (B5, B6, B43, B23, B17, B12, B59, B51, B31 & B7), Personable (B44, B49 & B26) and Analytical (B14 & B4) factors (and associated specific trait elements) were noteworthy. Refer to Appendix H and Appendix I.

5.3.4.2. Negligible leadership trait qualities

Responses were also analysed in order to determine negligible leader trait items (Tables 5.9 and 5.10) from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined and separately). A mean of less than 3,50 was considered in this regard. A further analysis identified the leader trait factors that were rated negligible (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined and separately). A mean of less than 3,50 (intrafactor) was considered in this regard. Refer to Appendix H and Appendix I.

Table 5.9. Negligible leader trait items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined)

ATCO, AIMO and ATSO combined			
Factors (Leader trait items)	N	Mean	Std. Deviation
Dedicated	145	3.34	1.040
Practical	145	3.35	.972
Cooperative	145	3.37	.977
Assertive	145	3.41	.853
Personable	145	3.32	.980
Analytical	145	3.23	.923

Compiled by the researcher

Information presented above illustrates that all factors (leader traits) were represented. This analysis took account of data structured in terms of negligible leader trait items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined). This description of the method of analysis is clear and complete, with reference to these factors (leader traits). Account has been taken of a

clear grouping of these factors. From a statistical perspective it was concluded that Dedicated (B20, B24, B25, B61 & B15), Practical (B56, B52, B22, B53, B60, B39 & B40), Cooperative (B30, B35, B16, B3, B38, B18, B45, B37 & B46), Assertive (B41 & B50), Personable (B28, B58, B36, B29 & B10) and Analytical (B8 & B13) factors (and associated specific trait elements) were noteworthy.

Table 5.10. Negligible leader trait items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups separately)

Air Traffic Control Officers			
Factors (Leader trait items)	N	Mean	Std. Deviation
Dedicated	85	3.36	1.040
Practical	85	3.32	.946
Cooperative	85	3.40	.929
Assertive	85	3.44	.830
Personable	85	3.29	.909
Analytical	85	3.19	.905
Air Traffic Service Officers			
Factors (Leader trait items)	N	Mean	Std. Deviation
Dedicated	46	3.32	1.048
Practical	46	3.35	1.051
Cooperative	46	3.32	1.086
Assertive	46	3.37	.926
Personable	46	3.35	1.119
Analytical	46	3.28	.940
Aeronautical Information Management Officer			
Factors (Leader trait items)	N	Mean	Std. Deviation
Dedicated	14	3.35	.837
Practical	14	3.34	.849
Cooperative	14	3.26	.869
Assertive	14	3.14	.965

Personable	14	3.23	.700
Analytical	14	3.21	.802

Compiled by the researcher

Information presented above illustrates represented factors (leader traits). This analysis took account of data structured in terms of negligible leader trait items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups separately). This description of the method of analysis is clear and complete, with reference to these factors (leader traits). Account has been taken of a clear grouping of these factors for each group. From a statistical perspective it was concluded that Dedicated (B20, B24, B25, B61 & B15), Practical (B47, B52, B22, B53, B40, B39 & B60), Cooperative (B30, B35, B3, B38, B16, B18, B37, B45 & B46), Assertive (B59 & B50), Personable (B26, B58, B36, B29 & B10) and Analytical (B8 & B13) factors (and associated specific trait elements) were noteworthy in the case of Air Traffic Control Officers. From a statistical perspective it was concluded that Dedicated (B54, B42, B25, B1, B20, B55, B24, B61 & B15), Practical (B52, B2, B57, B56, B60, B53 & B40), Cooperative (B30, B9, B16, B18, B35, B3, B38, B37, B45 & B46), Assertive (B41 & B50), Personable (B49, B28, B58, B10, B36 & B29) and Analytical (B8, B14 & B13) factors (and associated specific trait elements) were noteworthy in the case of Air Traffic Service Officers. From a statistical perspective it was concluded that Dedicated (B48, B1, B24, B34, B20, B42, B25 & B15), Practical (B56, B53, B52, B47, B22, B40 & B39), Cooperative (B16, B38, B37, B35, B18 & B3), Assertive (B12, B7 & B41), Personable (B29, B36 & B10) and Analytical (B13) factors (and associated specific trait elements) were noteworthy in the case of Aeronautical Information Management Officers.

From the leader trait items identified in the table above it was found that common leader trait items were identified by the three vocational groups (Table 5.10). A mean of less than 3,50 was applied in order to regard these common leader trait items to be classified as negligible. These common leader trait items are presented in the table below (Table 5.11). It was also noted that all these leader trait items (Table 5.11) were also part of the common trait items that were identified by the three vocational groups collectively (as per Table 5.9). Refer to Appendix H and Appendix I.

Table 5.11. Common leader trait items considered negligible

Leader traits	ATCO	ATSO	AIMO
B53 Pragmatic (treating things in a sensible and realistic way to produce results)	✓	✓	✓
B52 Practical (concerned with the actual doing of something rather than with theory)	✓	✓	✓
B16 Contemporary thinking (thinking about current, present and pressing matters)	✓	✓	✓
B29 Engaging personality (charming and attractive or capturing attention)	✓	✓	✓
B24 Efficient (able to work well without wasting time and resources, producing a satisfactory result)	✓	✓	✓
B20 Dependable (trustworthy and reliable)	✓	✓	✓
B38 Loyal (showing firm and constant support to a person)	✓	✓	✓
B37 Just (characterised by right and fair behaviour)	✓	✓	✓
B35 Honest (free of deceit, truthful and sincere)	✓	✓	✓
B25 Efficient and effective (producing the intended result, making strong impression)	✓	✓	✓
B36 Interesting (holding the attention, causing curiosity)	✓	✓	✓
B40 A micro-manager (controls every part, however small)	✓	✓	✓
B15 Consistent (unchanging in nature)	✓	✓	✓
B13 Complex-thinker (complicated and not easy to understand)	✓	✓	✓
B10 Charismatic (exercising a compelling charm which inspires devotion)	✓	✓	✓
B18 Cooperative (mutual assistance in working towards a common goal)	✓	✓	✓
B3 Agreeable (pleasant and enjoyable, prepared to consent)	✓	✓	✓

Compiled by the researcher

The common leader trait items presented in Table 5.11 provided insight into trait items only. From a qualitative analysis perspective these common leader trait items were considered to some extent to be similar to narrative codes and key descriptive terms (with reference to the individual and focus group interviews) derived from noted and reported events and behaviours (with reference to the individual and focus group interview field notes). The researcher also required insight into the intrafactor distribution (Table 5.12). Mentioned

information indicated which items within each factor (only viewed collectively) were rated and considered negligible. From a qualitative analysis perspective these common leader trait factor items were considered to some extent to be similar to subcategories (with reference to the individual and focus group interviews) and derived codes (with reference to the individual and focus group interview field notes).

Table 5.12. Leader trait factors that were rated negligible (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined)

ATCO, AIMO and ATSO combined			
Factor	N	Mean	Std. Deviation
Dedicated	145	3.91	1.036
Practical	145	3.35	.972
Cooperative	145	3.37	.978
Assertive	145	3.41	.853
Personable	145	3.32	.981
Analytical	145	3.23	.923

Compiled by the researcher

Information presented above illustrates that all factors (leader traits) were represented. This analysis took account of data structured in terms of leader trait factors that were rated negligible (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined). This description of the method of analysis is clear and complete, with reference to these factors (leader traits). Account has been taken of a clear grouping of these factors. From a statistical perspective it was concluded that Dedicated (B20, B24, B25, B61, B15 & B20), Practical (B56, B52, B22, B53, B60, B39 & B40), Cooperative (B30, B35, B16, B3, B38, B18, B45, B37 & B46), Assertive (B41 & B50), Personable (B28, B58, B36, B29 & B10) and Analytical (B8 & B13) factors (and associated specific trait elements) were noteworthy. Refer to Appendix H and Appendix I.

5.3.5. Leader behaviours

A research objective was to determine leadership behaviours that inspired followership within the Air Traffic and Navigation Services Company. A further research objective was to determine leadership behaviours that discouraged followership within the Air Traffic and Navigation Services Company. Identifying and understanding leadership behaviour

differences relied upon responses presented by followers (Appendix I). Seven behaviours (factored as “Focused”, “Supportive”, “Developer”, “Advisor”, “Competitive”, “Delegator” and “Charismatic”) were considered (Appendix H). This information was used to describe specific characteristics of the sample. Descriptive statistics were used to explain these continuous variables. Information for each variable is summarised below. It should be noted that the researcher determined limits (termed “noteworthy” and “negligible”) with reference to the Likert-style rating scale interpretation. This arrangement made it easier to standardise and interpret the data in terms of developed and desired leader behaviours “(noteworthy)” and emerging/undeveloped but desired leader behaviours (“negligible”).

5.3.5.1. Noteworthy leadership behaviour qualities

Responses were analysed in order to determine noteworthy leader behaviour items (Tables 5.13 and 5.14) from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined and separately). A mean of more than 3,50 was considered in this regard. A further analysis identified the leader behaviour factors that were rated noteworthy (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined and separately). A mean of more than 3,50 (intrafactor) was considered in this regard.

Table 5.13. Noteworthy leader behaviour items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined)

ATCO, AIMO and ATSO combined			
Factors (Leader behaviour items)	N	Mean	Std. Deviation
Focused	145	3.61	.901
Supportive	145	3.58	.965
Developer	145	3.52	.906
Advisor	145	3.55	.935
Competitive	145	3.64	.890
Delegator	145	3.69	.861
Charismatic	145	3.67	.882

Compiled by the researcher

Information presented above illustrates that all factors (leader behaviours) were represented. This analysis took account of data structured in terms of noteworthy leader behaviour items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined). This description of the method of analysis is clear and complete, with reference to these factors (leader behaviours). Account has been taken of a clear grouping of these factors. From a statistical perspective it was concluded that Focused (C45, C87, C39, C85, C77, C60, C90, C40 & C78), Supportive (C2, C46, C47, C11, C84 & C8), Developer (C88), Advisor (C43), Competitive (C83, C61 & C81), Delegator (C9, C10, C15, C26, C31, C3, C27 & C25) and Charismatic (C13, C14 & C21) factors (and associated specific behaviour elements) were noteworthy. Refer to Appendix H and Appendix I.

Table 5.14. Noteworthy leader behaviour items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups separately)

Air Traffic Control Officers			
Factors (Leader behaviour items)	N	Mean	Std. Deviation
Focused	85	3.64	.859
Supportive	85	3.66	.884
Developer	85	3.55	.852
Advisor	85	3.57	.866
Competitive	85	3.65	.794
Delegator	85	3.67	.828
Charismatic	85	3.70	.826
Air Traffic Service Officers			
Factors (Leader behaviour items)	N	Mean	Std. Deviation
Focused	46	3.64	.953
Supportive	46	3.59	.903
Competitive	46	3.61	.954
Delegator	46	3.70	.901
Charismatic	46	3.69	.867

Aeronautical Information Management Officer			
Factors (Leader behaviour items)	N	Mean	Std. Deviation
Focused	14	3.64	.926
Supportive	14	3.66	1.008
Developer	14	3.60	1.005
Advisor	14	3.50	.760
Competitive	14	3.71	.763
Delegator	14	3.78	.901
Charismatic	14	3.73	1.144

Compiled by the researcher

Information presented above illustrates represented factors (leader behaviours). This analysis took account of data structured in terms of noteworthy leader behaviour items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups separately). This description of the method of analysis is clear and complete, with reference to these factors (leader behaviours). Account has been taken of a clear grouping of these factors for each group. From a statistical perspective it was concluded that Focused (C45, C87, C39, C77, C60, C85, C90, C78, C74, C86 & C65), Supportive (C2, C46, C47, C11, C71 & C84), Developer (C88), Advisor (C43, C63 & C82), Competitive (C83, C61, C81 & C69), Delegator (C9, C10, C15, C26, C31, C3, C35, C27 & C32) and Charismatic (C13, C14 & C21) factors (and associated specific behaviour elements) were noteworthy in the case of Air Traffic Control Officers. From a statistical perspective it was concluded that Focused (C85, C87, C39, C45 & C40), Supportive (C2, C50 & C84), Competitive (C83, C61 & C58), Delegator (C9, C10, C15, C26, C31, C27 & C3) and Charismatic (C13 & C14) factors (and associated specific behaviour elements) were noteworthy in the case of Air Traffic Service Officers. Developer and Advisor factors were not scored by participants in this case. From a statistical perspective it was concluded that Focused (C45, C87, C39, C89, C86, C85 & C40), Supportive (C2, C8, C23, C11, C71, C12, C17 & C47), Developer (C88 & C6), Advisor (C38), Competitive (C83 & C69), Delegator (C15, C10, C9, C26, C3, C31, C25, C30 & C27) and Charismatic (C13, C21 & C14) factors (and associated specific behaviour elements) were noteworthy in the case of Aeronautical Information Management Officers.

From the leader behaviour items identified in the table above it was found that common leader behaviour items were identified by the three vocational groups (Table 5.14). A mean

of 3,50 was applied in order to regard these common leader behaviour items to be classified as noteworthy. These common leader behaviour items are presented in the table below (Table 5.15). It was also noted that all these leader behaviour items (Table 5.15) were also part of the common behaviour items that were identified by the three vocational groups collectively (as per Table 5.13). Refer to Appendix H and Appendix I.

Table 5.15. Common leader behaviour items considered noteworthy

Leader behaviours	ATCO	ATSO	AIMO
C9 Appears confident	✓	✓	✓
C10 Appears in charge	✓	✓	✓
C13 Acts assertively	✓	✓	✓
C83 Speaks out	✓	✓	✓
C15 Is aware of the company's values and leads in that direction	✓	✓	✓
C85 Is straightforward	✓	✓	✓
C87 Strives for success	✓	✓	✓
C2 Acts professionally	✓	✓	✓
C26 Acts decisively	✓	✓	✓
C39 Remains focused	✓	✓	✓
C45 Is hard-working	✓	✓	✓
C14 Assumes responsibility	✓	✓	✓
C31 Directs/orders followers	✓	✓	✓
C27 Delegates authorities	✓	✓	✓
C3 Is adaptive to changing environments	✓	✓	✓

Compiled by the researcher

The common leader behaviour items presented in Table 5.15 provided insight into behaviour items only. From a qualitative analysis perspective these common leader behaviour items were considered to some extent to be similar to narrative codes and key descriptive terms (with reference to the individual and focus group interviews) derived from noted and reported events and behaviours (with reference to the individual and focus group interview field notes). The researcher also required insight into the intrafactor distribution (Table 5.16). Mentioned information indicated which items within each factor (only viewed collectively) were rated and considered noteworthy. From a qualitative analysis perspective these common leader behaviour factor items were considered to some extent to be similar to

subcategories (with reference to the individual and focus group interviews) and derived codes (with reference to the individual and focus group interview field notes).

Table 5.16. Leader behaviour factors that were rated noteworthy (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined)

ATCO, AIMO and ATSO combined			
Factor	N	Mean	Std. Deviation
Focused	145	3.63	.899
Supportive	145	3.58	.965
Developer	145	3.52	.906
Advisor	145	3.55	.935
Competitive	145	3.64	.890
Delegator	145	3.69	.861
Charismatic	145	3.67	.882

Compiled by the researcher

Information presented above illustrates that all factors (leader behaviours) were represented. This analysis took account of data structured in terms of leader behaviour factors that were rated noteworthy (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined). This description of the method of analysis is clear and complete, with reference to these factors (leader behaviours). Account has been taken of a clear grouping of these factors. From a statistical perspective it was concluded that Focused (C45, C87, C39, C85, C77, C60, C90 & C40), Supportive (C2, C46, C47, C11, C84 & C8), Developer (C88), Advisor (C43), Competitive (C83, C61 & C81), Delegator (C9, C10, C15, C26, C31, C3, C27 & C25) and Charismatic (C13, C14 & C21) factors (and associated specific behaviour elements) were noteworthy. Refer to Appendix H and Appendix I.

5.3.5.2. Negligible leadership behaviour qualities

Responses were analysed in order to determine negligible leader behaviour items (Tables 5.17 and 5.18) from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined and separately). A mean of

less than 3,50 was considered in this regard. A further analysis identified the leader behaviour factors that were rated negligible (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined and separately). A mean of less than 3,50 (intrafactor) was considered in this regard. Refer to Appendix H and Appendix I.

Table 5.17. Negligible leader behaviour items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined)

ATCO, AIMO and ATSO combined			
Factors (Leader behaviour items)	N	Mean	Std. Deviation
Focused	145	3.40	.914
Supportive	145	3.29	1.000
Developer	145	3.19	.998
Advisor	145	3.33	.926
Competitive	145	3.17	.950
Delegator	145	3.37	.912
Charismatic	145	3.21	.995

Compiled by the researcher

Information presented above illustrates that all factors (leader behaviours) were represented. This analysis took account of data structured in terms of negligible leader behaviour items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined). This description of the method of analysis is clear and complete, with reference to these factors (leader behaviours). Account has been taken of a clear grouping of these factors. From a statistical perspective it was concluded that Focused (C86, C65, C74, C76, C91, C89, C79 & C75), Supportive (C71, C23, C50, C22, C94, C12, C17, C48, C92, C24, C56, C44, C59, C20, C80, C55 & C5), Developer (C1, C6, C62, C41, C29, C34, C33, C51, C57, C16 & C49), Advisor (C63, C38, C82, C42, C64, C66, C67, C36, C37, C68 & C70), Competitive (C69, C54, C58, C53, C72 & C52), Delegator (C35, C93, C7, C32, C30, C4 & C28) and Charismatic (C19, C18 & C73) factors (and associated specific behaviour elements) were noteworthy. Refer to Appendix H and Appendix I.

Table 5.18. Negligible leader behaviour items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups separately)

Air Traffic Control Officers			
Factors (Leader behaviour items)	N	Mean	Std. Deviation
Focused	85	3.44	.881
Supportive	85	3.33	.956
Developer	85	3.24	.930
Advisor	85	3.34	.874
Competitive	85	3.12	.947
Delegator	85	3.42	.853
Charismatic	85	3.26	.991
Air Traffic Service Officers			
Factors (Leader behaviour items)	N	Mean	Std. Deviation
Focused	46	3.36	.964
Supportive	46	3.24	1.088
Developer	46	3.20	1.116
Advisor	46	3.29	1.028
Competitive	46	3.16	1.013
Delegator	46	3.32	1.014
Charismatic	46	3.22	.995
Aeronautical Information Management Officer			
Factors (Leader behaviour items)	N	Mean	Std. Deviation
Focused	14	3.30	1.018
Supportive	14	3.15	1.080
Developer	14	2.84	.893
Advisor	14	3.20	.911
Competitive	14	3.08	1.036
Delegator	14	3.15	.905
Charismatic	14	3.07	1.031

Compiled by the researcher

Information presented above illustrates represented factors (leader behaviours). This analysis took account of data structured in terms of negligible leader behaviour items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups separately). This description of the method of analysis is clear and complete, with reference to these factors (leader behaviours). Account has been taken of a clear grouping of these factors for each group. From a statistical perspective it was concluded that Focused (C40, C76, C91, C79, C89 & C75), Supportive (C94, C8, C17, C23, C22, C50, C92, C56, C24, C80, C44, C12, C48, C59, C20, C55 & C5), Developer (C1, C6, C41, C62, C29, C57, C51, C34, C16, C49 & C33), Advisor (C67, C66, C42, C64, C38, C36, C68, C37 & C70), Competitive (C54, C53, C58, C72 & C52), Delegator (C25, C93, C7, C30, C4 & C28) and Charismatic (C18, C19 & C73) factors (and associated specific behaviour elements) were noteworthy in the case of Air Traffic Control Officers. From a statistical perspective it was concluded that Focused (C77, C60, C90, C86, C76, C65, C78, C74, C91, C89, C75 & C79), Supportive (C46, C12, C47, C48, C92, C94, C23, C11, C71, C22, C44, C56, C59, C24, C55, C20, C17, C80 & C5), Developer (C88, C1, C62, C33, C41, C29, C6, C34, C49, C16, C57 & C51), Advisor (C38, C36, C43, C66, C64, C42, C63, C37, C82, C67, C68 & C70), Competitive (C81, C69, C54, C72, C53 & C52), Delegator (C7, C25, C35, C93, C4, C32, C30 & C28) and Charismatic (C21, C19, C18 & C73) factors (and associated specific behaviour elements) were noteworthy in the case of Air Traffic Service Officers. From a statistical perspective it was concluded that Focused (C78, C65, C90, C79, C77, C74, C60, C76, C91 & C75), Supportive (C46, C22, C20, C84, C80, C50, C48, C24, C59, C5, C56, C94, C44, C92 & C55), Developer (C1, C34, C51, C16, C33, C41, C29, C62, C49 & C57), Advisor (C43, C42, C36, C82, C64, C70, C67, C66, C63, C68 & C37), Competitive (C81, C61, C72, C54, C53, C58 & C52), Delegator (C93, C32, C35, C7, C4 & C28) and Charismatic (C19, C73 & C18) factors (and associated specific behaviour elements) were noteworthy in the case of Aeronautical Information Management Officers. Refer to Appendix H and Appendix I.

From the leader behaviour items identified in the table above it was found that common leader behaviour items were identified by the three vocational groups (Table 5.18). A mean of less than 3,50 was applied in order to regard these common leader behaviour items to be classified as negligible. These common leader behaviour items are presented in the table below (Table 5.19). It was also noted that all these leader behaviour items (Table 5.19) were also part of the common behaviour items that were identified by the three vocational groups collectively (as per Table 5.17).

Table 5.19. Common leader behaviour items considered negligible

Leader behaviours	ATCO	ATSO	AIMO
C93 Uses resources effectively	✓	✓	✓
C94 Willingly supports employees	✓	✓	✓
C76 Sees opportunities	✓	✓	✓
C91 Acts in a timely manner	✓	✓	✓
C7 Allocates resources	✓	✓	✓
C67 Provides advice to employees	✓	✓	✓
C66 Provides the necessary resources for the team to succeed	✓	✓	✓
C1 Acknowledges achievement/effort	✓	✓	✓
C22 Is cooperative	✓	✓	✓
C42 Gathers all information	✓	✓	✓
C79 Shares the vision	✓	✓	✓
C64 Acts proactively	✓	✓	✓
C4 Addresses team members' issues/problems	✓	✓	✓
C54 Keeps a competitive edge	✓	✓	✓
C75 Seeks to understand	✓	✓	✓
C92 Is trusting	✓	✓	✓
C18 Challenges others in a constructive manner	✓	✓	✓
C56 Lends a helping hand/voice	✓	✓	✓
C24 Creates a comfortable working atmosphere	✓	✓	✓
C80 Shows genuine concern	✓	✓	✓
C44 Gives/solicits feedback	✓	✓	✓
C48 Is humble/modest	✓	✓	✓
C41 Fosters/promotes people growth	✓	✓	✓
C62 Positions individuals for success	✓	✓	✓
C36 Evaluates all options	✓	✓	✓
C19 Acts in a charismatic/charming manner	✓	✓	✓
C29 Develops others	✓	✓	✓
C59 Remains open-minded	✓	✓	✓
C68 Recognises talent	✓	✓	✓
C53 Is creative/innovative	✓	✓	✓
C20 Communicates openly	✓	✓	✓
C57 Motivates others	✓	✓	✓

C37 Evaluates talent	✓	✓	✓
C28 Determines people's needs	✓	✓	✓
C55 Learns about others	✓	✓	✓
C51 Inspires others	✓	✓	✓
C34 Energises others	✓	✓	✓
C73 Serves as a role model	✓	✓	✓
C70 Removes barriers	✓	✓	✓
C16 Builds leaders	✓	✓	✓
C49 Improves the morale of employees	✓	✓	✓
C33 Empowers others	✓	✓	✓
C72 Is a risk-taker	✓	✓	✓
C5 Admits mistakes	✓	✓	✓
C52 Is involved in community initiatives	✓	✓	✓

Compiled by the researcher

The common leader behaviour items presented in Table 5.19 provided insight into behaviour items only. From a qualitative analysis perspective these common leader behaviour items were considered to some extent to be similar to narrative codes and key descriptive terms (with reference to the individual and focus group interviews) derived from noted and reported events and behaviours (with reference to the individual and focus group interview field notes). The researcher also required insight into the intrafactor distribution (Table 5.20). Mentioned information indicated which items within each factor (only viewed collectively) were rated and considered negligible. From a qualitative analysis perspective these common leader behaviour factor items were considered to some extent to be similar to subcategories (with reference to the individual and focus group interviews) and derived codes (with reference to the individual and focus group interview field notes).

Table 5.20. Leader behaviour factors that were rated negligible (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined)

ATCO, AIMO and ATSO combined			
Factor	N	Mean	Std. Deviation
Focused	145	3.41	.917
Supportive	145	3.29	1.004
Developer	145	3.19	.998
Advisor	145	3.33	1.014
Competitive	145	3.17	.950
Delegator	145	3.37	.912
Charismatic	145	3.21	.995

Compiled by the researcher

Information presented above illustrates that all factors (leader behaviours) were represented. This analysis took account of data structured in terms of leader behaviour factors that were rated negligible (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined). This description of the method of analysis is clear and complete, with reference to these factors (leader behaviours). Account has been taken of a clear grouping of these factors. From a statistical perspective it was concluded that Focused (C86, C65, C74, C76, C91, C89, C79 & C75), Supportive (C71, C23, C50, C22, C12, C94, C17, C48, C92, C24, C56, C44, C20, C59, C80, C55 & C5), Developer (C1, C6, C41, C62, C29, C34, C33, C51, C57, C16 & C49), Advisor (C63, C38, C82, C42, C64, C66, C36, C67, C37, C68 & C70), Competitive (C69, C54, C58, C53, C72 & C52), Delegator (C35, C7, C93, C32, C4, C30 & C28) and Charismatic (C19, C18 & C73) factors (and associated specific behaviour elements) were noteworthy. Refer to Appendix H and Appendix I.

The intention and reason for use of the Leader Trait and Behaviour Questionnaire was to collect and analyse quantitative data in order to determine how followers (based on their experiences) rate leadership behaviour qualities within the Air Traffic and Navigation Services Company. Of specific interest was to note inspirational and discouraging leadership styles. Quantitative data collected, analysed and presented were found to be of importance in pursuit of this intention. The quantitative results illustrated the presence of

specific operational leader traits and behaviours within the Air Traffic and Navigation Services Company. Collected and analysed leader trait and behaviour data suggested that certain trait and behaviour items could be classified in terms of being noteworthy (a strong presence) or negligible (a weaker presence). This statement was also found to be true when considering leader trait and behaviour factors. Furthermore similarities amongst the three vocational groups were evident in terms of leader traits and behaviours. The quantitative results not only highlighted the positive leader actions and experiences. They also identified areas where improvements were required. These results were therefore considered vital during the interpretive phase of this study.

5.3.6. Statistical analysis of the Leader Trait and Behaviour Questionnaire

The researcher used factor analysis to identify scale items that could be refined or reduced to inform coherent subscales. Final statistics for each leader trait and behaviour factor accompanied by a communalities table, a total variance explained table and a factor matrix are presented in Appendix J. Evidence of coefficients greater than 0,30 were noted. Two statistical measures were generated to help assess the factorability of the data. Bartlett's test of sphericity and the Kaiser-Meyer-Olkin measure of sampling adequacy was considered. Bartlett's test of sphericity had to be significant ($p \leq 0,05$) for the factor analysis to be appropriate (presented in Appendix J). It was noted that the Kaiser-Meyer-Olkin index ranges from 0 to 1, with 0,6 suggested as the minimum value for a good factor analysis (presented in Appendix J).

The researcher also undertook to verify reliability of the Leader Trait and Behaviour Questionnaire, thereby confirming the consistency of measurement. The Leader Trait and Behaviour Questionnaire was used to delineate leadership behaviour qualities in terms of significance with reference to leadership behaviour qualities that inspire followership and leadership behaviour qualities that discourage followership (as per general focus research questions and associated research objectives). Mentioned action was thus required to ensure the integrity of the questionnaire for the purposes expressed in the research questions and objectives.

The researcher was also committed to determine whether differences between groups existed. In this regard a parametric test was considered for interval-scaled data with a normal distribution of scores. In addition, a nonparametric test was used for data not distributed normally. In this regard McMillan and Schumacher (2001: 383) suggest that the researcher should consider using a nonparametric test corresponding to the parametric test.

A parametric statistical test is one that makes assumptions about the parameters (defining properties) of the population distribution(s) from which one's data are drawn, while a non-parametric test is one that makes no such assumptions. Parametric statistical procedures rely on assumptions about the shape of the distribution (assuming a normal distribution) in the underlying population and about the form or parameters (the means and standard deviations) of the assumed distribution. Nonparametric statistical procedures rely on no or few assumptions about the shape or parameters of the population distribution from which the sample was drawn. Research questions in mixed methods studies are vitally important because they, in large part, dictate the type of research design used, the sample size and sampling scheme employed and the type of instruments administered as well as the data analysis techniques. In this research project a need was identified to also compare means between three or more distinct/independent groups. The parametric procedure selected was an analysis of variance and the nonparametric procedure was the Kruskal-Wallis test.

The researcher understood that nonparametric procedures generally have less power for the same sample size than the corresponding parametric procedure if the data truly are normal. Therefore, interpretation of nonparametric procedures can also be more difficult than for parametric procedures. The researcher acknowledged that in certain situations parametric procedures can give a misleading result and/or assumption of normality associated with a parametric test may not always be reasonable. In such cases a nonparametric procedure would be more appropriate. The researcher also accepted that nonparametric procedures are useful in many cases and necessary in some, but they are not a perfect solution. Also, in this study the parametric assumption of normality was particularly worrisome with regard to the small sample sizes. A nonparametric test offered a good option for these data.

5.3.6.1. Factor analysis decisions

In determining the research objectives, the researcher recognised a need to explore (using primarily inductive methods to explore a phenomenon) and to describe the antecedents and nature of a phenomenon. The research objectives required from the researcher to discover current views held by followers with regard to leadership behaviour qualities within the Air Traffic and Navigation Services Company. Identifying and exploring follower views that are synonymous with inspirational and discouraging leadership behaviours relied upon an analysis of factors derived from an analysis of questionnaire responses from followers regarding leadership behaviours. The qualitative elements inferred, required an investigative focus to describe, rather than only relate variables or compare groups. The quantitative elements inferred, required a descriptive approach to quantify responses more aspects.

Factor analysis as a statistical method was used to describe variability among observed variables in terms of a potentially lower number of unobserved variables called factors. Factor analysis assisted with explaining the rationale for mixing quantitative and qualitative approaches and subsequent findings. It supported efforts to identify interrelationships among items and group items that were part of unified concepts. The purpose or application of factor analysis as applicable to this study was to further assist with data reduction and exploring the theoretical structure.

The requirement of unidimensionality embodied the notion that it is best to measure one attribute at a time (Sick, 2010: 23). Clear unidimensional variables aid the formulation of conclusions and make decisions free of confounding interpretations (Sick, 2010: 23). Trait and Behaviour factor tables served as reference and principal-axis factoring was applied. In terms of the trait factors it was found that item B40 (Practical Factor – “a micro-manager”) showed a limited contribution to the scale, but it was decided to include mentioned item. Within the Cooperative Factor (Trait) it was found that participants observed two factors that could be termed “demeanour” and “trust”. In this case cross-loading was observed when applying a rotated factor matrix. In addition a further oblimin rotation and pattern matrix resulted in a clean structure. High correlations were found in terms of the factor correlation matrix. One factor was forced and it was found that one factor resulted. In this case the fit of the data should be noted; described as “residuals are computed between observed and reproduced correlations; there were 24 (53.0%) non-redundant residuals with absolute values greater than 0,05”. It was thus decided to note that although “demeanour” and “trust” could possibly be considered as being two factors, it was also decided – to use one factor, being the Cooperative Factor (Trait).

Within the Assertive Factor (Trait) one factor was forced due to the low commonalities found with reference to trait items B12 (Competitive), B41 (Opportunistic) and B50 (Poise). It was considered that removing these items would enable a higher percentage of variance. However containing these items led to 26 (39,0%) non-redundant residuals with absolute values greater than 0.05 (residuals are computed between observed and reproduced correlations). It was decided to include trait items B12 (Competitive), B41 (Opportunistic) and B50 (Poise) because support for this decision could also be established in terms of the reliability analysis. Within the Analytical Factor (Trait) it was decided to include items B4 (Analytical), B8 (Broad skills) and B14 (Concentrated). However item B13 (Complex-thinker) was omitted due to its low corrected item-to-total correlation as described in the reliability analysis. Within the Competitive Factor (Behaviour) items C58 (Is not afraid of failure) and

C72 (Is a risk-taker) was omitted. It was assumed by the researcher that participant ratings may have been influenced by a vocational need to avoid workplace failures and a need to continuously reduce risks. Due to the probability of possible confusion it was decided to exclude mentioned items.

Within the Delegator Factor (Behaviour) item C26 (Acts decisively) was included, considering that when one variable was forced (because they were highly correlated) sufficient shared variance of 54,104% could be explained. Two factors emerged, presented as "Delegator" and "Less democratic" (with reference to C9, C10 and C39). Moreover it was noted that there were 33 (36,0%) non-redundant residuals with absolute values greater than 0,05. Trait item B13 (Complex-thinker) displayed a low corrected item-to-total correlation. The researcher had the option to remove B13 although the mean inter-item correlation was considered high enough (0,342) for inclusion. The researcher decided to omit trait item B13.

The use of factor analysis was motivated as a useful tool for investigating variable relationships for complex concepts and it allowed the researcher to investigate concepts that are not easily measured directly by collapsing a large number of variables into a few interpretable underlying factors. Mentioned also aided participant enrichment (mixing of quantitative and qualitative techniques for the rationale of optimising the sample), instrument fidelity (maximising the appropriateness and/or utility of the instruments used in the study), treatment integrity (mixing quantitative and qualitative techniques in order to assess the fidelity of influences) and significance enhancement (mixing quantitative and qualitative techniques in order to maximise the researcher's interpretations of data). With reference to data reduction smaller sets of summary variables were explored. In terms of exploring theoretical structure the underlying structure of the phenomena could be explored and tested using factor analysis. Appendix J presents factor analysis statistics that include eigenvalues and total variances. Eigenvalues are a special set of scalars associated with a linear system of equations. The eigenvalues is a measure of the data variance explained by each of the new coordinate axis. In the case of this study eigenvalues were reported in factor analyses. They were calculated and used in deciding how many factors to extract in the overall factor analysis. From the researcher's perspective, it was noted that only variables with eigenvalues of 1.00 or higher are traditionally considered worth analysing. In the case of this study they were used to reduce the dimension of large data sets by selecting only a few modes. A factor with an eigenvalue of 1 accounted for as much variance as a single variable, and the logic is that only factors that explain at least the same amount of variance as a single variable was worth keeping.

5.3.6.2. Internal consistency

The researcher had to provide evidence that the selected scales were all measuring the same underlying construct. A need was thus identified to determine whether the scales were reliable and to establish the internal consistency of the scale. McMillan and Schumacher (2001: 246) state that internal consistency is the most common type of reliability since it can be estimated from giving one form of a test once.

The Cronbach alpha is the most appropriate type of reliability for questionnaires in which there is a range of possible answers for each item (McMillan & Schumacher, 2001: 247). Cronbach's alpha is also one of the most commonly used indicators of internal consistency. The Cronbach alpha was considered appropriate in this case because it assumes equivalence of all items and is used for items that are not scored right or wrong (McMillan & Schumacher, 2001: 247). Ideally the Cronbach alpha of a scale should be above 0,7 (Santos, 1999, McMillan & Schumacher, 2001: 248 and Tavakol & Dennick, 2011). The reliability statistics are presented in Table 5.21.

Table 5.21. Reliability statistics for the Leader Trait and Behaviour Questionnaire

Trait	Case processing summary				Reliability statistics		
Dedicated	Cases	Valid	N	%	Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
		Excluded	145	100.0			
	Total	0	0.0				
			145	100.0	.960	.961	17

Trait	Case processing summary				Reliability statistics		
Practical	Cases	Valid	N	%	Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
		Excluded	145	100.0			
	Total	0	0.0				
			145	100.0	.916	.918	12

Trait	Case processing summary				Reliability statistics		
Cooperative	Cases	Valid	N	%	Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
		Excluded	145	100.0			
		Total	0	0.0			
			145	100.0	.925	.924	10

Trait	Case processing summary				Reliability statistics		
Assertive	Cases	Valid	N	%	Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
		Excluded	145	100.0			
		Total	0	0.0			
			145	100.0	.906	.906	12

Trait	Case processing summary				Reliability statistics		
Personable	Cases	Valid	N	%	Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
		Excluded	145	100.0			
		Total	0	0.0			
			145	100.0	.894	.895	8

Trait	Case processing summary				Reliability statistics		
Analytical	Cases	Valid	N	%	Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
		Excluded	144	99.3			
		Total	1	.7			
			145	100.0	.669	.675	4
	Case processing summary				Reliability statistics		
	Cases	Valid	N	%	Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
		Excluded	145	100.0			
		Total	0	0.0			
			145	100.0	.771	.771	3

Note: Within the Analytical Factor (Trait) it was decided to include items B4 (Analytical), B8 (Broad skills) and B14 (Concentrated). However item B13 (Complex-thinker) was omitted due to its low corrected item-to-total correlation as described in the reliability analysis.

Behaviour	Case processing summary				Reliability statistics		
Focused	Cases	Valid	N	%	Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
		Excluded	144	99.3			
		Total	1	.7			
			145	100.0	.965	.966	17

Behaviour	Case processing summary				Reliability statistics		
Supportive	Cases	Valid	N	%	Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
		Excluded	145	100.0			
		Total	0	0.0			
			145	100.0	.974	.974	23

Behaviour	Case processing summary				Reliability statistics		
Developer	Cases	Valid	N	%	Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
		Excluded	145	100.0			
		Total	0	0.0			
			145	100.0	.956	.956	12

Behaviour	Case processing summary				Reliability statistics		
Advisor	Cases	Valid	N	%	Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
		Excluded	145	100.0			
		Total	0	0.0			
			145	100.0	.955	.955	12

Behaviour	Case processing summary				Reliability statistics		
Competitive	Cases	Valid	N	%	Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
		Excluded	145	100.0			
		Total	0	0.0			
			145	100.0	.875	.875	9

Behaviour	Case processing summary				Reliability statistics		
Delegator	Cases	Valid	N	%	Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
		Excluded	145	100.0			
		Total	0	0.0			
			145	100.0	.945	.945	15

Behaviour	Case processing summary				Reliability statistics		
Charismatic	Cases	Valid	N	%	Cronbach's Alpha	Cronbach's Alpha Based on Standardised Items	N of Items
		Excluded	145	100.0			
		Total	0	0.0			
			145	100.0	.874	.874	6

Compiled by the researcher

It may be concluded that the Leader Trait and Behaviour Questionnaire has good internal consistency, with Cronbach alpha coefficients reported above 0,07.

5.3.6.3. Exploring differences between the groups

A need was identified to determine whether the group scores actually differ. In this regard the requirement was to use a parametric test (considering that interval scaled data were available) to determine whether there was a statistical significant difference between the three groups. A one-way analysis of variance (ANOVA) was required because it provided for an indication of significant difference between the population's means. ANOVA allowed the researcher to test the differences between all the groups and to make accurate probability statements. The one-way analyses of variance are presented in Table 5.22.

Table 5.22. One-way analyses of variance

Leader trait: Dedicated					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.568	2	.284	.510	.602
Within Groups	79.012	142	.556		
Total	79.580	144			

Leader trait: Practical					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.009	2	.005	.010	.990
Within Groups	65.309	142	.460		
Total	65.318	144			

Leader trait: Cooperative					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.281	2	.141	.244	.784
Within Groups	81.785	142	.576		
Total	82.067	144			

Leader trait: Assertive					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.216	2	.108	.268	.765
Within Groups	57.326	142	.404		
Total	57.543	144			

Leader trait: Personable					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.079	2	.040	.076	.926
Within Groups	73.400	142	.517		
Total	73.479	144			

Leader trait: Analytical					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.216	2	.108	.196	.822
Within Groups	78.029	142	.550		
Total	78.245	144			

Leader behaviour: Focused					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.561	2	.281	.522	.594
Within Groups	76.284	142	.537		
Total	76.846	144			

Leader behaviour: Supportive					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.421	2	.211	.329	.720
Within Groups	90.890	142	.640		
Total	91.312	144			

Leader behaviour: Developer					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.022	2	.511	.768	.466
Within Groups	94.416	142	.665		
Total	95.438	144			

Leader behaviour: Advisor					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.537	2	.269	.464	.630
Within Groups	82.212	142	.579		
Total	82.750	144			

Leader behaviour: Competitive					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.766	2	.383	.732	.483
Within Groups	74.372	142	.524		
Total	75.138	144			

Leader behaviour: Delegator					
Sum of Squares		df	Mean Square	F	Sig.
Between Groups	.170	2	.085	.190	.827
Within Groups	63.606	142	.448		
Total	63.777	144			

Leader behaviour: Charismatic					
Sum of Squares		df	Mean Square	F	Sig.
Between Groups	.332	2	.166	.302	.740
Within Groups	78.078	142	.550		
Total	78.410	144			

Compiled by the researcher

The Kruskal-Wallis is the nonparametric alternative to a one-way between-groups analysis of variance. Scores were converted to ranks and the mean ranks for each group were compared. The information presented is the Chi-square value, the degrees of freedom (*df*) and the significance level (presented as *Asymp. Sig.*). The Kruskal-Wallis test results are presented in Table 5.23.

Table 5.23. Kruskal-Wallis test results

Leader trait: Dedicated		
Vocational group	N	Mean Rank
Air Traffic Services Officers (ATSO)	46	68.60
Aeronautical Information Management Officer (AIMO)	14	74.64
Air Traffic Control Officers (ATCO)	85	75.11
Total	145	
Leader trait: Dedicated		
Chi-Square		.742
df		2
Asymp. Sig.		.690

Leader trait: Practical		
Vocational group	N	Mean Rank
Air Traffic Services Officers (ATSO)	46	73.64
Aeronautical Information Management Officer (AIMO)	14	76.96
Air Traffic Control Officers (ATCO)	85	72.00
Total	145	
Leader trait: Practical		
Chi-Square		.184
df		2
Asymp. Sig.		.912

Leader trait: Cooperative		
Vocational group	N	Mean Rank
Air Traffic Services Officers (ATSO)	46	70.07
Aeronautical Information Management Officer (AIMO)	14	73.89
Air Traffic Control Officers (ATCO)	85	74.44
Total	145	
Leader trait: Cooperative		
Chi-Square		.332
df		2
Asymp. Sig.		.847

Leader trait: Assertive		
Vocational group	N	Mean Rank
Air Traffic Services Officers (ATSO)	46	72.76
Aeronautical Information Management Officer (AIMO)	14	68.00
Air Traffic Control Officers (ATCO)	85	73.95
Total	145	
Leader trait: Assertive		
Chi-Square		.244
df		2
Asymp. Sig.		.885

Leader trait: Personable		
Vocational group	N	Mean Rank
Air Traffic Services Officers (ATSO)	46	72.29
Aeronautical Information Management Officer (AIMO)	14	77.57
Air Traffic Control Officers (ATCO)	85	72.63
Total	145	
Leader trait: Personable		
Chi-Square		.186
df		2
Asymp. Sig.		.911

Leader trait: Analytical		
Vocational group	N	Mean Rank
Air Traffic Services Officers (ATSO)	46	71.04
Aeronautical Information Management Officer (AIMO)	14	75.71
Air Traffic Control Officers (ATCO)	85	73.61
Total	145	
Leader trait: Analytical		
Chi-Square		.180
df		2
Asymp. Sig.		.914

Leader behaviour: Focused		
Vocational group	N	Mean Rank
Air Traffic Services Officers (ATSO)	46	69.82
Aeronautical Information Management Officer (AIMO)	14	68.50
Air Traffic Control Officers (ATCO)	85	75.46
Total	145	
Leader behaviour: Focused		
Chi-Square		.719
df		2
Asymp. Sig.		.698

Leader behaviour: Supportive		
Vocational group	N	Mean Rank
Air Traffic Services Officers (ATSO)	46	70.88
Aeronautical Information Management Officer (AIMO)	14	70.11
Air Traffic Control Officers (ATCO)	85	74.62
Total	145	
Leader behaviour: Supportive		
Chi-Square		.311
df		2
Asymp. Sig.		.856

Leader behaviour: Developer		
Vocational group	N	Mean Rank
Air Traffic Services Officers (ATSO)	46	73.03
Aeronautical Information Management Officer (AIMO)	14	59.93
Air Traffic Control Officers (ATCO)	85	75.14
Total	145	
Leader behaviour: Developer		
Chi-Square		1.579
df		2
Asymp. Sig.		.454

Leader behaviour: Advisor		
Vocational group	N	Mean Rank
Air Traffic Services Officers (ATSO)	46	71.85
Aeronautical Information Management Officer (AIMO)	14	64.00
Air Traffic Control Officers (ATCO)	85	75.11
Total	145	
Leader behaviour: Advisor		
Chi-Square		.893
df		2
Asymp. Sig.		.640

Leader behaviour: Competitive		
Vocational group	N	Mean Rank
Air Traffic Services Officers (ATSO)	46	70.64
Aeronautical Information Management Officer (AIMO)	14	61.89
Air Traffic Control Officers (ATCO)	85	76.11
Total	145	
Leader behaviour: Competitive		
Chi-Square		1.596
df		2
Asymp. Sig.		.450

Leader behaviour: Delegator		
Vocational group	N	Mean Rank
Air Traffic Services Officers (ATSO)	46	71.02
Aeronautical Information Management Officer (AIMO)	14	72.75
Air Traffic Control Officers (ATCO)	85	74.11
Total	145	
Leader behaviour: Delegator		
Chi-Square		.162
df		2
Asymp. Sig.		.922

Leader behaviour: Charismatic		
Vocational group	N	Mean Rank
Air Traffic Services Officers (ATSO)	46	70.60
Aeronautical Information Management Officer (AIMO)	14	70.46
Air Traffic Control Officers (ATCO)	85	74.72
Total	145	
Leader behaviour: Charismatic		
Chi-Square		.345
df		2
Asymp. Sig.		.841

Compiled by the researcher

No conclusive evidence of significant difference between the groups could be claimed because of the variability of data. No significant differences ($p \leq 0,05$) between the three

vocational groups (Air Traffic Control Officers, Air Traffic Service Officers and Aeronautical Information Management Officers) were thus noted.

5.4. Qualitative results – individual interviews

It was envisaged that during the qualitative data collection period the researcher would be able to gain a deeper understanding of reflective practices employed by participants resulting in the emergence of perceptions and views held by participants. Individual interviews, focus group interviews and field notes were employed by the researcher in this regard. Data collected were context-specific, emergent, allowed for multiple perspectives and focused on follower experiences and expectations of leadership behaviours. The qualitative data were found within the participants' personal experiences, self-stories and statements that related to the phenomenon being studied. Assisted interpretations of mentioned phrases produced derived meanings. According to Denzin (1989) and Janesick (2003: 65) interpretations (data analyses) may reveal essential and recurring features that relate to the phenomenon being studied.

Contents were analysed on two levels. The basic level of analysis consisted of a descriptive account of the data. This is what actually was said to the researcher and noted by the researcher with nothing assumed about it. A higher level of analysis was interpretative and it was concerned with what was meant by the response and/or field note, and what was inferred or implied. This approach allowed the researcher to check that post-coding schemata met the criterion of mutual exclusiveness.

5.4.1. Individual interviews

During each individual interview ten questions were posed. Fifteen ATNS employees were interviewed and participant verbal responses and non-verbal responses were summarised as field notes, while recorded participant views and experiences were transcribed. Interviews were conducted at sites (ATNS units) and with employees as depicted in Table 5.24. Associated demographic details are presented in Table 5.25.

Table 5.24. Participants and sites (individual interviews)

ATNS site/unit	Number of employees interviewed
Aviation Training Academy	Nine
O.R. Tambo	Six

Compiled by the researcher

Table 5.25. Demographic information (individual interviews)

Vocational Groups	Gender	Race/ethnicity	Nationality	Years experience with ATNS	Age (years)
Air Traffic Services Officers (ATSO)	3 X Male 2 X Female	3 X Black African 1 X White 1 X Indian	5 X South African	4 X 5 or less 1 X 6-10	5 X 21-30
Aeronautical Information Management Officers (AIMO)	4 X Male 2 X Female	4 X Black African 1 X White 1 X Coloured	6 X South African	4 X 5 or less 2 X 6-10	6 X 21-30
Air Traffic Control Officers (ATCO)	2 X Male 2 X Female	4 X White	4 X South African	2 X 6-10 2 X 11-20	2 X 21-30 2 X 31-40

Compiled by the researcher

Individual interviews included vocational, gender and race/ethnicity representation. These interviews were conducted with qualified and experienced participants. All participants were South Africans. It should also be noted that the fifteen members represented four ATNS units. The researcher was thus able to follow a wide field of focus (more than one site), followed by a narrower field of focus (data collection and analysis presented below) and finally interpretation and member-checking (also presented below). This approach allowed for an ethnographic method that relied on past participant observations. The researcher was thus empowered to explore the nature of leadership phenomena as presented by a small number of cases that involved explicit interpretations of the meaning of human actions.

5.4.2. Information from field notes

The individual interview field notes identified indicators of categories in terms of events and behaviours (these were named and coded). Derived codes (Table 5.26) were compared to find consistencies and differences (consistencies between codes revealed categories). Noted comparisons resulted in emerging categories (Tables 5.28 and 5.30). The researcher found that information collated from field notes was less detailed than the individual interview transcript analyses. Despite a lack of mentioned detail the researcher found corresponding evidence that supported transcript analyses and interpretations.

Table 5.26. Field note codes (individual interviews). Note that the numbers in brackets denote the number of similar observations recorded

Noted and reported leadership events and behaviours	Derived codes
Emphasises relationship value (3) Emphasises a need for social solutions (3) Social emphasis focus (2) Maintains relationships (2)	Desired positive social relations
Motivating and supporting (3) Employee focus (7)	Desired encouragement of followers
Focus on positive emotions (2) Exhibits people skills Calms conflict situations (2)	Desired leader sentiment
Does not socialise	Undesired leader sentiment
Creates follower confusion Shoots down ideas Lacking focus on employee needs (2)	Undesired leader-follower interaction
Understands generation differences	Desired leader empathy
Leader is of an older generation and does not want to change	Undesired leader empathy
Encourages unity (2) Provides for comfortable interaction (2) Emphasises teamwork (4) Becomes part of the team (3) Emphasises team-building and development (2)	Desired collaborative effort

<p>Poor relationship-building Critical of the team (2) Lacking teamwork (2)</p>	<p>Undesired teamwork</p>
<p>Business and work focus (8) Enforces aviation safety (3) Emphasises a need for work solutions (3)</p>	<p>Desired work focus</p>
<p>Not able to see end-in-sight Ignores the dynamics of the environment (2) Too much work focus (2) Does not ensure follow-through (2)</p>	<p>Undesired work relations</p>
<p>Is an executor (2) Strives for ideals Focused on work outcomes/objectives (6) Being solution-focused (3) Provides space and opportunity to employees for end results</p>	<p>Desired work relations</p>
<p>Leads-by-example (6) Positivity displayed (2) Admiration for the leader (2) A can-be leader (2) Inspires and motivates (4)</p>	<p>Desired inspirational leader</p>
<p>Being negative and has a negative focus (2) Not trusting leader's integrity (2) Does not motivate employees enough (3) Judges employees early</p>	<p>Undesired leader motivation efforts</p>
<p>Aims to be the best leader Is helpful (5) A role-model (4) Trustworthy leader Is honest A humble person (2)</p>	<p>Desired leader role-model</p>
<p>Delegates and explains (2) Ensures buy-in (2) Structured in terms of work allocation (4)</p>	<p>Desired leader delegation</p>
<p>Does not delegate (4) Interferes in duties (2) Overbearing nature (4)</p>	<p>Undesired leader delegation</p>

<p>Shares information and knowledge</p> <p>A source of information</p> <p>Instructions are provided (2)</p> <p>Willing to share and learn</p>	<p>Desired effective information sharing</p>
<p>Allows free-flow of ideas/conversations</p>	<p>Desired creative thinking</p>
<p>Does not allow free-flow of ideas</p> <p>Does not depict openness (2)</p>	<p>Undesired information sourcing</p>
<p>A good decision-maker</p> <p>Calm and collective problem-solving skills</p>	<p>Desired decision-making</p>
<p>Blindly makes decisions (2)</p> <p>Is very opinionated (2)</p> <p>Focuses only on own views (2)</p>	<p>Undesired decision-making</p>
<p>Monitors performance (2)</p> <p>Ensures compliance with rules and regulations (3)</p> <p>Random checks (spot-checks) performed</p>	<p>Desired rule following</p>
<p>Stressed-out leader</p> <p>Does not know how to lead (3)</p> <p>Is a selfish leader (3)</p> <p>A rule-by-terror leader (3)</p> <p>Is an aggressive leader</p> <p>A power-hungry leader (2)</p> <p>Is a militaristic leader</p> <p>Is a dictator leader (2)</p> <p>Is a non-humanistic leader (3)</p> <p>A grumpy and moody leader (2)</p> <p>Lacks dedication as a leader</p>	<p>Undesired leadership style</p>
<p>Is a working leader (4)</p> <p>Is a non-autocratic leader (2)</p> <p>Is an involved leader (3)</p>	<p>Desired leadership style</p>
<p>Grows company employees (2)</p> <p>Ensures employee satisfaction (3)</p> <p>Has employees best interest in mind</p>	<p>Desired follower development</p>

Lacking recognition of employee performance (3) Frustrates employees (3) Fear of victimisation No credit/reward received (2) Favouritism evident (2)	Undesired follower development
Stands-up for employees (2) Non-arrogant person (2) Praise is given by leader Leader is fair (2) Leader does not discriminate Leader maintains employees' discipline Leader is compassionate (2)	Desired follower support
Poor discipline enforcement (2) No mutual respect Low morale noted (2) Employee happiness jeopardised (2) Employees must first prove themselves before being accepted	Undesired follower support
Good communicator (4) Creates rapport Ensures correctness of information (2) Is a good listener Is approachable (4)	Desired leader communication
Poor communicator (5) Vague answers to questions provided (2) Incorrect information provided Provides ambiguous instructions Is not approachable (3)	Undesired leader communication

Compiled by the researcher

The researcher noted that both consistencies (leadership behaviour qualities inspire followership) and differences (leadership behaviour qualities discourage followership) emerged. These are presented in Table 5.27. Identified consistencies and differences from the field notes illustrated partial alignment with the duality of this study (with specific reference to stated inspirational and discouraging behaviours).

Table 5.27. Identified consistencies and differences from field notes (individual interviews)

Codes	Identified consistencies	Identified differences
Social relations	Desired positive social relations	
Follower encouragement	Desired encouragement of followers	
Leader sentiment	Desired leader sentiment	Undesired leader sentiment
Leader-follower interaction		Undesired leader-follower interaction
Leader empathy	Desired leader empathy	Undesired leader empathy
Collaboration	Desired collaborative effort	Undesired teamwork
Work focus	Desired work focus	
Work relations	Undesired work relations	Desired work relations
Leader inspiration	Desired inspirational leader	Undesired leader motivation efforts
Leader role model	Desired leader role model	
Leader delegation	Desired leader delegation	Undesired leader delegation
Information sharing	Desired effective information sharing	
Leader decision-making	Desired decision-making	Undesired decision-making
Rule following	Desired rule following	
Leadership style	Undesired leadership style	Desired leadership style
Follower development	Desired follower development	Undesired follower development
Follower support	Desired follower support	Undesired follower support
Leader communication	Desired leader communication	Undesired leader communication

Compiled by the researcher

Table 5.28. Emerging categories from field notes (individual interviews)

Codes	Emerging categories	Designator
Social relations	Leader support	INF1
Follower encouragement	Leader support	INF1
Leader sentiment	Leader support	INF1
Leader-follower interaction	Follower development	INF2
Leader empathy	Leader support	INF1
Collaboration	Follower development	INF2
Work focus	Assertive leadership	INF3
Work relations	Assertive leadership	INF3
Leader inspiration	Transformational leadership	INF4
Leader role model	Transformational leadership	INF4
Leader delegation	Assertive leadership	INF3
Information sharing	Leader support	INF1
Leader decision-making	Assertive leadership	INF3
Rule following	Assertive leadership	INF3
Leadership style	Transformational leadership	INF4
Follower development	Leader support	INF1
Follower support	Leader support	INF1
Leader communication	Leader support	INF1

Compiled by the researcher

The researcher noted/documentated certain non-verbal communication aspects that deserved mention. It should be noted that the researcher, following his observation and internalisation of the available cues, made an attribution about each respondent's non-verbal communication. Proxemic (use of interpersonal space to communicate attitudes), chronemic (use of pacing of speech and length of silence in conversation), kinesic (body movements or postures) and paralinguistic (all variations in volume, pitch and quality of voice) modes were recorded by the researcher. Observation of gesture clusters and congruence of the verbal and non-verbal channels were found to be of essence during efforts to accurately interpret interviews. Observed and noted non-verbal communication phenomena allowed a deeper shared meaning, in which both the interviewer and interviewee increased their awareness of the contextual nature of the verbal responses. Observations and interpretations are presented in Table 5.29. Common characteristics including trustworthy, kind, warm, friendly and pleasant communication were noted, suggesting that a conversational style was present

during the individual interviews. Verbal and non-verbal congruence was noted. Listed and described interpretations suggest that all participants exhibited non-verbal communication features that supported the verbal conversations. This informative conclusion encouraged the researcher to accept that responses provided were trustworthy, sincere and noteworthy.

Table 5.29. Non-verbal results (field notes from individual interviews)

	Observations noted	Respondent(s)
Proxemic modes	No physical touching. Seated at least one seat space apart. Corner position seating arrangement. Compliance with the corporate dress code noted. Physical attractiveness not considered.	All
Chronemic modes	Slower speech rate containing examples, rephrasing and coherency noted.	All
Kinesic modes	Relaxed and open posture. Forward body leaning. Frequent eye contact. No crossing of arms. No mouth covering. Head nodding.	All
Paralinguistic modes	Displaying interest in the research topic. Friendly voice tone. Conversational speech style. Conveying confidence (use of “I” statements). Use of brief pauses during responses.	All

Compiled by the researcher

The researcher found that ATNS employees readily provided their interpretations of the workplace as part of individual interview responses. These interpretations provided the researcher with insight into the motivating factors that were expressed from each participant’s own point of view (presented in Table 5.26 above). Glimpses into individuals’ mental models were thus facilitated. Mentioned insight aided understanding in terms of how followers delineated leadership behaviour qualities in terms of the significance of these behaviour qualities. Emerging characteristics of these mental models showed that participants viewed the workplace as a holistic entity comprising both work and social

environments. People and work perspectives subsequently emerged as leading themes. Participant feelings were expressed and workplace examples were also provided based on own operational experiences. Participants were willing to share information freely and thus exhibited an important and valuable “own follower voice”. Enthusiasm was noted in terms of participant inquisitiveness, mutual trust, passion, openness and excitement observed and noted by the researcher. Participants acknowledged the existence of follower rights, importance of effective relations at work, role-modelling needs (follower and leader-inspired), significance of own beliefs and the necessity for vocational professionalism. The importance of successful leadership was prominent in all discussions. Mentioned derived interpretations (Table 5.26) further motivated and contextualised emerging categories (Table 5.30).

Table 5.30. Emerging categories (field notes from individual interviews)

Emerging categories	Designator
Leader support	INF1
Follower development	INF2
Assertive leadership	INF3
Transformational leadership	INF4

Compiled by the researcher

Analyses of field notes collected during individual interviews provided for the presentation of useful codes and categories. Furthermore contextual understanding could be derived and presented, thereby validating occurrences from a pragmatic perspective. The researcher concluded that insights gained as a result of these analyses may be considered as pertinent and valuable. Field note results from individual interviews were thus drawn on in order to achieve the research objectives.

5.4.3. Individual interview results

Fifteen individual interviews were conducted. Details on the interview sites and demographic details appear above in Tables 5.24 and 5.25. Interview contents were analysed at a basic level of analysis and an interpretative level of analysis. The researcher developed inductive codes and identified the themes, patterns and relationships that were emerging across data inputs.

5.4.4. Transcript reviews

Transcribed descriptive accounts were made available to participants in an effort to obtain approval that interview contents were accurately transcribed, consisted of correct information and were true reflections of dialogue that had taken place. The request for review afforded to participants is presented as Appendix C. Feedback obtained from these transcript reviews suggested that no corrections were required.

5.4.4.1. First/basic level of analysis

Transcribed responses received alpha-numerical values which were allocated in accordance with the ten questions posed during each individual interview. The letter **A** refers to the candidate (for example **A.1.** refers to candidate A and his/her response to question 1). This first step (required for the basic level of analysis) is illustrated in Table 5.31.

Table 5.31. Alpha-numerical codes (individual interviews)

Individual interview question 1		Provide your own definition of leadership.											
Rationale for posing this question		Definition/conceptualisation of leadership as a construct.											
Alpha-numerical codes													
A.1.	B.1.	C.1.	D.1.	E.1.	F.1.	G.1.	H.1.	I.1.	J.1.	K.1.	L.1.	M.1.	
N.1.	O.1.												
Individual interview question 2		Provide your own definition of followership.											
Rationale for posing this question		Definition/conceptualisation of followership as a construct.											
Alpha-numerical codes													
A.2.	B.2.	C.2.	D.2.	E.2.	F.2.	G.2.	H.2.	I.2.	J.2.	K.2.	L.2.	M.2.	
N.2.	O.2.												

Individual interview question 3		Explain the responsibilities of ATNS leaders.											
Rationale for posing this question		Contextualised leadership role and responsibilities.											
Alpha-numerical codes													
A.3.	B.3.	C.3.	D.3.	E.3.	F.3.	G.3.	H.3.	I.3.	J.3.	K.3.	L.3.	M.3.	
N.3.	O.3.												
Individual interview question 4		Describe your relationship with ATNS leadership.											
Rationale for posing this question		Description of the nature of the leader-follower relationship.											
Alpha-numerical codes													
A.4.	B.4.	C.4.	D.4.	E.4.	F.4.	G.4.	H.4.	I.4.	J.4.	K.4.	L.4.	M.4.	
N.4.	O.4.												
Individual interview question 5		What do leaders of <u>effective</u> work teams within ATNS do?											
Rationale for posing this question		Description of behaviour imperatives synonymous with effective leadership from a team perspective.											
Alpha-numerical codes													
A.5.	B.5.	C.5.	D.5.	E.5.	F.5.	G.5.	H.5.	I.5.	J.5.	K.5.	L.5.	M.5.	
N.5.	O.5.												
Individual interview question 6		What do leaders of <u>less</u> effective work teams within ATNS do?											
Rationale for posing this question		Description of behaviour imperatives synonymous with less effective leadership from a team perspective.											
Alpha-numerical codes													
A.6.	B.6.	C.6.	D.6.	E.6.	F.6.	G.6.	H.6.	I.6.	J.6.	K.6.	L.6.	M.6.	
N.6.	O.6.												
Individual interview question 7		What leadership behaviours come to mind when you think of an effective ATNS leader?											
Rationale for posing this question		Description of behaviour imperatives synonymous with effective leadership from a follower mental model perception.											
Alpha-numerical codes													
A.7.	B.7.	C.7.	D.7.	E.7.	F.7.	G.7.	H.7.	I.7.	J.7.	K.7.	L.7.	M.7.	
N.7.	O.7.												

Individual interview question 8		What leadership behaviours come to mind when you think of a <u>less</u> effective ATNS leader?											
Rationale for posing this question		Description of behaviour imperatives synonymous with less effective leadership from a follower mental model perception.											
Alpha-numerical codes													
A.8.	B.8.	C.8.	D.8.	E.8.	F.8.	G.8.	H.8.	I.8.	J.8.	K.8.	L.8.	M.8.	
N.8.	O.8.												
Individual interview question 9		Recall a specific situation within the ATNS workplace that serves as an example of effective leadership.											
Rationale for posing this question		Description of behaviour imperatives synonymous with effective leadership in a specific context.											
Alpha-numerical codes													
A.9.	B.9.	C.9.	D.9.	E.9.	F.9.	G.9.	H.9.	I.9.	J.9.	K.9.	L.9.	M.9.	
N.9.	O.9.												
Individual interview question 10		Recall a specific situation within the ATNS workplace that serves as an example of <u>less</u> effective leadership.											
Rationale for posing this question		Description of behaviour imperatives synonymous with less effective leadership in a specific context.											
Alpha-numerical codes													
A.10.	B.10.	C.10.	D.10.	E.10.	F.10.	G.10.	H.10.	I.10.	J.10.	K.10.	L.10.		
M.10.	N.10.	O.10.											

Compiled by the researcher

5.4.4.2. Interpretive analyses

Transcripts allowed for categorisation and analysis of data. Transcript categories were inductively analysed and grouped as narrative codes derived from actual statements, key descriptive terms, subcategories and categories. Noteworthy narrative codes (Table 5.32) derived from actual statements were the result of a summary of participant statements. The researcher ensured that the original meaning and intention was not consciously distorted. These summaries allowed the researcher to extract important aspects from the data itself and to present these in a logical and condensed manner and order. Narrative codes derived from actual statements formed the point of departure for all key descriptive terms, subcategories and categories. Key descriptive terms were used during transcript analyses and formulation of narrative codes. These efforts allowed the researcher to formulate

collective terms that accurately described narrative codes. Key descriptive terms that emerged are presented in Table 5.33.

Table 5.32. Narrative codes (individual interviews). Note that the numbers in brackets denote the number of similar statements recorded

Alpha-numerical codes	Summary of noteworthy narrative codes derived from actual statements
A.1. – O.1.	<p>“leadership is less about your title and more about impact”; “to realise our potential”; “success which is true leadership”; “somebody you can look up to, you can follow, they inspire, they motivate, they lead (5)”; “a person of character (2)”; “qualities that people around you actually want”; “to be supportive”; “strong willed (2), accepting, motivating, there must be a good sense of communication (4), you must be willing to accept that there are different answers to a question, not always one answer”; “puts their staff first”; “honest way of communicating (4)”; “emphasis is on their people always”; “takes the bull by the horns”; “tells you what to do”; “sets an example (3)”; “like to follow”; “directs people”; “qualities being selfless, working hard (2), confidence, outspoken, intelligent and wise”; “monitor his people’s needs”; “people to copy that sort of behaviour”; “given certain teams to work with”; “collectively the people should be led for a positive output (5)”; “ability to control (2)” and “conduct themselves as leaders”.</p>
A.2. – O.2.	<p>“creating unity in a work environment”; “has the ability to do what task has been given (4)”; “the idea that I am a follower”; “it requires a lot of humility”; “strive to be like someone or strive to do something”; “support their leader (3)”; “take orders and humble themselves”; “people who walk behind the leader”; “complies with the instructions”; “follow the example or the instructions (3)”; “fill the tasks that are assigned to you”; “obeying by the rules or the rules of the leader (2)” and “act to the instructions”.</p>
A.3. – O.3.	<p>“safe and expeditious (5)”; “lead by example (2)”; “sustainable to the future”; “grow the company as well as the employees”; “random checking”; “operationally their responsibilities is to manage the staff”; “need to communicate with their staff”; “disgruntlement between the employees because it’s confusion (2)”; “need to involve the people more”; “make decisions without involving the people”; “need to involve the staff with</p>

	<p>decisions”; “comply with obviously ATNS relations and directives (2)”; “keep everybody in line”; “got to be clear-headed”; “set up specific goals”; “followers have to buy in and follow the leaders (2)”; “follow the rules or to motivate ATNS”; “making sure that the people are happy, staff members are happy and respected”; “everybody follows procedures and basically being in charge (2)”; “identify where shortcomings are”; “to ask for help if they need help”; “give guidance”; “moving the group forward and making them better, helping them achieve the goals”; “leaders they first put company, then it is themselves and then it is the employee (2)”; “your leader is actually not for you but for the company”; “I don’t know what the current responsibilities are according to the organisation”; “provides mental support and advice” and “make sure that everything is done in on time in order (4)”.</p>
A.4. – O.4.	<p>“is a great leader personally (4)”; “a good relationship with you”; “always positive in anything that he does he is always learning from you”; “They give instructions as to what needs to be done (4)”; “but they want to tell you exactly how to do something (3), they don’t trust your integrity to do something and to get to the end goal”; “are too set in their ways (2)”; “somebody that you come and actually speak to”; “willing to create a report and listen to the employees”; “might be an experience difference or an age difference that are not willing to listen, not willing to change (2)”; “very approachable, understanding and supportive”; “haven’t found him to be as approachable, not be as understanding (2)”; “bull by its horns but some cases take things very personally”; “answers would come slightly varied and vague (2)”; “approachable, also able to delegate tasks which I think is highly important”; “I try and avoid them, come across being very aggressive”; “they will see you as being difficult”; “I am frustrated, it doesn’t help getting angry (2)”; “make decisions quick snap decisions without looking at paper or books and it doesn’t work”; “are there to just generally help you”; “they are very friendly”; “call them rule by terror (3)”; “have an open relationship (2)”; “able to communicate better with the leadership”; “relationship with ATNS leadership as per my contract of employment”; “I feel welcome and I haven’t experienced any negative stuff”; “leaders are always around so the relationship is good” and “they are easy to access”.</p>
A.5. – O.5.	<p>“effective work team within ATNS”; “creating an environment where you are openly free to have a conversation”; “you create development skills in that social entertainment aspects”; “they give their team the necessary ... and</p>

	<p>you set a goal there and you keep”; “you want an end result, give them free reign, let them do what they do best”; “and they lead by example”; “they know their staff (2)”; “we do actually like is teamwork”; “create a rapport and you now listen to the employees”; “create an environment where you want to achieve a certain goal (2)”; “each other you listen to each other, you provide your own opinions, give your own arguments (2)”; “involved with the staff again”; “team builds which I think was absolutely brilliant”; “tries to handle conflict at the most”; “they just lead the meetings and I must say I am still to actually find an effective work team”; “yes we are going to do this and then it just dies a slow death (2)”; “no arguments arise and making sure that people are in line with that common goal and a common task (2)”; “everybody is satisfied and happy”; “our leaders are always there when we need them”; “communication of the plan of the goals of the roadmap of the departments”; “being proactive with the staff or the followers would actually make for a very effective team”; “a lot of respect and a lot of broad perspective to the group and make sure that everybody is in the picture”; “showing courage” and “they will always stand by whenever we need their help they will be there to assist us”.</p>
A.6. – O.6.	<p>“you don’t feel open towards that particular person (2)”; “don’t think they motivate us enough (4)”; “hard for me to work with somebody I feel like I don’t trust”; “that I could do something and not get a fired for it, but somebody else can do the same thing and get a fired for it”; “one is liked and the other is not or one got away with it (2)”; “not willing to change, you’re not willing to listen”; “militaristic, that is what’s happening I mean and people feel very kind of violated”; “uncertainty of what is going to happen next (2)”; “don’t give you the authority to make decisions and do stuff”; “they make the wrong decision at the end of the day (3)”; “only wants his own views across who doesn’t want to listen to the views of team members”; “like nothing has happened then they are still within the company for years still being corrupt”; “coming away makes you like lack the I don’t know the faith or you question if it’s a favoritism”; “doesn’t know the team players (3)”; “its leaders that are not hands on and do not really care about the team”; “communication, blind-sided (2)”; “don’t actually have a clear direction of what you are supposed to be doing”; “not too sure what you are supposed to be doing or who you are supposed to be listening to”; “no communication whatsoever (2)”; “no input whatsoever from the employees”; “inability to</p>

	<p>focus on issues that are going to be problematic (2)”; “unhappy teams”; “team feels like they aren’t listened for or they are not taken into account (2)”; “work is not done in the correct way or in the intended way”; “a lack of dedication” and “they don’t listen surely they do not give you what you need”.</p>
<p>A.7. – O.7.</p>	<p>“one of positivity being always positive in anything that you do”; “motivating and supporting your employees (2)”; “they give praise”; “keep their people informed”; “communication channels are open”; “leading by example (4)”; “be trustworthy”; “behave fairly (4)”; “are honest they are outspoken”; “approachable but they can approach you too (3)”; “are structured, well structured rather”; “willing to listen, willing to learn and being opinioned”; “come to them as an equal people”; “support of the staff and involvement of the staff (2)”; “obviously hard worker that I can guarantee”; “will go according to the book”; “sets an example then tell me to do stuff”; “open and honest communication (3)”; “hard-working (3), who is dedicated, who listens to other people, who values the contribution made by other team members”; “don’t like to let one person’s mistakes or actions affect the whole team”; “they will just see what the problem is and approach the person providing help or ask the person if they can help”; “very open, good communicator (4), not overbearing”; “a clear vision”; “very honest and very direct with everybody”; “work like this as a team”; “assertive (5), very respectable and very respecting at the same time”; “, encouraging behaviour, a motivating behaviour, I think also recognising (2)”; “a bit of interaction” and “they just need to give us the ears so that we tell them”.</p>
<p>A.8. – O.8.</p>	<p>“being negative towards the situation of handling a situation”; “not building a good relationship with your employers”; “don’t feel a comfort level to speak”; “not able to trust (3)”; “not being able to speak to or not being able to lead, don’t know how to lead”; “not being able to delegate”; “rule by terror (2)”; “closed door of personality”; “having a overbearing nature (3)”; “not good enough until you prove you are good enough”; “being unapproachable (2)”; “fear of the militaristic thing again”; “he is looking down here to us, it is not like coming down to our level (2)”; “too much work orientated”; “they forget about the people and when they were part of the workforce (2)”; “should I rather say dishonesty”; “think of themselves as OK I am in authority and then you are under authority (4)”; “they don’t listen to what you have to say”; “still goes back to being unhappy (2)”; “they don’t care anymore about what</p>

	<p>they are doing”; “delegate, give people chances you know”; “those leaders that have the favourites obviously they only look at the favourite”; “I would say too strict”; “leading through fear and not actually through respect”; “Dictatorship somebody that you fear more, not a good communicator (3), no clear roadmap or vision of where the department is supposed to be moving”; “not being able to plan, as I said not being able to focus and being just too personal”; “grumpiness, moodiness and taking personal feelings out on the staff (2)”; “not considering staff inputs”; “lack of management skills maybe (2)”; “less motivating leader a leader who is not involved in the team” and “not listening to what the employees has to say that is our problem”.</p>
A.9. – O.9.	<p>“so calm and effective”; “this leader then stood up for her people or for this specific person”; “resolved the issue in question (2)”; “have a good relationship where the roster is fair and everybody works the same”; “come back with what or with the same question and then we reopen so that everyone has time to cool down and he does it as well”; “he will listen to your own problems (3)”; “a very fair and very firm person”; “is very compassionate (2)”; “just cool off and work (3)”; “you could go to her and talk to her, I mean I got my salary thing sorted out with her”; “I actually learned something”; “showed me that somebody else understands”; “the situation was resolved”; “actually took the criticism as well as all the feedback and she actually developed on that”; “is more approachable and a better communicator (4)”; “better roadmap of where the department is going”; “took initiative there in solving that I really thought it was a small issue”; “an effective leader considers the situation at hand and not blame me for anything that goes wrong in that (5)”; “to identify what potential you’ve got in your staff”; “person is being recognised or being rewarded for their hard work” and “to come and assist us”.</p>
A.10. – O.10.	<p>“whole situation and that leads to a very low morale (4)”; “would be the lack of communication”; “managers try to interfere in other people’s duties”; “there was a very militaristic response”; “I felt like I can’t even approach him with anything (3)”; “took a while before action to take place”; “Good ideas get shot down for nothing (3)”; “doesn’t want to give some of the responsibilities to one specific person”; “not making use of the resources underneath you”; “you’ve got no reason to question”; “I said it’s favouritism they have their favourites (4)”; “cannot do anything because we are scared of victimisation”; “got three managers but each one of them tells me a</p>

	different thing”; “said very disturbing words for a senior employee of the company”; “would choose to shout at you on the spot and maybe confront you in front of everybody which is not preferably a nice thing to do (4)”; “our leader is not in a good mood for that day (2)”; “a leader to be screaming at others, staff or at another leader right in public, I don’t think that is good leadership skills” and “a problem of the managers not listening to our complaints or our thoughts or our way of doing things (2)”.
Note that the numbers in brackets denote the number of similar observations recorded.	

Compiled by the researcher

Table 5.33. Key descriptive terms and specific codes (individual interviews)

Key descriptive terms and codes		
A.1. – O.1./1	A.1. – O.1./2	A.1. – O.1./3
Impact directed Moral-fibre Self-actualisation To be successful Successful person Convincing	Inspiring person Idealised influence Motivator People attentive Role-model Influential An exemplarily person	Supportive Accepting multiple answers Follower-focused Energises others Provides for people’s needs Teamwork Collaborative effort
A.1. – O.1./4	A.1. – O.1./5	A.2. – O.2./1
Good communicator Sincere communicator	Strong willed Assertive In charge In control	Aspires to unity Task executor Role acceptance Humility-in-effort Accepted behaviour Supporting efforts Involved in efforts Ensures compliance Rule follower
A.3. – O.3./1	A.3. – O.3./2	A.3. – O.3./3
Task focus Future business stability Business focus Task regulator	An exemplarily person Inspires follower development Coordinator of effort People manager	Effective communicator Ensures clarity Problem solver Collaborative efforts

Goal-focused Rule-focused Target-focused	Democratic decision-maker Ensures discipline Sets direction Motivates job satisfaction In control Assist followers Serves as advisor	
A.3. – O.3./4	A.4. – O.4./1	A.4. – O.4./2
People made uninvolved People disgruntled Autocratic leader People not motivated People not informed	Good leader Relationship builder Positive outlook Inspiring Co-learner Sets direction Caring Approachable Good delegator Helpful Friendly Accessible	Restricts involvement Autocratic Too strict control Inflexible Unapproachable Over-sensitive Aggressive Frustrates employees Poor decision-maker Rule-by-terror
A.4. – O.4./3	A.4. – O.4./4	A.5. – O.5./1
Good listener Good communication	Poor listener Poor communicator	Effective teamwork Empowerment Role-model Personable Team-builder Inspires involvement Conflict manager Respectful
A.5. – O.5./2	A.5. – O.5./3	A.5. – O.5./4
Effective communication Create rapport Stimulate peer discussions Informer	Social focus Engaging	Goal-focused Task-focused Work planner
A.5. – O.5./5	A.6. – O.6./1	A.6. – O.6./2

Lacks energy/effort Poor team leader Reactive action	Inaccessible Team lacks motivation Lacks trust Inconsistent action Favouritism Too militaristic Uncertain prospects Not empowered Poor decision-making Dictator Unfamiliar with team members Uncaring Indecision Poor insight/reactive Work confusion Not dedicated	Unwilling to listen Ineffective communication Confusing replies
A.7. – O.7./1	A.7. – O.7./2	A.7. – O.7./3
Optimistic Passionate Being fair Being honest Being approachable Is an equal Task focus Dedicated Being assertive	Energises others Provides information Provides structure Supports others Task executor Collaborative effort Good teamwork Encourages others	Awards praise Mutual trust Co-learner An exemplary person Visionary Gives recognition
A.7. – O.7./4	A.8. – O.8./1	A.8. – O.8./2
Effective communication Outspoken Provides opinions Good listener Honest communicator Interacts	Inability to handle a situation Poor relations Lacking mutual trust Unfamiliar with leader role Ineffective delegation Rule-by-terror/fear Not personable Overbearing nature Not approachable	Inability to express oneself Poor listener Poor communication

	<p>Too militaristic</p> <p>Too work-orientated</p> <p>Follower isolation</p> <p>Dishonesty</p> <p>Unhappiness at work</p> <p>Uncaring towards work</p> <p>Not delegating</p> <p>Too strict</p> <p>Dictatorial</p> <p>No vision for department</p> <p>Poor planning</p> <p>Does not motivate</p> <p>Lacking teamwork</p>	
A.9. – O.9./1	A.9. – O.9./2	A.9. – O.9./3
<p>Effective at work</p> <p>Work focus</p>	<p>Inspirational</p> <p>Compassionate</p> <p>Conflict manager</p> <p>Idealised influence</p> <p>Approachable</p> <p>Visionary</p> <p>Shows initiative</p> <p>People attentive</p> <p>Gives recognition</p>	<p>Assertive</p> <p>In control</p> <p>Problem solver</p>
A.9. – O.9./4	A.10. – O.10./1	A.10. – O.10./2
<p>Good listener</p>	<p>Low morale present</p> <p>Unnecessary interference</p> <p>Too militaristic</p> <p>Not approachable</p> <p>Not assertive</p> <p>Not appreciating staff inputs</p> <p>Reluctant delegation</p> <p>Favouritism</p> <p>Fear of victimisation</p> <p>Moodiness</p>	<p>Lack of communication</p> <p>Confusing messages</p> <p>Rude verbal interaction</p>

Compiled by the researcher

Subcategories were developed by identifying properties in the key descriptive terms that could be grouped. Key descriptive terms and associated subcategories that occurred are presented in Table 5.34.

Table 5.34. Key descriptive terms and associated subcategories (individual interviews)

Codes (key descriptive terms)	Subcategories	Designator
A.1. – O.1./1 A.9. – O.9./1	Driven leader	INVa
A.1. – O.1./2 A.3. – O.3./2 A.4. – O.4./1 A.5. – O.5./1 A.7. – O.7./3 A.9. – O.9./2	Charismatic leader	INVb
A.1. – O.1./3 A.2. – O.2./1 A.5. – O.5./3 A.7. – O.7./2	Supportive leader	INVc
A.1. – O.1./4 A.3. – O.3./3 A.4. – O.4./3 A.5. – O.5./2 A.7. – O.7./4 A.9. – O.9./4	Practical communicator (leader)	INVd
A.1. – O.1./5 A.3. – O.3./1 A.5. – O.5./4 A.7. – O.7./1 A.9. – O.9./3	Assertive leader	INVe
A.3. – O.3./4 A.4. – O.4./2 A.5. – O.5./5 A.6. – O.6./1 A.8. – O.8./1 A.10. – O.10./1	Unsupportive leader	INVf

A.4. – O.4./4 A.6. – O.6./2 A.8. – O.8./2 A.10. – O.10./2	Poor communication (leader)	INVg
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Compiled by the researcher

Similar subcategories were then identified and categorised. Categories and associated subcategories that emerged are presented in Table 5.35.

Table 5.35. Categories and associated subcategories (individual interviews)

Categories	Category designators	Associated subcategories (designators)
Transformational leader	INV1	INVa; INVb; INVe & INVe
Pragmatic leaders	INV2	INVd
Leader limitations	INV3	INVf & INFg

Compiled by the researcher

5.4.4.3. Member checking

Feedback from participants to review typed transcripts was required. Participants were requested to communicate any required changes to the researcher by a specific agreed-upon date. A covering letter explaining this process is included as Appendix C. Transcripts were made available to all participants via email. In reaction it was noted that grammar, terms and titles used and spelling corrections were received from participants. The integrity of the transcript contents was not questioned or changed with reference to feedback received from participants.

5.4.4.4. External Codifier comments

The External Codifier confirmed the truthfulness of the data analysis phase associated with the research results (Appendix K). In this regard the External Codifier concluded that codes and categories were identified according to scientific principles. Furthermore it was found that tendencies in the data were presented as accurately as possible and based on qualitative analysis principles. Saturation was considered to be present with reference to the number of similar observations recorded. Moreover the key terms illustrated duplication of

reports obtained from participants. Central themes could be identified and these were reinforced by means of transcribed participant reports.

5.5. Qualitative results - focus group interviews

During each focus group interview four questions were posed. Nine ATNS employees were interviewed and participant responses were summarised as field notes, whereas recorded participant views and experiences were transcribed. Interviews were conducted at one ATNS unit and with employees as indicated in Tables 5.36 and 5.37.

Table 5.36. Participants and site (focus group interviews)

ATNS site/unit	Number of employees interviewed
Aviation Training Academy	Nine

Compiled by the researcher

Table 5.37. Demographic information (focus group interviews)

Vocational Groups	Gender	Race/ethnicity	Nationality	Years experience with ATNS	Age (years)
Aeronautical Information Management Officers (AIMO)	3 X Male	3 X Black African	3 X South African	3 X 5 or less	3 X 21-30
Air Traffic Control Officers (ATCO)	2 X Male 4 X Female	2 X Black African 4 X White	6 X South African	3 X 5 or less 2 X 6-10 1 X 11-20	2 X 21-30 3 X 31-40 1 X 41 - 50

Compiled by the researcher

Focus group interviews were conducted with qualified and experienced participants. All participants were South Africans. These interviews did not include all vocational, gender and race/ethnicity possibilities. However, it should also be noted that the nine members represented seven ATNS units. The researcher was thus able to proceed and interpret data

with caution (considering the small sample). The researcher followed a wide field of focus (more than one site), subsequently followed by a narrower field of focus (data collection and analysis presented below) and finally interpretation and member-checking (also presented below). This approach allowed for an ethnographic method that relied on past participant observations that were presented and discussed in a focus group context. The researcher was thus empowered to explore the nature of leadership phenomena as presented by a small number of cases that involved explicit interpretations of the meaning of human actions.

5.5.1. Information from field notes

The field notes identified indicators of categories in terms of events and behaviours (these were named and coded). Derived codes (Table 5.38) were compared to find consistencies and differences (consistencies between codes revealed categories). Noted comparisons resulted in emerging categories (Tables 5.40 and 5.42). The researcher established that information collated from field notes was less detailed than the focus group interview transcript analyses. The researcher did, however, find corresponding evidence that supported transcript analyses and interpretations.

Table 5.38. Field note codes (focus group interviews). Note that the numbers in brackets denote the number of similar observations recorded

Noted and reported leadership events and behaviours	Codes
A role-model (2) Is passionate Sincere	Desired leader role-model
Shows trust Displays confidence (2) Creative and innovative Focuses on follower development Boosts morale	Desired inspirational leader
Motivating and supporting (2) Open-minded Good delegator	Desired encouragement of followers

<p>Concern for followers (2)</p> <p>Sympathy for follower problems (2)</p> <p>A can-do approach</p> <p>Defends followers</p>	<p>Desired leader sentiment</p>
<p>No concern for followers</p> <p>No follower trust</p> <p>Makes futile changes</p> <p>Ignorance</p> <p>Apologetic</p>	<p>Undesired leader sentiment</p>
<p>Lack of learning in the workplace</p> <p>Excessive checking of followers' work</p> <p>Poor delegator (2)</p> <p>Lack of follower empowerment</p> <p>Lack of recognition (2)</p> <p>Lack of leader visibility</p> <p>Inconsistent rule application (2)</p> <p>Exhibits double standards</p> <p>Lacks consultation</p>	<p>Undesired leader-follower interaction</p>
<p>Leader-follower happiness focus</p> <p>Leader goes the extra mile</p> <p>Leader approachable (2)</p> <p>Caring</p>	<p>Desired leader-follower interaction</p>
<p>Money-driven leaders</p> <p>Lacking work passion</p>	<p>Undesired leader motivation efforts</p>
<p>Good listening skills</p> <p>Shares information</p> <p>Speaks with interest and truthfully</p>	<p>Desired leader communication</p>
<p>Promoting rumours (2)</p> <p>Not willing to listen</p> <p>Poor information sharing (2)</p> <p>Evasive (2)</p> <p>Indecisiveness</p>	<p>Undesired leader communication</p>
<p>Task ability evident</p> <p>Experience-based action</p>	<p>Desired work focus</p>

Unable to handle confrontation Shows lack of backbone On the defensive Poor conflict management (2)	Undesired work relations
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Compiled by the researcher

The researcher again noted that both consistencies (leadership behaviour qualities inspire followership) and differences (leadership behaviour qualities discourage followership) emerged. These are presented in Table 5.39. Identified consistencies and differences from the field notes suggested partial alignment with the duality of this study (with specific reference to mentioned inspirational and discouraging behaviours).

Table 5.39. Identified consistencies and differences from field notes (focus group interviews)

Codes	Identified consistencies	Identified differences
Leader role model	Desired leader role-model	
Leader inspiration	Desired inspirational leader	Undesired leader motivation efforts
Follower encouragement	Desired encouragement of followers	
Leader sentiment	Desired leader sentiment	Undesired leader sentiment
Leader-follower interaction	Desired leader-follower interaction	Undesired leader-follower interaction
Leader communication	Desired leader communication	Undesired leader communication
Work focus	Desired work focus	Undesired work relations

Compiled by the researcher

Table 5.40. Emerging categories from field notes (focus group interviews)

Codes	Emerging categories	Designator
Leader role model	Transformational leadership	FGF1
Leader inspiration	Transformational leadership	FGF1
Follower encouragement	Leader support	FGF2
Leader sentiment	Leader support	FGF2
Leader-follower interaction	Follower development	FGF3

Leader communication	Leader support	FGF2
Work focus	Assertive leadership	FGF4

Compiled by the researcher

Burgoon (1991), Palmer and Simmons (1995) and Sundaram and Webster (2000) agree that non-verbal behavioural signals are utilised as a communication vehicle. The researcher noted that individuals consciously and subconsciously integrated non-verbal cues into the focus group conversations, using these cues to convey specific social meanings (as described in the tables below). Analysis in this case corresponds with the individual interview field note practice (as described earlier in this chapter). Observations and interpretations from focus group interviews are presented in Table 5.41. Listed and described interpretations suggest that all participants exhibited non-verbal communication features that supported the verbal conversations. Common characteristics including respect for each other's contributions, listening attentively to the detail presented by each participant, pleasant facial expressions, an eagerness to contribute and overall pleasant communication aspects were noted. These features suggested that a conversational style was present during the individual interviews. This informative conclusion encouraged the researcher to accept that responses provided were trustworthy, sincere and noteworthy.

Table 5.41. Non-verbal results (field notes from focus group interviews)

	Observations noted	Respondent(s)
Proxemic modes	No physical touching. Seating allowed for adequate personal space for each participant. Round-table seating arrangement was accepted. Compliance with the corporate dress code noted. Physical attractiveness not considered.	All
Chronemic modes	Slower speech rate containing examples, re-phrasing and coherency noted. Relating connections to the previous participant's comments were observed. Questioning one another to ensure clarity and/or support was prominent.	All

Kinesic modes	Relaxed and open postures. Hands on the table. Smiling at each other. Forward body leaning. Frequent eye contact. No crossing of arms. No mouth covering. Head nodding.	All
Paralinguistic modes	Displaying interest in the research topic. Friendly voice tone. Conversational speech style. Conveying confidence (use of “I” statements). Use of brief pauses during responses.	All

Compiled by the researcher

The researcher found that ATNS employees eagerly provided their versions of leadership found in the workplace as part of focus interview responses. These inputs stimulated group discussions and provided different perspectives and examples associated with the topic discussed. Consequent interpretations provided the researcher with deeper insight into the motivating factors that were expressed from each focus group’s own point of view. It was of specific value to identify with participant mental models (both individual and collective). Mentioned awareness aided understanding in terms of how followers within an interactive session delineated leadership behaviour qualities in terms of the significance of these behaviour qualities.

Emerging characteristics of these mental models showed that participants viewed the workplace as a holistic entity comprising both work and social environments. However the work environment was emphasised. Desired and undesired leader attributes as well as follower introspection conclusions subsequently emerged as leading themes. Participant views were expressed and these were supported with context-specific occurrences and workplace examples. These were aimed at explaining leader and follower differences and similarities. Participants were eager to share information freely and thus exhibited an important and valuable “own follower voice”. Sharing the information in a non-threatening setting further encouraged an exchange of views. Keeness to participate and a passion for the work performed were noted. Mentioned was evident in terms of participants’ questioning attitudes, acceptance of dependence, professional dedication, openness to contribute and excitement observed and noted by the researcher. Participants acknowledged the existence

of follower rights, importance of effective relations at work, role-modelling needs (follower and leader-inspired), significance of own beliefs and the necessity for vocational professionalism. The importance of successful leadership was prominent in all discussions. Mentioned derived interpretations (Table 5.42) further motivated and contextualised emerging categories (Table 5.40).

Table 5.42. Emerging categories and context-specific motivations (field notes from focus group interviews)

Emerging categories	Designator
Transformational leadership	FGF1
Leader support	FGF2
Follower development	FGF3
Assertive leadership	FGF4

Compiled by the researcher

The researcher accepted that analyses of field notes collected during focus group interviews provided for the presentation of useful codes and categories. Furthermore contextual understanding could be derived and presented, thereby validating occurrences from a pragmatic perspective. The researcher conceded that insights gained as a result of these analyses may be considered (mindful of the possible influence of the sample limitations) as pertinent and valuable. Field note results from focus group interviews were thus cautiously drawn on in order to achieve the research objectives.

5.5.2. Focus group interview results

Three focus group interviews were conducted. Details pertaining to the interview sites and demographic details are provided above in Tables 5.35 and 5.37. Focus group interview contents were analysed on two levels. The basic level of analysis was a descriptive account of the data. This is what was actually said with nothing assumed about it. The higher level of analysis was interpretative. It was concerned with what was meant by the response and what was inferred or implied. The researcher developed codes during the coding of data. These codes were inductive codes, developed by the researcher by directly examining the data. This approach allowed the researcher to identify the themes, patterns and relationships that were emerging across data inputs.

5.5.3. Transcript reviews

Transcribed descriptive accounts were made available to participants in an effort to obtain approval that interview contents were accurately transcribed, consisted of correct information and were true reflections of dialogue that took place. The request for review afforded to participants is presented as Appendix C. Feedback obtained from these transcript reviews suggested that no further content changes were required.

5.5.3.1. First/basic level of analysis

Transcribed responses received alpha-numerical values which were allocated in accordance with the four questions posed during each focus group interview. The letter **A** refers to the focus group (for example **A.1.** refers to focus group A and their response to question 1). This first step (required for the basic level of analysis) is illustrated in Table 5.43.

Table 5.43. Alpha-numerical codes (focus group interviews)

Focus group interview question 1	Explain the differences between leadership and followership within ATNS.		
Rationale for posing this question	Definition/conceptualisation of leadership and followership constructs.		
Alpha-numerical codes			
A.1.	B.1.	C.1.	
Focus group interview question 2	What do leaders of <u>effective</u> work teams within ATNS do?		
Rationale for posing this question	Description of behaviour imperatives synonymous with effective leadership from a team perspective.		
Alpha-numerical codes			
A.2.	B.2.	C.2.	
Focus group interview question 3	What do leaders of <u>less</u> effective work teams within ATNS do?		
Rationale for posing this question	Description of behaviour imperatives synonymous with less effective leadership from a team perspective.		
Alpha-numerical codes			
A.3.	B.3.	C.3.	

Focus group interview question 4	Provide examples of leadership behaviours that come to mind when you think of ATNS leaders?	
Rationale for posing this question	<p>Description of behaviour imperatives synonymous with effective leadership from a follower mental model perception.</p> <p>Description of behaviour imperatives synonymous with less effective leadership from a follower mental model perception.</p> <p>Description of behaviour imperatives synonymous with effective leadership in a specific context.</p> <p>Description of behaviour imperatives synonymous with less effective leadership in a specific context.</p>	
Alpha-numerical codes		
A.4.	B.4.	C.4.

Compiled by the researcher

5.5.3.2. Interpretive analyses

Transcripts allowed for categorisation and analysis of data. Transcript categories were inductively analysed and grouped as narrative codes derived from actual statements, key descriptive terms, subcategories and categories. Noteworthy narrative codes (Table 5.44) derived from actual statements were the result of a summary of participant group statements. The researcher ensured that the original meaning and intention was not consciously distorted. These summaries allowed the researcher to extract important aspects from the data itself and then to present these in a logical and condensed manner and order. Narrative codes derived from actual group statements were the point of departure for all key descriptive terms, subcategories and categories. Key descriptive terms transpired during transcript analyses and formulation of narrative codes. These efforts allowed the researcher to formulate collective terms that accurately described narrative codes. Key-descriptive terms that emerged are presented in Table 5.45.

Table 5.44. Narrative codes (focus group interviews). Note that the numbers in brackets denote the number of similar statements recorded

Alpha-numerical codes	Summary of noteworthy narrative codes derived from actual statements
A.1. – C.1.	<p>“leadership and followership explains two different workforces”; “people who want to excel want to become managers”; “leadership and responsibility within their workplace”; “followers don’t really want to do anything more than just get there do the job and go home (2)”; “they go all out to assist that person to reach certain goals”; “easy to talk to and you share confidential information”; “followership is somebody that would actually follow that look up to that person”; “as you’re role model”; “have trusted that person and have confidence in that person”; “people who motivate you (2)”; “follower is a person who waits for someone to help him or to bail him out”; “leadership is a person who is creative and innovative and he makes sure that everything is perfect (2)”; “try to help them to do everything right”; “leaders ... when it comes to implementation we are a bit lacking”; “you’re just frustrated and you take it out on the guys that need you”; “in some cases too many people to report to”; “lead by example (2)”; “not being assertive in their leadership roles”; “followers do not take themselves very seriously because they don’t know what their future is”; “It is not always voluntary I feel”; “for followers only one way of doing things and there is no other way”; “leadership in our department, it seems as if they’re against their follower (2)”; “they gave the other party the impression that I was wrong”; “leaders bending the rules a bit”; “you know you don’t even question it, you know we knew it was coming so let me just follow”; “most of the time what leadership is saying is not questioned (2)”; “you know there is no engagement”; “leaders won’t tend to attend or try to understand the root cause of the problem” and “is I don’t want to say victimising but say you get punished”.</p>
A.2. – C.2.	<p>“communicate, that’s what I think (2)”; “our major turnaround was when we started communicating”; “we have a communication relationship with our immediate manager”; “they delegate their work to their subordinates it feels it helps them a lot”; “manager plays a huge role in the rest of the group (2)”; “manager work shifts if somebody books off the manager is willing to help out, goes the extra mile”; “the open-door policy where the manager is really</p>

	<p>open-minded”; “listen this is now my problem and the manager is not going to blame you for the problem”; “then everybody understands it”; “they listen (2)”; “and they lead-by example (2)”; “they know their people that they manage as well”; “they physically get to know you”; “you feel special”; “and you feel encouraged because they are making an effort”; “they don’t put themselves on a pedestal”; “they ask they don’t just decide”; “basically listen (2) to their grievances and try and solve the problem”; “an effective manager will act on the grievances of the follower’s timely”; “effective leaders recognise that they are part of the team (2)” and “compliment when compliment is due that’s motivating”.</p>
<p>A.3. – C.3.</p>	<p>“don’t delegate for sure (2)”; “don’t empower their employees or the rest of the group”; “he doesn’t fully focus and I have said this to him many times”; “I felt there is no trust when the leader doesn’t trust you enough and is not confident enough to know that you can actually do the job”; “no communication in a certain level of leadership where it leaves us now, you start wondering and you start listening to rumours”; “if those things are not communicated it kills your morale (2)”; “some leaders just never give any recognition of any sort”; “they don’t come back to you and say let’s just get the facts (2)”; “some of them really need to get a backbone when it comes to confrontation”; “they have got double standards”; “siding, if I can use that word with other parties (2)”; “not feeling backed up”; “you come to work one day then you kind of get attacked”; “they are non-approachable you can’t like state your case (2)”; “they have a closed-door policy basically”; “consistently feeling that you have to justify yourself”; “also bad information sharing, they don’t share information, that is a big problem”; “they don’t have the knowledge, it almost feels they are not qualified (2), not wise enough”; “you kind of feel shocked that your own leader is not knowledgeable”; “not knowledgeable in management”; “not dealing well with conflict, oh yes ... they would rather avoid conflict”; “becoming very defensive”; “like passing the buck, so no accountability”; “managers are more reactive they’re not proactive (2)”; “it will take time to even solve the problem or to even recognise that there is a problem”; “a lack of consultation (2)”; “they lack knowledge in dealing with people”; “they have difficulties in dealing with their employees” and “another one will be this disciplinary, I don’t think they’re consistent”.</p>

A.4. – C.4.	<p>“will talk around that question and put little stories around it and he entertains you for a half an hour about the same question but by the time that they leave he’s given you no answer, no direct answer (2)”; “only have rumours to work on (2)”; “not generalise because we all have different issues and different problems”; “they won’t respond to the email they will just call you so that there won’t be proof that you’ve been communicating”; “every situation we experience they change the rule book”; “there is always good in what they do especially sometimes when you are faced with that unusual situation they will help you out (2)”; “unfortunately there was no response to the email ... there is no effective communication (2)”; “I feel like I was really helped (2)”; “they really did go all out to assist me so I feel like they are human”; “people who are very approachable, who know the system and who are really not afraid of assisting you”; “I have really seen leaders with very, very good leadership skills and manager skills (2)”; “you know what is expected and you know what to expect”; “eliminates the frustration and looking down”; “leaders will help you with your private affairs or matters”; “no information-sharing (2) ... evasive”; “stability, one day it will be this way the next that way”; “you feel unsure as a team player, member”; “they have not tried to fight the fight”; “there are leaders that want change, they are competent (2)”; “they are caring, interested in people and in the job”; “imposing, you have to do this in this way”; “they don’t consult and say OK we have this on the table”; “it’s really sort of demoralising”; “not engaging or shall I say leaders are not engaging with us”; “there is not much consultation (2)”; “there is no structure in place, it goes back to demoralisation, no motivation (2)”; “they always fail us, up there somewhere” and “now we can talk, we are getting along and now I belong somewhere”.</p>
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Note that the numbers in brackets denote the number of similar observations recorded.

Compiled by the researcher

Table 5.45. Key descriptive terms and specific codes (focus group interviews)

Key descriptive terms and codes		
A.1. – C.1./1	A.1. – C.1./2	A.1. – C.1./3
Opportunistic Authority Driven Goal-focused Energetic Focused	Compliant Obedient Unassuming Uncertainty No clear future/vision Forced to follow Deference	Engaging personality Idealised influence Role-model Trustworthy Motivator An exemplary person
A.1. – C.1./4	A.1. – C.1./5	A.1. – C.1./6
Confident	Helpful	Slow implementers Frustrated Team too large Lacks assertiveness Opposes followers Does not support followers Selective rule compliance Autocratic Lack of synergy Ignorant Punishes unfairly
A.2. – C.2./1	A.2. – C.2./2	A.2. – C.2./3
Effective communication Good listener	Effective delegation Teamwork Collaborative effort Helpful Interested in team members Cooperative Problem solver	Engaging personality Personable Fair An exemplary person Is approachable Motivator Acts decisively Inspirational
A.3. – C.3./1		A.3. – C.3./2
Poor delegation Poor empowerment Lacks work focus	Not supportive Not approachable Lacks work knowledge	Ineffective communication Rumouring Absent listener

Overburdened	Lacks management knowledge	Selective information sharing
Not trusting follower	Acts defensive	Lack of employee consultation
Competence/ability	Avoids accountability	
Low morale	Reactive action	
Inadequate recognition	Slow problem-solving	
Poor conflict management	Lacks people focus	
Acts inconsistently	Inconsistent action	
A.4. – C.4./1	A.4. – C.4./2	A.4. – C.4./3
Acts inconsistently	Avoiding the issue/problem	Is approachable
Not approachable	Rumouring	Shows empathy
Inconsistent action	Poor communicator	Inspirational
Creates uncertainty	Inconsistent information sharing	Change agents
Lack of employee support	Poor listener	Acts decisively
Demoralising		
Aloof		
Lack of employee consultation		
Lacking motivation		
A.4. – C.4./4		
Helpful	Cooperative	
Interested in team members	Problem solver	

Compiled by the researcher

Subcategories were developed by identifying properties in the key descriptive terms that could be grouped. Key descriptive terms and associated subcategories that occurred are presented in Table 5.46.

Table 5.46. Key descriptive terms and associated subcategories (focus group interviews)

Codes (key descriptive terms)	Subcategories	Designator
A.1. – C.1./1	Assertive leader	FCGa
A.1. – C.1./2	Passive follower	FCGb
A.1. – C.1./3 A.2. – C.2./3	Charismatic leader	FCGc

A.4. – C.4./3		
A.1. – C.1./4 A.2. – C.2./1	Practical communicator (leader)	FCGd
A.1. – C.1./5 A.2. – C.2./2 A.4. – C.4./4	Supportive leader	FCGe
A.1. – C.1./6 A.3. – C.3./1 A.4. – C.4./1	Unsupportive leader	FCGf
A.3. – C.3./2 A.4. – C.4./2	Poor communication (leader)	FCGg

Compiled by the researcher

Similar subcategories were then identified and categorised. Categories and associated subcategories that emerged are presented in Table 5.47.

Table 5.47. Categories and associated subcategories (focus group interviews)

Categories	Category designators	Associated subcategories (designators)
Transformational leader	FCG1	FCGa; FCGc & FCGe
Pragmatic leader	FCG2	FCGd
Leader limitations	FCG3	FCGf & FCGg
Follower limitations	FCG4	FCGb

Compiled by the researcher

5.5.3.3. Member checking

Feedback from participants to review typed transcripts was required. Participants were requested to communicate any required changes to the researcher by a specific agreed-upon date. A covering letter explaining this process is included as Appendix C. Transcripts were made available to all participants via email. The integrity of the transcript contents was not questioned or changed with reference to feedback received from participants.

5.5.3.4. External Codifier comments

The External Codifier confirmed the truthfulness of the data analysis phase associated with the research results (Appendix K). In this regard the External Codifier concluded that codes and categories were identified based on scientific principles. Furthermore it was found that tendencies in the data were presented as accurately as possible and based on qualitative analysis principles. Saturation was considered to be present (mindful of the limited sample) with reference to the number of similar observations recorded. Moreover the key terms illustrated duplication of reports obtained from participants. Central themes could be identified and these were reinforced by means of transcribed participant reports.

5.6. Mixed methods results

The value of this case study was found in the fact that exploratory and explanatory evidence could be collected from multiple sources by means of different methods. Participants were provided with multiple opportunities to provide insights, explanations and deeper understanding of the complexities of leadership within a specific context. Following a mixed methods approach helped to stress the similarities and differences between particular aspects of leadership. This mixed methods endeavour allowed for quantitative research to inform the qualitative portion of the study. In-depth and detailed data segments resulted, which had to be consolidated in support of the research intent, questions and objectives. An overview and summary of these data set results are presented in Table 5.48. Mentioned conceptualisation informed and motivated triangulation in support of the mixed methods outcome.

Table 5.48. An overview of mixed methods data

Leader Trait and Behaviour Questionnaire	
“Subcategories”	“Categories”
Dedicated Practical Cooperative Assertive Personable Analytical	Leader traits

Focused Supportive Developer Advisor Competitive Delegator Charismatic	Leader behaviours
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Individual interviews			
Interview subcategories	Interview Categories	Field note Categories	Field note codes
Driven leader Charismatic leader Supportive leader Assertive leader	Transformational leader	Transformational leadership	Leader inspiration Leader role model Leadership style
Practical communicator (leader)	Pragmatic leaders		
Unsupportive leader Poor communication (leader)	Leader limitations		
		Leader support	Social relations Follower encouragement Leader sentiment Leader empathy Information sharing Follower development Follower support Leader communication
		Follower development	Leader-follower interaction Collaboration

		Assertive leadership	Work focus Work relations Leader delegation Leader decision-making Rule following
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Focus group interviews			
Interview subcategories	Interview Categories	Field note Categories	Field note codes
Assertive leader Charismatic leader Supportive leader	Transformational leader	Transformational leadership	Leader role model Leader inspiration
Practical communicator (leader)	Pragmatic leader		
Unsupportive leader Poor communication (leader)	Leader limitations		
Passive follower	Follower limitations		
		Leader support	Follower encouragement Leader sentiment Leader communication
		Follower development	Leader-follower interaction
		Assertive leadership	Work focus

Compiled by the researcher

Data were further merged by comparing the results of quantitative and qualitative data sets by means of the triangulation phases. These triangulation phases provided for a data presentation matrix. Triangulation as part of the data analysis activity was performed in order to further structure and understand the data. Essentially an inspection of the inferences and relationships between concepts and constructs was carried out, which identified patterns, trends and themes within specific triangulation phases.

5.7. Triangulation

Common/similar descriptive variables were addressed by means of triangulation. Although the measures were not the same within each instrument, the researcher purposely tried to create comparable items to assure the desired common scopes of data clustering and presentation. Triangulation supported efforts to ensure joint analyses of quantitative and qualitative elements. Use of data and method triangulation allowed the researcher to assess evidence, collected by means of different methods, by comparing it with other kinds of evidence on the same issue. Mentioned analyses required from the researcher to move between induction and deduction through a process of critical inquiry that resulted in conclusions.

Due to the specific nature of the research questions it was expected to find similarities and differences in different sets of data. This meant that both leadership behaviour qualities that inspired followership and leadership behaviour qualities that did not inspire followership would emerge.

Triangulation assisted with establishing data links that eventually created a complete presentation of research results. The purpose of triangulation was to test for consistency rather than to achieve identical results using different data sources or inquiry approaches.

The first phase of data and method triangulation required from the researcher to consider external codifier feedback, member-checking comments, individual interview data and data from individual interview field notes. Individual interviews were conducted with participants that met all the defined sample requirements. All participants were considered to be experts because their responses were based on their prior knowledge, “lived” experiences and examples associated with leadership and followership within the defined context. Strict adherence to detailed methodological requirements and associated techniques was observed during individual interviews. In terms of interview methodology both recorded interviews and documented interview field notes were analysed. These analyses were aimed at presenting all the significant aspects of the case study. Tables 5.26, 5.27, 5.28, 5.29, 5.30, 5.32, 5.33, 5.34 and 5.35 provide evidence of detailed analyses and associated significant aspects.

The external codifier reviewed all evidence recorded, documented, transcribed and analysed. Furthermore all participants were provided with an opportunity to review and

comment on the contents of the interview transcripts. The external codifier and member-checking feedback did not contest the content and analyses of data. It was therefore assumed by the researcher that both parties agreed that the data were correct, consistent, trustworthy and useful. These assumptions were further assessed during the cross-checking of individual interview transcript analyses and individual interview field note analyses. In terms of the individual interview analyses it was found that leadership and followership as phenomena were reflected upon and reported by participants in terms of actual desired and undesired experienced traits, behaviours, occurrences and needs. Evidence in this regard is found in Table 5.33. In terms of the individual interview field note analyses it was also found that leadership and followership as phenomena were reflected upon and reported by participants in terms of actual desired and undesired experienced traits, behaviours, occurrences and needs. Evidence of these possible rival interpretations is found in Table 5.27.

A comparison between identified consistencies and differences from the individual interview field note analyses (Table 5.27) and the individual interview key descriptive terms and specific codes (Table 5.33) illustrates that leader and follower characteristics were detailed. Leader and leadership descriptive experiences (for example leadership style, driven, charismatic, practical and supportive) as well as follower needs and concerns (for example unsupportive, poor communication, follower development and leader-follower interaction) received different descriptions. However consistencies were noted in terms of desired and undesired qualities. These consistencies were also obvious when considering individual interview and individual interview field note derived categories (Tables 5.30 and 5.35). Both categories allowed for a leader focus (transformational leadership, leader support, assertive leadership and pragmatic leaders) and follower focus (follower development and leader limitations). Attention to these two areas of foci illustrated that the most significant aspects of the case study were addressed and analysed.

The second phase of data and method triangulation required the researcher to consider external codifier feedback, member-checking comments, focus group interview data and data from focus group interview field notes. Focus group interviews were conducted with participants that had met the defined sample requirements. Both the researcher and the external codifier emphasised that focus group interviews were only conducted during three sessions. Despite this possible limitation it was noted that all participants were considered to be representative of an expert group because their responses were based on their prior knowledge, "lived" experiences and examples associated with leadership and followership

within the defined context. In this case group feedback provided for interaction between participants guided by agreements, disagreements and rival interpretations.

Mentioned interaction provided for valuable intragroup understanding and researcher-focus group understanding. Furthermore cross-checking between participants to ensure that all the evidence was presented and considered was observed. Strict adherence to detailed methodological requirements and associated techniques was observed during focus group interviews. In terms of focus group methodology both recorded interviews and documented focus group interview field notes were analysed. These analyses ensured that all the significant aspects of the case study were covered. Tables 5.38, 5.39, 5.40, 5.41, 5.42, 5.44, 5.45, 5.46 and 5.47 provide evidence of detailed analyses and associated significant aspects. The external codifier reviewed all evidence recorded, documented, transcribed and analysed. Furthermore all participants were provided with an opportunity to review and comment on the contents of the interview transcripts. The external codifier and member-checking feedback did not contest the content and analyses of data. It was therefore assumed by the researcher that both parties agreed that the data were correct, consistent, trustworthy and useful. These assumptions were further assessed during the cross-checking of focus group interview transcript analyses and focus group interview field note analyses. In terms of the focus group interview analyses it was found that leadership and followership as phenomena was reflected upon and reported by participants in terms of actual desired and undesired experienced traits, behaviours, occurrences and needs. Evidence in this regard is found in Tables 5.45 and 5.46.

In terms of the focus group interview field note analyses it was also found that leadership and followership as phenomena was reflected upon and reported by participants in terms of actual desired and undesired experienced traits, behaviours, occurrences and needs. Evidence of these possible rival interpretations is found in Table 5.39. A comparison between identified consistencies and differences from the focus group interview field note analyses (Table 5.39) and the focus group interview key descriptive terms and specific codes (Table 5.45) illustrate that leader and follower characteristics were detailed. Leader and leadership descriptive experiences (for example transformational, assertive, charismatic and supportive) as well as follower needs and concerns (for example unsupportive, poor communication, follower development and passive follower) received different descriptions. However consistencies were noted in terms of desired and undesired qualities. These consistencies were also obvious when considering focus group interview and focus group field note derived categories (Tables 5.42 and 5.47). Both categories allowed for a leader focus (transformational leadership, leader support, assertive leadership and pragmatic

leaders) and follower focus (follower development, follower limitations and leader limitations). Consideration of both leadership and followership illustrated that the most significant aspects of the case study were addressed and analysed.

The third phase of data and method triangulation required from the researcher to consider external codifier feedback, member-checking comments, all focus group interview data and all individual interview data. Discussions of aspects of importance to this phase relied upon content presented above as part of phases one and two. In the case of individual and focus group interviews it was noted that interview questions differed, but focused on similar themes. Individual and focus group interviews (inclusive of field notes in each case) were conducted with participants that met the defined sample requirements. Interview data collected from participants were characterised by agreements, disagreements and rival interpretations. In both cases strict adherence to detailed methodological requirements and associated techniques were observed. These analyses ensured that all the significant aspects of the case study were covered. Cross-checking with respect to the two data collection methods provided evidence that emphasis was placed on both leadership and followership. In both cases participants reported actual desired and undesired experienced traits, behaviours, occurrences and needs. Leader and leadership descriptive experiences as well as follower needs and concerns received different descriptions. However consistencies were noted in terms of desired and undesired qualities. The researcher concluded that the data were correct, consistent, trustworthy and useful. Consistency in terms of research results and understanding pertaining to both leadership and followership was accepted.

The final phase of data and method triangulation required that the researcher consider Leader Trait and Behaviour Questionnaire data, all focus group interview data and all individual interview data. In the case of the Leader Trait and Behaviour Questionnaire and individual and focus group interviews it was noted that although questions differed, emphasis was placed on leader characteristics and leadership. Administering the Leader Trait and Behaviour Questionnaire, individual interviews and focus group interviews (inclusive of field notes in each case) were conducted with participants that met the defined sample requirements. In terms of individual and focus group interviews both desired and undesired leader characteristics were reported and interpreted. A similar interpretation followed for the Leader Trait and Behaviour Questionnaire results. However in this case noteworthy and negligible leader criteria were listed. Cross-checking with respect to the three data collection methods provided evidence that emphasis was placed on leaders and leadership. This evidence supported a notion that the significant aspects of the case study were addressed.

Although the theme remained the same, differences were noted in terms of detailed focal points. Leader traits, leader behaviours, leadership styles as well as follower characteristics served as evidence of these differences but also provided impetus for convergence. These differences were viewed as different perspectives that were associated with an integrated study of context-bound leadership. The researcher therefore considered mentioned integrative outcome as a beneficial contribution to this study.

Triangulation was used successfully to signify consistency, to determine whether multiple sources of data agreed and to ensure cross-checked insights.

5.8. Conclusion

Adherence to an ethnographic case study research style ensured the availability of data, transformed as patterns or themes that were summarised and presented as an essential contribution towards the specific production of meaning within a particular context. A unique opportunity that ensured access to follower derived data was consequently created. Mentioned privilege and access were important considering that the field of leadership studies has been described as theoretically inadequate from its inception because it primarily excluded followers when explaining what constituted leadership (Avolio, 2007, Grint, 2000 & 2005 and Lord, Brown & Freiberg, 1999). Research results were valued as essential interpretations of events that signified organisational realities. Such realities provided evidence of the participants' exclusive realities. The promise, presence, importance and significance of multiple realities were accentuated.

Research results contributed to a further appreciation of current leadership dynamics, concerns and practices as well as followership needs (albeit from a follower perspective within a specific context). Follower responses recognised both inspirational leadership qualities and discouraging leadership qualities within a defined context. Execution of the mixed methods research decision provided the researcher with an opportunity to continue the investigative journey to understand the interpretations of followers.

CHAPTER 6: DISCUSSION OF FINDINGS AND CONTEXTUALISING OF RESULTS

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CHAPTER 6: DISCUSSION OF FINDINGS AND CONTEXTUALISING OF RESULTS

6.1. Introduction

Subjective reality contends that ultimate truth is modified or affected by personal views, experience or background. These differences in knowledge arise because everyone has a different set of experiences, not because there is no objective reality.

Leader/follower and leading/following behaviours exist at all levels of the organisation and transcend the traditional hierarchical and mechanistic managerial roles (Andert, 2011: 68). Research shows that “leadership cannot be studied apart from followership” (Van Vugt, Hogan & Kaiser, 2008: 193 and Darioly & Schmid Mast, 2011: 261). It is important to acknowledge that underneath the assortment of follower attributes, there are individual fundamental patterns of behaviour, attitudes, aspirations and beliefs (Prilipko, Antelo & Henderson, 2011: 80). Attributions that followers ascribe to the leader can result from implicit leadership theories that followers have on their leader (Eden & Leviatan, 1975).

The essence of leadership is to marshal followers for positive action (Iwu & Adeola, 2011: 123 & 124). Yet, the concept cannot be devoid or separated from the word “followership” (Iwu & Adeola, 2011: 123 & 124). Albert (2003) observes that “whenever we refer to leadership, mention must also be made of followership” (Iwu & Adeola, 2011: 123 & 124). In terms of follower perspectives Burns (1978) and Russell and Kuhnert (1992) noted that two categories of leadership behaviours, transactional and transformational, have received much attention in the leadership field. According to Burns (1978) and Russell and Kuhnert (1992) research findings have suggested that transformational leadership received the most positive follower reaction.

According to Hogg (2008: 272) it is the followers who provide the necessary conditions for effective leadership. The development of leadership consists of reciprocal and mutually reinforcing perspectives held by leaders and followers and is endorsed and reinforced within a broader organisational context that is dynamic over time. Considering a linear and causal orientation may be useful and may provide a reliable explanation of the world. This thinking may work within the boundaries of a stable and certain world where cause and effect views are plausible. However the researcher appreciates that the world is not stable, linear and predictable. Furthermore a follower’s reality is complex and seldom linear and causal.

Research findings presented below were exclusively shaped by subjective realities sourced by means of different techniques with the sole purpose of achieving multilayered insights into leadership and followership phenomena. These findings are the product of implicit leadership theories presented, held and shared by a specific and unique group of followers. This discussion of research results and contextualising of findings was arranged in accordance with themes highlighted by the literature review, the research questions and the research objectives.

6.2. Leadership as a construct

The impact of leadership and the perceived levels of success associated with the type of leadership displayed, contributed and shaped reported perspectives held by followers regarding leaders and leadership (*“creating impact, being successful, willing to follow”*). These perspectives favoured functional, efficient and effective definitions of leadership (*“directs people, monitors, communicates”*). These suggested a transactional leadership perspective characterised by a desire to maintain the company's existing policies, procedures and practices. A further follower perspective consisted of idealistic and inspirational constructs (*“somebody you can look up to, you can follow, they inspire, they motivate, they lead”*). The described role of the leader-follower relationship also emphasised positive aspirations and expectations held by followers (*“a person of character, copy that sort of behaviour”*). It was found that follower perspectives of actual workplace realities, presented as potential and idealistic yearnings, guided their definitions and conceptualisation of leadership.

Characteristics of a motivated and preferred leadership style were synonymous with positive influences, aspirations, individual considerations, teamwork and a definite work focus. According to followers their leaders should also act professionally, appear confident and in charge, act assertively and strive for success. Statements of *“emphasis is on their people always and takes the bull by the horns”* served as descriptive examples in this regard. Summative leader traits including dedication (*“want to excel”*), pragmatism (*“a person of character, creative and innovative”*), cooperation (*“realise our potential”*), assertiveness (*“strong willed and ability to control”*) and charisma (*“sets an example”*) were also highlighted. In this regard desired leader behaviours illustrated a need for employee support, advice to employees, positioning of individuals for success, inspiring and energising others and providing a helping hand/voice. According to Avolio, Bass and Jung (1999) organisational leadership literature highlights that transformational leadership has four salient features: intellectual stimulation, individualised consideration, individualised

influenced attributions and individualised influenced behaviour. Northouse (2001) argues that transformational leadership is developed through individualised consideration, inspirational motivation, intellectual stimulation and idealised influence. An analysis of follower feedback resulted in a transformational leadership style being favoured.

Workplace examples served as evidence of leadership styles that were not preferred by followers. Associated characteristics of these undesired leadership styles were explained as *“leaders ... when it comes to implementation we are a bit lacking; you are just frustrated and you take it out on the guys that need you; in some cases too many people to report to and leadership in our department is seems as if they’re against their follower, they gave the other party the impression that I was wrong, leaders bending the rules a bit”*. Derived leader traits illustrating slow responsiveness, workplace frustration, follower-leader relationship anxieties and concerns regarding risk taking provided agitated views. It may be noted that poor transactional leaders may be less likely to anticipate problems and to intervene before problems come to the fore, whereas more effective transactional leaders take appropriate action in a timely manner. It may be concluded that these leader traits and associated behaviours highlighted the previously stated support and agreement for a transformational leadership style.

Relational and emotional bonds between followers and their leaders were noted. The presences of both desired and undesired relationship were stated. Qualities provided such as *“supportive, like to follow, directs people, being selfless, working hard, collectively the people should be led for a positive output, try to help them to do everything right”* signified desired relationships. In contrast, undesired relationships were found in statements such as *“just get there, do the job and go home, there is no engagement, leaders won’t tend to attend or try to understand the root cause of the problem”*. Followers expressed a need for favourable relationships in the workplace. Such relationships had to consider organised, focused and dependable teamwork, cooperative efforts (inclusive of trust, fairness and assertive traits) and be driven by a common objective. An emphasis on workplace relations focusing specifically on direct coordination, control and supervision was provided. It was considered that transactional leaders focus on systems that are already in place and they tend to primarily emphasise standard rules, procedures and short-term goals. A desire to have both workplace (task-focused) and personal (emotional focused) inspired relationships was evident.

An understanding of followers' introspection and cognition regarding leadership was found during the analysis of individual and focus group interview field notes. Mentioned was

evident in terms of participants' questioning attitudes, acceptance of dependence, professional dedication, openness to contribute and excitement observed and noted by the researcher. It became evident to the researcher that follower introspection and cognition were shaped and guided by episodes, versions and interpretations of leadership found in the workplace. Followers presented and described the workplace as a holistic entity (comprising both work and social environments) within which they observed desired and undesired leader attributes as well as leader and follower differences and similarities. An important and valuable "own follower voice" was thus exhibited. During interviews confirmation of the aforementioned was presented in phrases such as "*somebody you can look up to, realises your potential, shows desired qualities, to copy that sort of behaviour*". The existence of follower mental models could be argued, because followers exhibited adequate knowledge and expertise that enabled them to structure opinions of leadership and leader behaviours based upon their own realities.

It appeared that the impact of followership on leadership was considered limited. The leader and leader role was described as being "*more about impact, they inspire, they motivate, directs people, being selfless, working hard, confidence, outspoken, intelligent and wise*". A willing follower role emerged as motivated by the following statements: "*realise our potential, tells you what to do, collectively the people should be led for a positive output*". This described follower reality suggested that subordinates were not necessarily expected to think innovatively and may only be monitored on the basis of predetermined work criteria. These examples were found to be supportive of a desired assertive and charismatic leadership style. However the follower desires stated as "*qualities that people around you actually want, followership is somebody that would actually follow that look up to that person, as you are a role model, have trusted that person and have confidence in that person, try to help them to do everything right, given certain teams to work with*" suggested that assertive and charismatic leadership should be inspiring, motivating, positively influencing and should also employ effective teamwork. These were found to be supportive of the emerging leadership theme, being transformational leadership.

A single follower-inspired and derived definition and conceptualisation of leadership was not possible. An attempt to formulate such a conclusive phrase had to contend with the multiple desired and undesired leader traits and behaviours expressed, as well as context-specific requirements. At best the researcher became aware that any such definition had to consider perspectives held by followers regarding leaders and leadership, characteristics of preferred and undesired leadership styles, relational and emotional bonds between followers and their leaders and acknowledge the presence and influence of follower mental models. Follower

experiences and expectations suggested the presence of a transactional leadership style. It was noted that followers working under transactional leadership had the advantage of a very clear and structured system. They knew the chain of command and they were aware what was expected of them at all times. Followers also knew and accepted that when they followed orders and completed objectives, they were rewarded with something that they found to be of value. Despite the reality and assumed complexity associated with the formulation of a definition it was evident that successful, desired, positive, effective and efficient leadership was required and desired by followers. It may be concluded that leadership, synonymous with a transformational leadership style may be considered.

6.3. Followership as a construct

Evidence supporting an emotional bond between follower and leader (from a follower-perspective) was not apparent. A work-based and directed relationship was highlighted. What became apparent were the views held by followers regarding their hierarchical role, described as *“support their leader, take orders and humble themselves, people who walk behind the leader, complies to the instructions”*. Again the notion of a willing follower emerged. A sense of actual follower empowerment at an emotional level was not mentioned and it was also considered negligible leader behaviour (with reference to the Leadership Trait and Behaviour Questionnaire results). The same occurrence was noted in terms of noteworthy leader behaviour ratings for willingly supporting employees, positioning individuals for success, fostering/promoting people growth and providing a helping hand/voice (with reference to the Leadership Trait and Behaviour Questionnaire results). In support the statements *“follower is a person who waits for someone to help him or to bail him out, leadership is a person who is creative and innovative and he makes sure that everything is perfect”* not only illustrates possible absence of these behaviours, but also drew attention to leader dependency. In this regard it was noted that a transactional leadership style was appropriate in many settings and may have supported adherence to practice standards, but not necessarily openness to innovation. It may be construed that a leader-follower relationship on an emotional level was desired, but it had not yet evolved as an emotional leader-follower bond.

Followers' introspection and cognition regarding leadership was presented as *“leadership and followership explains two different workforces”*. Cognition in this regard was probably more of a passive expression as noted in the following phrase *“follower is a person who waits for someone to help him or to bail him out”; “leadership is a person who is creative and innovative and he makes sure that everything is perfect”*. Findings supportive of followers'

cognition and introspection suggested that the existence of follower rights, importance of effective relations at work, role-modelling needs (follower and leader-inspired), significance of own beliefs and the necessity for vocational professionalism were known and accepted. Furthermore the importance of successful leadership was found to be prominent in all follower discussions. Followers revealed awareness and know-how that enabled them to compose and present opinions of leadership and leader behaviours based upon their own realities. The researcher therefore acknowledged the existence of follower mental models.

Definitions and conceptualisations of followership (as a construct) were not as prominent as leadership descriptions. Followers have clearly defined roles, processes and tasks. These are detailed and need to be executed with the utmost precision within a rigid and structured environment. Followers admitted that they understood and enforced rules and regulations required to provide a safe, effective and efficient service. They also stated interest, passion and support for their work. Followers viewed themselves as highly independent decision makers in terms of workplace tasks. They agreed that they are bound by expectations aimed at standardisation and safety. The researcher noted that followership descriptions were expressed as *"followers don't really want to do anything more than just get there, do the job and go home, take orders and humble themselves, people who walk behind the leader, complies with the instructions, follow the example or the instructions, carrying out the tasks that are assigned to you, obeying by the rules or the rules of the leader, act to the instructions, followers do not take themselves very seriously because they don't know what their future is, for followers only one way of doing things and there is no other way, leadership in our department it seems as if they're against their follower"*. Based on these descriptions an obedient, passive and compliant follower role emerged. In support it was believed that these transactional leadership behaviours were based on exchanges between the leader and follower and that followers were rewarded for meeting specific goals or performance criteria. Furthermore it was also noted that leaders needed to improve the morale of employees, willingly support employees, address team members' issues/problems, inspire and empower others (with reference to the Leadership Trait and Behaviour Questionnaire results). Followership was consequently conceived by followers as a passive and transactional construct.

Evidence of follower motivations and assumptions held were found in the following statements *"to do what task has been given, unity in a work environment, complies with the instructions, follow the example or the instructions, to assist that person to reach certain goals"*. Followers admitted to a common identity and common purpose. Followers stressed the need for effective teamwork. They believed that each team member knows what he/she

is expected to do and that these behaviours must increase safety. They also acknowledged that team members can adapt to various situations through learned behaviours and interactions with others. Followers acknowledged and accepted that a safety culture requires incentives and disciplinary actions in order to reinforce conformity. Follower motivations were considered to be work-focused and outcome-based. These follower motivations were also presented as noteworthy leader behaviours that comprised assertive, professional, decisive leader actions that ensured focus on company outcomes (with reference to the Leadership Trait and Behaviour Questionnaire results). It was concluded that followers possibly assumed that leaders also shared these motivations and that the collective effort was primarily expected to be work-focused. Mentioned view strengthened the notion that a transactional leadership style was present. This transactional leadership was found to be more practical in nature and required from both leader and follower to meet specific work targets or objectives.

Specific but conflicting needs, wants and desires of followers emerged. Desired behaviours were traced in terms of *“creating unity in a work environment, has the ability to do what task has been given”*. Evidence in support of a conducive and accommodating work environment was accepted in this case. Noteworthy leader traits (assertive, in control, authoritative, disciplined, coherent, powerful) and leader behaviours (delegates authority, directs followers, appears confident, assertive, in charge, adaptive to changing environments) may have created conditions that accommodated mentioned desired follower actions. However it was also considered that followers may have wished to act in an irregular manner when considering statements such as *“follower is a person who waits for someone to help him or to bail him out, followers don’t really want to do anything more than just get there do the job and go home, so let me just follow”*. It may be assumed that these irregular actions were supported by leaders (and exploited by followers) because of statements such as *“not being assertive in their leadership roles, there is no engagement, leaders won’t tend to attend or try to understand the root cause of the problem”*. Furthermore negligible leader traits (inefficiency, uncooperative, too agreeable) and leader behaviours (not using resources effectively, acting reactively, creating an uncomfortable work atmosphere) may create conditions that accommodated mentioned undesired follower actions. These may be negated by considering the expansion of aforementioned noteworthy leader traits and leader behaviours.

The nature of the leader-follower relationship was found to be workplace-focused. The emergence of both helpful and unfortunate relationships was noted. Comments provided such as *“creating unity in a work environment, follow the example or the instructions, try to*

help them to do everything right” signified needed relationships. In contrast, undesired relationships were found in statements such as *“you know there is no engagement, leaders won’t tend to attend or try to understand the root cause of the problem, I don’t want to say victimising but say you get punished”*. Both followers and leaders were found to be responsible for mentioned state of affairs. This is motivated in terms of evidence found in support of a conducive and accommodating work environment and evidence suggesting that followers may have acted in an irregular manner (as stated and motivated earlier). Followers asserted that negative consequences were the result of not following orders, therefore they were motivated to continually perform and try their best to reach a positive outcome (restricted to work responsibilities). In support of assertive, supportive and transformational leadership it may be sensible for followers to benefit from workplace (task-focused) and personal (emotional focused) inspired relationships.

The perceived impact of followership on leadership provided for evidence of workplace success (in terms of meeting work objectives). Substantiation was found in statements such as *“creating unity in a work environment, walk behind the leader, obeying by the rules or the rules of the leader, you know we knew it was coming so let me just follow”*. Contemporary followership characteristics suggested that followers were guided by leader instructions and responded accordingly (*“fill the tasks that are assigned to you, obeying by the rules or the rules of the leader, act to the instructions”*). Leaders may have been accustomed and entitled to the predictability of followership (considering *“follower is a person who waits for someone to help him or to bail him out, try to help them to do everything right”*). Mentioned possibly provided further evidence of (emphasised by *“the idea that I am a follower, it requires a lot of humility, followers do not take themselves very seriously because they don’t know what their future is”*) follower obedience, compliance and duty. The mentioned impact of followership on leadership may not suggest compliance with perceived transformational followership (in response to transformational leadership).

A follower-inspired and derived definition and conceptualisation of followership was only possible by examining the nature of the leader-follower relationship (as framed by a follower perspective). It was, however, acknowledged that followership assumed a complexity associated with leadership behaviours. Leadership behaviours in this context illustrated trends synonymous with assertive, directive and domineering traits and behaviours. Moreover a transactional leadership style again emerged because leaders reportedly functioned from their formal authority and level of responsibility within the organisation. It was perceived that a transactional leadership style was apparent and considered appropriate because it emphasised support and adherence to practice and work standards,

but not necessarily openness to innovation. These leaders therefore did not focus much on their followers' ideas and creativity. Followership behaviours in this context were described as passive, obedient, duty-focused and compliant. Evidence of a prominent emotional bond with leadership was not noticeable. In this regard it was concluded that a follower-inspired and derived definition and conceptualisation of experienced followership did not illustrate inclusion of a transformational leadership style.

6.4. Contextualised leadership roles and responsibilities

Follower views held regarding roles and responsibilities of the leaders were included in the following statements *“provide a safe and expeditious service, grow the company as well as the employees, operationally their responsibilities are to manage the staff, comply with obviously company relations and directives, leaders they first put company, then it is themselves and then it is the employee”*. These statements suggested that leaders had organisational, team and employee roles and responsibilities. Details associated with these roles and responsibilities included positive social relations, encouragement of followers, people skills, leader empathy, conducive work relations, collaborative efforts and follower development and support. The researcher concluded that leaders and followers understood the multiple roles and responsibilities synonymous with effective organisational leadership. Mentioned were also motivated in terms of noteworthy leader traits (dedicated, focused, hard-working) and behaviours (is aware of the company's values and leads in that direction, directs/orders followers, acts professionally and assertively). When reflecting on these leader roles and responsibilities it was apparent that leader support, follower development, assertive leadership and transformational leadership emerged as themes.

Followers provided insight into how leaders manage and conduct themselves. Comments in this regard included *“lead by example, keep everybody in line, clear headed, set up specific goals; followers have to buy in and follow the leaders”*. Further feedback from individual interview field notes highlighted leaders' abilities to manage themselves in an acceptable and desired manner (emphasised the relationship value, motivated and supported an employee focus, encouraged unity, provided for comfortable interaction, emphasised teamwork). Examples and expectations regarding leaders' roles and responsibilities provided by followers also suggested that common knowledge existed regarding mentioned duties. Furthermore no evidence was available to suggest a prevailing climate of unscrupulous and unethical leader conduct.

Followers' introspection and cognition regarding leadership again suggested that followers view and described themselves from an obedient, passive and compliant perspective (*"your leader is actually not for you but for the company, I don't know what the current responsibilities are according to the organisation"*). The impact of mentioned statement was noted in terms of the following comments *"disgruntlement between the employees because it's confusion, need to involve the people more, make decisions without involving the people, need to involve the staff with decisions"*. Followers' feedback also indicated that a need for socialising with leaders existed, more focus on employee needs was required and improved relationship building and better teamwork efforts were considered essential. In this instance followers' introspection and cognition signified a need and readiness for an emotional/social bond. According to follower feedback these related and desired leader traits (engaging personality, just, honest, charismatic) and behaviours (willingly supports employees, provides advice to employees, acknowledges achievement/effort, is trusting, shows a genuine concern, acts in a charismatic/charming manner) supported this discovery. This finding was considered to be another perspective of the follower mental model. Leadership and leaders were subsequently appreciated from both a work and personal perspective. Mentioned views were found to be supportive of a transformational leadership style because transformational leadership acknowledges, inspires and motivates followers, whereas transactional leadership is based more on reinforcement and exchanges.

It was understood that followers collected, managed and disseminated leader information by paying attention to workplace performances and emotional occurrences. Workplace performance information processed, suggested that leaders were concerned with safe and expeditious service delivery, growth of the company, management of the staff, compliance with organisational procedures and directives, achieving company goals and ensuring completion of required tasks. Emotional occurrences were stated as *"need to involve the people, need to involve the staff with decisions, followers have to buy in, staff members are happy and respect, provides mental support and advice"*. Followers considered both pleasant occurrences and opportunities for improvement when reflecting on leader performances and behaviours. Statements that identified a need for improvement were *"need to communicate with their staff, disgruntlement between the employees because it's confusion, need to involve the people more, your leader is actually not for you but for the company"*. It was concluded that followers were able to critically collect, manage and disseminate leader information. Mentioned information was considered to be trustworthy because it was occurrence-based and substantiated by followers (including workplace examples and experiences).

Follower knowledge held as business knowledge was emphasised as *“a need for a safe and expeditious service, growth of the company, compliance with company rules, directives and policies, meeting specific company goals/objectives, ensuring that everything is done in on time in order”*. Individual interview field note information also accentuated business and work focus, aviation safety and a need for work solutions. Follower comments showed understanding of the type and significance of business knowledge and how this information related to leader performances and behaviours.

Follower knowledge held as personal knowledge was evident in follower mental models. In this regard it was noted that followers delineated leadership behaviour qualities in terms of the significance of these behaviour qualities. Both people and work perspectives emerged as leading frames-of-reference used by followers. Followers acknowledged the existence of follower rights, importance of effective relations at work, role-modelling needs (follower and leader-inspired), significance of own beliefs and the necessity for vocational professionalism. Examples in this regard were found and categorised in terms of encouraging unity, providing for comfortable interactions, emphasising teamwork and being part of a successful team. The importance of successful and participative leadership was thus a prominent consideration employed by followers.

Followers noted how leaders shared knowledge (how information is managed) with reference to *“make decisions without involving the people, need to involve the staff with decisions, to ask for help if they need help, I don’t know what the current responsibilities are according to the organisation”*. In addition it was also found that leaders created follower confusion, “shot down ideas follower ideas”, were unable to see an end-in-sight, ignored the dynamics of the environment, blindly made decisions, were very opinionated and focused only on their own views. Despite these views, it was also noted that leaders did share information and knowledge, were sources of information, provided instructions and were willing to share and learn. These contradictions may indicate individual leader differences and/or may be linked to the followers’ self-image of obedience, passiveness and deference. Benefits associated with leaders that share knowledge was evident in terms of *“keep everybody in line, got to be clear headed, set up specific goals, provides mental support and advice, make sure that everything is done in on time in order”*. Leaders that shared knowledge were considered to be supportive of transformational and pragmatic leadership styles.

Regrettably followers did not provide ample evidence that described how leaders managed their networks. In the absence of such evidence the researcher relied upon information from

the Leader Trait and Behaviour Questionnaire that suggested that leaders should consider improving competence in terms of reflecting on work outcomes, ensuring a competitive edge and ensuring involvement in community initiatives. These aspects were considered as being aligned to competitive leader behaviours that may be tantamount to assertive leadership.

An analysis of follower views held regarding roles and responsibilities of their leaders within a defined context provided insight into how leaders managed and conducted themselves and how followers viewed leadership. Mentioned analysis assisted with understanding how followers collected, managed and disseminated leader information by paying attention to workplace performances and emotional occurrences. It was also evident that follower knowledge was held as personal knowledge (with reference to follower mental models). Furthermore it was also noted that followers paid attention to how leaders shared knowledge (how information is managed), but were unable to note how leaders managed their networks. Findings presented in this regard assisted with an overall understanding and contextualising of leadership roles and responsibilities.

6.5. Insight into the leader-follower relationship

Followers' descriptions of characteristics of leadership competence illustrated that desired leader traits, behaviours, interactions and experiences were familiar in the workplace. Desired common leader traits inclusive of assertiveness, being outspoken, dedication, in control, being authoritative, driven, disciplined, enduring, hard-working, coherent, powerful/strong, well spoken, focused, analytical, a fast-thinker and being passionate (describing leadership competence) were prominent. Desired common leader behaviours that described leadership competence were listed as appears confident, appears in charge, acts assertively, speaks out, is aware of the company's values and leads in that direction, is straightforward, strives for success, acts professionally, acts decisively, remains focused, is hard-working, assumes responsibility, directs/orders followers, delegates authorities and is adaptive to changing environments. Desired leader interactions that focused on leadership competence were described as emphasising the relationship value, benefit of social solutions and highlighting a need to maintain social relationships. Areas of leadership competence was transactional and emphasised work relations (signifying the leader as an executor, a person that strives for ideals, is focused on work outcomes/objectives, is solution-focused and provides space and opportunity to employees in order to achieve end-results), leader inspiration (leads-by-example, a can-do leader), leader role modelling (helpful, honest, trustworthy), delegation and problem-solving skills, information sharing (willing to share and learn), follower support and development (grows company employees,

ensures employee satisfaction) and communication skills (is a good listener, is approachable). Experiences reflected upon by followers described desired leadership competence as *“is a great leader personally, always positive in anything that he does he is always learning from you, give instructions as to what needs to be done, willing to create a report and listen to the employees, very approachable, understanding and supportive, approachable, also able to delegate tasks which I think is highly important, have an open relationship, able to communicate better with the leadership”*. These leadership characteristics were summarised and described as successful leader support, follower development, assertive leadership and transformational leadership.

The aforementioned information that described desired leadership characteristics provided impetus for the conceptualisation of preferred leadership styles. Desired leadership styles illustrated a requirement for all the traits and behaviours listed as part of the Leadership Trait and Behaviour Questionnaire (mindful that a number of traits and behaviours required further development). These desired traits (dedication, being practical, cooperative, assertiveness, being personable and being analytical) and behaviours (being focused, supportive, acting as a developer, advisor, being competitive/assertive, serving as a delegator and being charismatic/transformational) were all considered concurrent with successful leader support, follower development, assertive leadership, pragmatic leadership and transformational leadership.

Follower comments and descriptions aimed at proving a conceptualisation of leadership styles not preferred included phrases such as *“restricted involvement, was autocratic, too strict control exercised, was inflexible, unapproachable, over-sensitive, too aggressive, frustrating to employees, a poor decision-maker and ruled-by-terror”*. Further undesired leadership characteristics noted by followers were summarised as displaying undesired leader sentiment (lack of socialising), ineffective leader-follower interaction (created confusion, “shot-down” ideas), poor leader empathy, poor teamwork and work relations (too critical of the team, not able to see end-in-sight, ignoring the dynamics of the environment), poor motivation efforts, poor decision-making, lacked delegation skills and did not emphasise follower development. Follower statements such as *“but they want to tell you exactly how to do something, they don’t trust your integrity to do something and to get to the end goal, are too set in their ways, might be an experience difference or an age difference that are not willing to listen, not willing to change, haven’t found him to be as approachable, not be as understanding, I try and avoid them, come across being very aggressive, I am frustrated, it doesn’t help getting angry”* further supported the existence of undesired leadership styles. It was considered that transactional leadership allowed for the use of a

reward-and-punishment based system that may have compelled employees to perform certain behaviours. All these critiqued characteristics were considered being unsupportive of successful leader support, follower development, assertive leadership, pragmatic leadership and transformational leadership.

While describing leadership characteristics it was noted that the existence and nature of emotional bonds between followers and leaders could be explained in terms of desirable and undesirable experiences and expectations of leadership behaviours. Strengthened emotional bonds between followers and leaders could be traced to successful leader support, follower development, assertive leadership, pragmatic leadership and transformational leadership style characteristics. Evidence in this regard was found in terms of follower reports that signified satisfaction with leaders' assertive actions, ability to direct/order followers, delegation skills, approachability and willingness to assist others. Moreover leaders were rated as being passionate, eloquent, personable, disciplined and able to organise people. Weakened emotional bonds between followers and leaders could be traced to ratings that indicated areas of development required, for example social interaction, cooperation, charisma, an engaging personality, acknowledgement of achievements, caring about others, energising and inspiring others. It was concluded that opportunities for the strengthening of emotional bonds between followers and leaders were evident. Activities in this regard had to be aimed at (as highlighted by followers) willingly supporting employees, providing advice to employees, providing the necessary resources for the team to succeed, acknowledging achievements/efforts, being cooperative, sharing the vision, addressing team members' issues/problems, nurturing trust, lending a helping hand/voice, creating a comfortable working atmosphere, showing genuine concern, fostering and promoting people growth, positioning individuals for success, maintaining an open-mind, communicating openly, motivating others, inspiring others, energising others, removing barriers, improving the morale of employees and empowering others.

Followers' introspection and cognition regarding the leader-follower relationship further emphasised people and work perspectives. In this instance it was noted that the emotional (people) perspective emerged as a leading frame-of-reference used by followers. Followers acknowledged these in statements such as *"somebody that you come and actually speak to, willing to create a report and listen to the employees, very approachable, understanding and supportive, they are very friendly, I feel welcome and I haven't experienced any negative stuff, leaders are always around so the relationship is good, they are easy to access"*. The importance of leader support, follower development, assertive leadership, pragmatic leadership and transformational leadership was found to be acceptable.

6.6. Behaviour imperatives synonymous with effective leadership from a team perspective

Gagliardi (2007: 25) states that leaders need teams to execute their decisions and teams need leaders to make decisions so they can act.

It was stated that leaders *“give their teams the necessary and they set a goal there and you keep to it”*. Mentioned statement served as a descriptor of how, according to followers, leaders initiate action in the workplace. Leader logic associated with this action was found in statements that *“leaders create an environment where you want to achieve a certain goal, communication of the plan of the goals of the roadmap of the departments, being proactive with the staff or the followers would actually make for a very effective team”*. Successful leadership in effective teams required from leaders to ensure that work goals and objectives were present and understandable to all stakeholders.

Specific and desired emotional bonds between followers and leaders within effective work teams were noted. These critical emotional competencies of effective leadership also highlighted the characteristics of effective leader-follower relations as applicable to effective team performance. Attributes related to mentioned success were found in follower statements describing a need to *“create an environment where you are openly free to have a conversation, you want an end result, give them free reign, let them do what they do best, each other you listen to each other, you provide your own opinions, give your own arguments, manager work shifts if somebody books off, the manager is willing to help out, goes the extra mile, the open-door policy where the manager is really open-minded, team builds which I think was absolutely brilliant”*. Successful leadership in effective teams required from leaders to recognise, inspire and ensure individual and collective efforts and contributions as well as concerted leader efforts to build successful teams.

Followers' introspection and cognition regarding leadership (from a team perspective) illustrated the importance of communication and delegation. Mentioned was noted as *“communicate, that’s what I think, our major turnaround was when we started communicating, we have a communication relationship with our immediate manager, they delegate their work to their subordinates, it feels it helps them a lot, manager plays a huge role in the rest of the group”*. Successful leadership in effective teams required leaders to utilise effective communication (calm and poised speech and having a composed and self assured manner) and delegation skills (appear confident, appear in charge, be aware of the

company's values and leads in that direction, act decisively, direct/order followers, is adaptive to changing environments, delegate authorities and generate solutions).

An understanding of leaders' motives that contributed to desired leadership was found in statements that suggested that leaders *"know their people that they manage as well, they physically get to know you, you feel special and you feel encouraged because they are making an effort, recognises that they are part of the team"*. Followers also provided evidence of their understanding in terms of how the leader managed the team. Statements that *"effective leaders recognised that they are part of the team, they know their staff, they create an environment where you are openly free to have a conversation, they create and develop their skills in that social entertainment aspects, they give their team the necessary and you set a goal there and you keep"* illustrated that followers appreciated collaborative efforts within a favourable work environment. Followers also appreciated the reality that *"everybody is satisfied and happy, our leaders are always there when we need them, communicating the plan of the goals of the roadmap of the departments, being proactive with the staff or the followers would actually make for a very effective team, a lot of respect and a lot of broad perspective to the group and make sure that everybody is in the picture"*. According to followers, successful leadership in effective teams required that the leaders be part of the team effort, to be team-oriented, to act professionally, to favour an open-door policy, to help to resolve conflicts, to be approachable, to remain positive and to always be willing to help others.

Understanding how leadership behaviour was identified and cognitively evaluated (with reference to inspiring behaviours) by followers within successful teams required insight into followers' current individual and shared mental models in use. Insights obtained furthermore identified followers' implicit theories of leadership. These implicit leadership theories highlighted by phrases such as *"we do actually like is teamwork, create a rapport and you now listen to the employees, create an environment where you want to achieve a certain goal, each other you listen to each other, you provide your own opinions, give your own argument, a lot of respect and a lot of broad perspective to the group and make sure that everybody is in the picture"* illustrated a theoretical theme inclusive of supportive aspects, social aspects and contributory factors. Characteristics of both individual and shared mental models were identified as being framed by work and social environments, guided by workplace examples and relied on own operational experiences that provided for a valuable "own follower voice" (used in both individual and collective settings). Followers also acknowledged the existence of their follower rights, the importance of effective relations at work, role-modelling needs (follower and leader-inspired), significance of own beliefs and the

necessity of vocational professionalism. The importance of successful leadership was prominent in all discussions. These culminated in a follower preference for a transformational leadership style.

Follower statements that suggested *“creating an environment where you are openly free to have a conversation, create a rapport and you now listen to the employees, listen to each other, you provide your own opinions, give your own arguments, have a communication relationship with our immediate manager, they know their people that they manage as well, they physically get to know you, you feel special and you feel encouraged because they are making an effort, they don’t put themselves on a pedestal”* allowed the researcher to understand the nature of positive leader-follower exchanges and relationships. In this regard followers also found it acceptable for leaders to monitor follower performances, ensure compliance with rules and regulations and to perform random checks (spot-checks) of work. Leaders were furthermore described as being good executors, idealistic, work-focused, solution-focused and provided space and opportunity to employees for end-results. Successful leadership in effective teams required leaders to ensure effective communication and sincere follower involvement (guided by leader influence, inspiration and interest).

Successful leadership in effective teams required leaders to understand the impact of the work environment on positive follower perceptions. Characteristics of an effective work environment (described from a team perspective) included a climate inspired by a leader-follower happiness focus, a willingness of the leader to go the extra mile, the leader being approachable and caring, and experienced-based leader actions. Followers commented that *“creating an environment where you are openly free to have a conversation, you want an end result, you feel encouraged because they are making an effort, effective leaders recognise that they are part of the team”* facilitated a preferred work environment. Followers rated aspects associated with “leader drive, overall discipline, focus, hard work and success” as supportive of a conducive work environment.

An understanding of leadership behaviour qualities that evoked positive and increased followership, were used to identify, assess and describe inspiring leadership behaviours. Mentioned relied on current experiences and expectations of preferred leadership behaviours found, reported and rated by followers within the operational environment. Common desired leader traits were listed as assertive (showing a strong and confident personality), outspoken (saying openly exactly what one thinks), dedicated (devoted to a task or purpose), controlled (power to influence people’s behaviour or events), authoritative (being reliable and showing authority), driven (motivated by a specific factor/feeling),

disciplined (showing a controlled form of behaviour or working), enduring (the ability to see something through), hard-working (working with energy and care), coherent (able to communicate clearly, consistently and logically), powerful/strong (having great power-basis, having a strong effect on people), well spoken (speaking correctly or in an elegant way), focused (directing a great deal of attention or activity towards a particular aim), analytical (using or involving analyses or logical reasoning), fast-thinking (able to decide on an action quickly) and passionate (having, showing, or caused by strong feelings or beliefs). Common desired leader behaviours described leaders as confident, in charge, assertive, out-spoken, aware of the company's values and leads in that direction, straightforward, success-driven, professional, decisive, focused, hard-working, responsible, good delegators, adaptive to changing environments and able to successfully delegate authorities. The leadership behaviour qualities that inspired positive reactions and increased followership were supportive of assertive and transformational leadership styles. It was postulated that leadership training and development aimed at developing, strengthening and inculcating these leadership behaviour qualities may continue to evoke positive reactions and increased followership.

Followers highlighted role modelling as a specific desired leader behaviour. In support it was mentioned by followers that they appreciate leaders that *“lead by example, shows a lot of respect and a lot of broad perspective, don't put themselves on a pedestal”*. Role modelling exhibited by leaders was described by followers as features of a person who aims to be the best leader, is helpful, is a role-model, is honest and a trustworthy leader. It was also noted that followers prefer positivity displayed leadership, a can-be leader and a leader that inspires and motivates. These traits and behaviours again signified alignment to a transformational leadership style.

6.7. Behaviour imperatives synonymous with less effective leadership from a team perspective

It was stated that leaders *“were not willing to change, you are not willing to listen, militaristic, that is what's happening I mean and people feel very kind of violated”*. Mentioned statement served as a description of how, according to followers, leaders initiate action in the workplace that results in less effective leadership and teamwork (from a team transactional perspective). Leader logic associated with this action was found in statements that leaders were *“not hands on and do not really care about the team, only wants his own views across who doesn't want to listen to the views of team members, don't actually have a clear direction of what you are supposed to be doing; don't actually have a clear direction of what*

you are supposed to be doing, not too sure what you are supposed to be doing or who you are supposed to be listening to". As previously stated (and relying on evidence provided by followers) successful leadership in effective teams required from leaders to ensure that work goals and objectives were present and understandable by all stakeholders. Leader actions that led to less effective leadership and teamwork were further summarised as undesired leader sentiment (including no concern for followers, no follower trust, makes futile changes, is ignorant and apologetic) and undesired work relations (unable to handle confrontation, showed a lack of backbone, being on the defensive and exhibited poor conflict management). Undesired leader motivation efforts, lacking leader sentiment, ineffective leader-follower interaction, poor leader communication and unproductive work relations emerged as main themes that inhibited effective leadership from a team perspective.

As previously mentioned successful leadership in effective teams required from leaders to recognise, inspire and ensure individual and collective efforts and contributions as well as concerted efforts to build successful teams. Follower feedback supporting a conflicting perspective emerged. Specific and desired emotional bonds between followers and leaders within less effective work teams were distinguished. Emotional competencies associated with less effective leadership also highlighted the characteristics of less effective leader-follower relations as applicable to less effective team performance. Follower concerns were found in follower statements describing that *"you don't feel open towards that particular person, hard for me to work with somebody I feel like I don't trust, its leaders that are not hands on and do not really care about the team, unhappy teams; team feels like they aren't listened for or they are not taken into account, I felt there is no trust when the leader doesn't trust you enough and is not confident enough to know that you can actually do the job, some of them really need to get a backbone"*. Rated leader traits and behaviours suggested weaknesses in terms of leader energy, social skills, charisma, respect, courtesy, cooperation, support, employees' welfare and trust relationships. In this case follower feedback suggested that leaders required remedial action that would need to facilitate development of valuable and constructive emotional bonds between followers and leaders.

Followers' introspection and cognition regarding leadership (from a team perspective) illustrated the importance of communication and delegation. Mentioned was further highlighted by disapproving comments regarding leadership noted as *"only wants his own views across who doesn't want to listen to the views of team members, "communication, blind-sided, not too sure what you are supposed to be doing or who you are supposed to be listening to, no communication whatsoever, no input whatsoever from the employees"*. Moreover in terms of delegation it was stated by followers that concerns were *"uncertainty of*

what is going to happen next, don't give you the authority to make decisions and do stuff, don't actually have a clear direction of what you are supposed to be doing, inability to focus on issues that that are going to be problematic, don't empower their employees or the rest of the group". Successful leadership in effective teams required from leaders to utilise effective communication and delegation skills. However communication concerns (does not allow free-flow of ideas, does not depict openness, poor communicator, vague answers to questions provided, incorrect information provided, provides ambiguous instructions, is not approachable) and shortcomings in terms of delegation (not able to see end-in-sight, ignores the dynamics of the environment, too much work focus, does not ensure follow-through) were received.

An understanding of leaders' motives that contributed to undesired leadership was found in statements that suggested that followers found *"it is hard for me to work with somebody I feel like I don't trust, that I could do something and not get a fire note for it, but somebody else can do the same thing and get a fire note for it, one is liked and the other is not, or one got away with it, you start wondering and you start listening to rumours"*. Concerns regarding the lack of trust, inconsistent action and favouritism as impeding motives were thus identified. Lehmann-Willenbrock and Kauffeld (2010) pointed out that supervisor trust can foster innovative work behaviour. According to Tschannen-Moran (2001) trust in teams and teamwork is influenced by levels of interpersonal trust, which in turn is, linked to social and leadership relationships, organisational effectiveness, organisational climate and health and performance and achievement. Followers also provided evidence of their understanding in terms of how the leader managed the team. Statements such as *"unhappy teams, doesn't want to listen to the views of team members, doesn't know the team players, leaders that are not hands on and do not really care about the team, they have a closed-door policy basically"* illustrated that leaders may not have appreciated the need for collaborative efforts within a favourable work environment. Followers also did not appreciate that *"leaders a lack of consultation, lack knowledge in dealing with people, have difficulties in dealing with their employees"*. According to followers, successful leadership in effective teams required from leaders to develop their skills in terms of relationship-building, teamwork, learning in the workplace, checking of followers' work, follower empowerment, recognition, leader visibility, consistent rule application and consultation.

Understanding how leadership behaviour was identified and cognitively evaluated (with reference to inspiring behaviours) by followers within successful teams required insight into followers' current individual and shared mental models in use. Insights obtained furthermore identified followers' implicit theories of leadership. These implicit leadership theories were

highlighted by phrases such as *“you don’t feel open towards that particular person, somebody I feel like I don’t trust, people feel very kind of violated, they don’t listen surely they do not give you what you need, there is no trust, never give any recognition of any sort, passing the buck, so no accountability”* illustrated a theoretical theme that illustrated unhappiness with mentioned affairs. Both individual and shared mental models were identified as being framed by work and social environments, guided by workplace examples (*“you come to work one day then you kind of get attacked, he doesn’t fully focus and I have said this to him many times, not get a fire note for it, but somebody else can do the same thing and get a fire note for it”*) and relied on own operational experiences (*“don’t give you the authority to make decisions and do stuff, inability to focus on issues that that are going to be problematic”*) that provided for a discontented “own follower voice” (used in both individual and collective settings).

Followers also acknowledged the existence of their follower rights (*“I felt there is no trust when the leader doesn’t trust you enough and is not confident enough to know that you can actually do the job, hard for me to work with somebody I feel like I don’t trust”*), the importance of effective relations at work (*“other one will be this disciplinary part of thing, I don’t think they’re consistent”*), role-modelling needs (follower and leader-inspired), significance of own beliefs (*“don’t empower their employees or the rest of the group, not feeling backed up”*) and the necessity for vocational professionalism (*“you kind of feel shocked that your own leader is not knowledgeable, work is not done in the correct way or in the intended way, a lack of dedication they don’t have the knowledge, it almost feels they are not qualified”*). The importance of successful leadership was prominent in all discussions. These culminated in a follower preference for a move towards a transformational leadership style.

Follower statements that suggested that *“they don’t come back to you and say let’s just get the facts, some of them really need to get a backbone when it comes to confrontation, they have got double standards, siding, if I can use that word with other parties, a lack of consultation, they lack knowledge in dealing with people, they have difficulties in dealing with their employees, consistently feeling that you have to justify yourself, also bad information sharing, they don’t share information, that is a big problem”* allowed the researcher to understand the nature of problematic leader-follower exchanges and relationship concerns. In this regard followers also found it unacceptable when leaders were money-driven leaders, lacked work passion, were unable to handle confrontation, showed a lack of backbone, were always on the defensive and exhibited poor conflict management. Leaders were furthermore rated in terms of growth areas being, acknowledgement of follower achievements and

efforts, advocating the “we” and not the “I” in team, fostering and promoting people growth, positioning individuals for success, developing others, energising others, empowering others, inspiring others, motivating others and improving the morale of employees. Successful leadership in effective teams required from leaders to ensure earnest follower involvement (guided by leader authority, motivation and attention).

Successful leadership in effective teams required from leaders to appreciate the impact of the work environment on positive follower perceptions. Features of an undesired work environment (described from a team perspective) were presented as *“no accountability, managers are more reactive they’re not proactive, I feel like I don’t trust, not willing to listen, militaristic, still within the company for years still being corrupt, not too sure what you are supposed to be doing or who you are supposed to be listening to”*. Followers commented that leaders *“have difficulties in dealing with their employees, not willing to change, don’t give you the authority, lack of dedication”* and also did not facilitate a preferred work environment. Follower ratings suggested that leaders must improve their abilities to become more rational (able to think and make decisions based on reason), practical (concerned with the actual doing of something rather than with theory), down to earth (with no illusions or pretensions; practical and realistic), pragmatic (treating things in a sensible and realistic way to produce results), tactful (skill and sensitivity in dealing with others or with difficult issues), dependable (trustworthy and reliable), efficient and effective (producing the intended result, making a strong impression), consistent (unchanging in nature) and dependable (trustworthy and reliable). Successful development in these could ensure a more supportive and conducive work environment.

An understanding of leadership behaviour qualities that did not promote positive and increased followership was used to identify, assess and describe undesired leadership behaviours. Mentioned approach relied on recent experiences and expectations of leadership behaviours found, reported and rated by followers within the operational environment. Evidence of compliance with these desired traits and behaviours existed. However scope and opportunity for further development were identified. Common leader traits that had to be developed were listed as pragmatic (treating things in a sensible and realistic way to produce results), practical (concerned with the actual doing of something rather than with theory), contemporary thinking (thinking about current, present and pressing matters), engaging personality (charming and attractive or capturing attention), efficient (able to work well without wasting time and resources, producing a satisfactory result), dependable (trustworthy and reliable), loyal (showing firm and constant support to a person), just (characterised by right and fair behaviour), honest (free of deceit, truthful and sincere),

efficient and effective (producing the intended result, making strong impression), interesting (holding the attention, causing curiosity), consistent (unchanging in nature), charismatic (exercising a compelling charm which inspires devotion), cooperative (mutual assistance in working towards a common goal) and agreeable (pleasant and enjoyable, prepared to consent). Common leader behaviours that had to be developed were aimed at using resources effectively, supporting supports employees, identifying opportunities, acting in a timely manner, allocating resources, providing advice to employees, providing the necessary resources for the team to succeed, acknowledging achievement/effort, being cooperative, gathering all information, sharing the vision, acting proactively, addressing team members' issues/problems, maintaining a competitive edge, seeking to understand, illustrating trust, challenging others in a constructive manner, lending a helping hand/voice, creating a comfortable working atmosphere, showing genuine concern, giving and soliciting feedback, remaining humble/modest, fostering and promoting people growth, positioning individuals for success, evaluating all options, acting in a charismatic/charming manner, developing others, remaining open-minded, recognising talent, ensuring creativity and innovation, communicating openly, motivating others, evaluating talent, determining people's needs, learning about others, inspiring and energising others, serving as a role model, removing barriers, building leaders, improving the morale of employees, empowering others and ensuring involvement in community initiatives. It was postulated that leadership training and development aimed at developing, strengthening and inculcating these leadership behaviour qualities may inspire positive and increased followership.

Followers highlighted role modelling as specific desired leader behaviour. In support it was mentioned by followers that they do not appreciate leaders that they *"don't trust, is not willing to change, is militaristic, does not care about the team, don't actually have a clear direction, don't empower their employees, kills your morale, are non-approachable, avoid conflict, lack of consultation"*. The existence of these follower experiences and expectations suggested motivation for transformational leadership development.

6.8. Behaviour imperatives synonymous with effective leadership from a follower mental model perception

Miller, Nunnally and Wackman (1998) state that self-awareness enables a person to process information that he or she already has regarding a specific phenomenon more effectively. In this regard it was found that descriptive statements provided by followers suggested their use of sensory data. Mentioned sensory data were interpreted by followers and presented as impressions, conclusions and assumptions. Followers also expressed their feelings

which involved an emotional or affective response to the sensed data received and the meaning assigned. Followers also indicated their needs and wishes regarding leadership changes desired.

A description of emotional bonds between followers and leaders from a follower mental model perspective also allowed for insight into followers' introspection and cognition regarding leadership. Mentioned insight facilitated understanding of followers' current shared mental models and individual mental models in use (with reference to inspiring behaviours). Comments received from followers suggested that leaders *"will just see what the problem is and approach the person providing help or ask the person if they can help, very open, good communicator, not overbearing, a clear vision, very honest and very direct with everybody, encouraging behaviour, a motivating behaviour, I think also recognising, there is always good in what they do especially sometimes when you are faced with that unusual situation they will help you out"*. These statements suggested that follower comments were shaped by individual needs with reference to effective communication, motivating behaviours and leader helpfulness. Evidence of shared mental models (from focus group interviews) characterised leaders as *"people who are very approachable, who knows the system and who is really not afraid of assisting you, I have really seen leaders with very, very good leadership skills and manager skills, you know what is expected and you know what to expect, eliminates the frustration and looking down"*. These statements suggested that focus group comments were shaped by respect, assertiveness, motivation and inspiration. Mentioned feedback also helped to identify underlying implicit and common theories of leadership. These were descriptive of desired leader role-model actions, inspirational leader qualities, showed encouragement of followers, support for desired leader sentiment, successful leader-follower interaction, improved leader communication and a desired work focus.

Follower feedback assisted in creating an understanding of how leadership behaviour is identified and cognitively evaluated (with reference to inspiring behaviours). Mentioned feedback dealt with how leaders managed teams, the nature of positive leader-follower exchanges and relationships. Follower statements such as *"who listens to other people, who values the contribution made by other team members, values the contribution made by other team members, you feel unsure as a team player, member"* provided evidence that leaders managed teams in a desired manner. Follower statements such as *"they give praise, keep their people informed, approachable but they can approach you too, support of the staff and involvement of the staff, not overbearing, a clear vision, very honest and very direct with everybody, they are caring, interested in people and in the job"* provided evidence

of positive leader-follower exchanges and relationships. Mentioned behaviours were also presented and described in terms of preferences for positive social relations, encouragement of followers, positive leader sentiment, leader empathy, collaborative effort, work focus, work relations, inspirational leadership, leader role-modelling, effective leader delegation, effective information sharing, desired decision-making, rule following, follower development and excellent leader communication.

The impact of the work environment on positive follower perceptions from a follower mental model provided for meaningful findings. It was found that these could also be viewed as critical emotional competencies of effective leadership. Favourable characteristics of the work environment were noted as *“stability, one day it will be this way the next that way, come to them as an equal people, support of the staff and involvement of the staff”*. In terms of the emotional perspective it was noted that *“leaders are structured, well structured rather, will go according to the book, sets an example then tell me to do stuff, open and honest communication, there is always good in what they do especially sometimes when you are faced with that unusual situation they will help you out”*. In this regard it was understood that effective leadership relied upon a positive teamwork orientation, professional actions, an open-door policy, conflict management abilities, being approachable, positive and always willing to help others. Satisfying a need for leader assertiveness required from leaders to be assertive, authoritative, outspoken, driven, competitive, powerful/strong (having great power-basis, having a strong effect on people), fast-thinking and bold (confident and brave, fearless and adventurous). In terms of the approachability of leaders it was noted that leaders needed to show or cause strong feelings or beliefs, have a pleasant appearance or manner and be eloquent (persuasive in speaking and writing or indicating something).

Leader behaviours that showed promise for increased follower performance and leadership behaviour qualities that could evoke positive followership were recognised. Followers assessed inspiring leadership behaviours (from a follower mental model perspective) and found that leaders *“give praise, keep their people informed, communication channels are open, leading by example, be trustworthy, behave fairly, are honest they are outspoken, approachable but they can approach you too, are structured, well structured rather, willing to listen, willing to learn and being opinioned, come to them as an equal people, support of the staff and involvement of the staff”*. Followers also rated specific leader traits (assertiveness, outspokenness, dedication, controlling, driven, disciplined, enduring, coherent, focused, analytical and passionate) and behaviours (confidence, assertiveness, professional, decisiveness, focused, responsible and adaptive to changing environments) in this regard in a favourable manner.

Follower reports confirmed that their individual and collective personal and emotional events, experiences and interactions with leaders assisted in shaping and framing espoused follower mental models. Insight into individual and shared follower mental models suggested that followers found leadership to be acceptable when leaders provide evidence of desired characteristics synonymous with dedication, cooperation, pragmatism, assertiveness, support and charisma.

6.9. Behaviour imperatives synonymous with less effective leadership from a follower mental model perception

Jones (1998) acknowledges that each of us has, in our relations with other people, a more or less consistent set of assumptions that we make about other people and about ourselves and that our philosophies may be inferred by observing us relating to other people. Followers thus related to leaders in terms of influence, power, rewards, reinforcement, manipulation and conditioning.

A description of emotional bonds between followers and leaders from a follower mental model perspective also allowed for insight into followers' introspection and cognition regarding less effective leadership. Mentioned insight facilitated understanding of followers' current shared and individual mental models in use. In this regard comments such as *"leaders being negative towards the situation of handling a situation, not building a good relationship with your employers, don't feel a comfort level to speak, not able to trust, not being able to speak to or not being able to lead, don't know how to lead, not being able to delegate, rule by terror"* did not support successful leadership. Focus group comments were also less inspiring and highlighted occurrences such as *"one day it will be this way the next that way, you feel unsure as a team player, member, they have not tried to fight the fight; they don't consult and say OK we have this on the table how do we, and with that restrict people to be innovative, it's really sort of demoralising, not engaging or shall I say leaders are not engaging with us, there is not much consultation, there is no structure in place, it goes back to demoralisation, no motivation, they always fail us, up there somewhere"*. It became evident that followers were not content with poor leader sentiment, leader-follower interaction, empathy, teamwork, work relations, motivation efforts, delegation, decision-making and communication. Undesired follower development and follower support were also mentioned in this regard. Mentioned feedback also acknowledged underlying implicit theories of leadership associated with less effective leadership. These were influenced by

mentioned characteristics and followers subsequently concluded that these were not supportive of successful assertive, pragmatic and transformational leadership.

Follower feedback assisted in creating an understanding of how leadership behaviour is identified and cognitively evaluated (with reference to less effective behaviours). Mentioned feedback dealt with how leaders lacked effective team skills, the nature of less effective leader-follower exchanges and unsuccessful relationships. Less effective team behaviours were mentioned as being *“they forget about the people and when they were part of the workforce, think of themselves as OK I am in authority and then you are under authority, you feel unsure as a team player, member”*. Undesired leader-follower exchanges were evident in claims that leaders show *“closed doors of personality, it’s really sort of demoralising, not engaging or shall I say leaders are not engaging with us”*. Statements signifying problematic relationships illustrated a presence of *“those leaders that have the favourites obviously they only look at the favourite, rule by terror, I would say too strict, leading through fear and not actually through respect, dictatorship somebody that you fear more”*. Followers suggested improvements in terms of showing allegiance and attachment to a course of action, being free of deceit, thinking about current, present and pressing matters, being pleasant and enjoyable, prepared to consent, showing loyalty, being cooperative, just and patient. Leaders were also required to improve their social skills, show greater curiosity and cultivate an engaging and charismatic personality. In summary it was found that valuable team skills, desired leader-follower exchanges and constructive relationships were identified by followers as essential leadership development focus areas.

The impact of an undesired work environment on follower perceptions from a follower mental model provided for meaningful findings. It was found that these could also be viewed as critical emotional competencies associated with less effective leadership. The work environment was described as having *“no clear roadmap or vision of where the department is supposed to be moving, not being able to plan, as I said not being able to focus and being just too personal, they won’t respond to the email, they will just call you so that there won’t be proof that you’ve been communicating, every situation we experience they change the rule book, there is no effective communication, one day it will be this way the next that way, you feel unsure as a team player, member, they always fail us, up there somewhere”*. Statements that directed attention to the emotional aspects of undesired leadership described leaders as being *“unable to provide direct answers, only have rumours to work on, not generalise because we all have different issues and different problems, it’s really sort of demoralising, not engaging or shall I say leaders are not engaging with us, there is not much consultation”*. Overall, leadership improvements in terms of leader motivational efforts,

leader sentiment, leader-follower interactions, leader communication and work relations were noted.

Undesired leader behaviours that could threaten follower performance and leadership behaviour qualities that did not evoke positive followership were recognised. In this regard comments suggested that leaders were *“being unapproachable, fear of the militaristic thing again, too much work orientated, should I rather say dishonesty, think of themselves as OK I am in authority and then you are under authority, they don’t listen to what you have to say, you feel unsure as a team player, member, they don’t consult and say OK we have this on the table how do we and with that restrict people to be innovative, it’s really sort of demoralising”*. Followers assessed less effective leadership behaviours (from a follower mental model perspective) and found that leaders need to act more respectfully, be more courteous, inform employees, be more cooperative, request follower feedback, support employees, be more humble and respecting, become more pragmatic, illustrate contemporary thinking, be efficient and effective, act consistently and be prepared to consent when required.

Again, it was found that followers’ individual and collective personal and emotional encounters, occurrences and episodes with leaders assisted in shaping and framing espoused follower mental models. Insight into individual and shared follower mental models suggested that followers found leadership to be less successful when leaders only emphasised transactional aspects and failed to provide sufficient evidence of desired characteristics synonymous with commitment, teamwork, practicality, assertiveness, support and an alluring personality. According to Conger and Kanungo (1998), Bass and Steidlmeier (1999), Weierter (1997) and Tepper (2007) leaders may be viewed as being ineffective and destructive if they are narcissistic, ignore reality, overestimate their personal capabilities, disregard the views of others, are self-serving, behave unethically and act immorally.

6.10. Behaviour imperatives synonymous with effective leadership in a specific context

Understanding of followers’ current individual and shared mental models were of interest to the researcher. In this regard, the emotional bonds between followers and leaders as well as an understanding of followers’ introspection and cognition regarding leadership within the workplace were considered essential. Followers commented on leaders and their leadership as *“this leader then stood up for her people or for this specific person, a very fair and very firm person, is very compassionate, there is always good in what they do especially*

sometimes when you are faced with that unusual situation they will help you out". In this regard leaders were witnessed as being inspirational, illustrated concern for followers and created a sense of pride. From a collective perspective followers commented that *"there are leaders that want change, they are competent, they are caring, interested in people and in the job"*. Moreover it was found that leaders received excellent trait ratings in terms of being passionate (having, showing, or caused by strong feelings or beliefs), personable (having a pleasant appearance or manner) and eloquent (persuasive in speaking and writing or indicating something). Furthermore leaders were favourably rated in terms of supportive behaviours that included being able to resolve conflicts, being professional, accessible (have an open-door policy), approachable, positive and willing to help others. Evidence suggested that positive constructs patterned by workplace experiences and expectations guided followers' introspection and cognition regarding leadership within the workplace.

An understanding of how leadership behaviour was identified and cognitively evaluated (with reference to inspiring behaviours) with reference to teamwork, leader-follower relations and the work environment was achieved. When considering these leader behaviours it was noted that thoroughness, follow-through, a team orientation and delegation transpired as highly rated leader behaviours. Encouraging comments supportive of teamwork, leader-follower relations and the work environment served as further evidence. In terms of effective teamwork it was reported that *"an effective leader considers the situation at hand and not blame me for anything that goes wrong in that, to identify what potential you've got in your staff, person is being recognised or being rewarded for their hard work"*. Desired leader-follower relations were evident in *"he will come back with what or with the same question and then we reopen so that everyone has time to cool down and he does it as well, actually took the criticism as well as all the feedback and she actually developed on that, took initiative there in solving that I really thought it was a little issue, leaders will help you with your private affairs or matters"*.

Comments that described a conducive work environment included *"we have a good relationship where the roster is fair and everybody works the same, you could go to her and talk to her, I mean I got my salary thing sorted out with her, better roadmap of where the department is going"*. Leaders were also rated high in terms being hard-working, dedicated, focused, disciplined, organised, productive, coherent, persistent, willing to take action and able to deal with something unexpectedly. These traits were viewed as qualities that had a positive influence on teamwork, workplace relationships and a dynamic work environment. In further support of this statement it was noted that leaders' assertiveness traits (being authoritative, outspoken, driven, in-control, competitive, fast-thinking, bold, having a great

power-basis and having a strong effect on people) were rated as excellent. Followers displayed their individual and collective abilities to critically evaluate leadership as applicable to teamwork, leader-follower relations and the work environment. It was surmised that leaders contributed in a convincing manner in this regard.

An understanding of emotional competencies of effective leadership, how followers assess inspiring leadership behaviours and leader motives permitted the identification of leadership behaviour qualities that evoke positive followership. A required emphasis on the workplace was possible in terms of experiences, ratings and expectations offered by the three vocational groups. A focused presentation based on the analyses of vocational groups followed (mindful that there was no statistically significant difference noted between groups). Common leader trait items such as being assertive, outspoken, dedication, in control, driven, reliable, disciplined, hard-working, focused, analytical, enduring, passionate, authoritative, coherent, well spoken and fast thinking were rated as leadership qualities that evoked positive followership. Behaviours such as being confident, in charge, assertive, outspoken, straightforward, successful, professional, decisive, focused hard-working, responsible and aware of the company's values and leading in that direction were also rated as leadership qualities that evoked positive followership. These findings also contributed to an appreciation of followers' implicit theories of leadership that suggested a preference for transformational, assertive and pragmatic leadership styles.

6.11. Behaviour imperatives synonymous with less effective leadership in a specific context

Darioly and Schmid Mast (2011: 239) found that having a task-incompetent leader affects not only the followers' perception of the leader, but also how the follower interacts with the leader. A poor leader-subordinate relationship reduces individual well-being, affects team performance, contributes to workplace stress and impacts on the company as a whole (Darioly & Schmid Mast, 2011: 240 and Hogan, 2007).

If followers know the weaknesses of leadership, they can accurately predict the problems that may subsequently evolve (Gagliardi, 2007). With reference to less effective leadership, an understanding of followers' current individual and shared mental models in use were of significance to the researcher. In this regard the emotional bonds between followers and leaders as well as an understanding of followers' introspection and cognition regarding less effective leadership were sought. Followers viewed comments such as *“whole situation and that lead to a very low morale, the lack of communication, you've got no reason to question, I*

said it's favouritism they have their favourites, it's really sort of demoralising, they always fail us, up there somewhere" with less enthusiasm because these were considered indicative of inherent operational leadership shortcomings. Furthermore leaders received less favourable ratings in terms of supportive behaviours that included being respectful, courteous, cooperative, supporting, informing, caring, trusting, helpful and being humble/modest. Leader behaviours such as respect, courtesy, information sharing, cooperation, feedback skills, employee support, care, modesty, open-mindedness and showing genuine concern were considered by followers to be less prominent in the workplace. Evidence suggested that constructs shaped and influenced by undesired workplace experiences and expectations guided followers' introspection and cognition regarding ineffective leadership within the workplace. Followers' current individual and shared mental models in use were influenced by considering a holistic view of workplace experiences and expectations. Attention was afforded to both people and work perspectives. Subsequent follower feedback (reports and ratings) were based on their own operational experiences. Mentioned valuable experiences and expectations stressed the importance of successful leadership in the workplace.

An understanding of how less effective leadership behaviour was recognised, characterised and cognitively evaluated (with reference to less effective leader behaviours) with reference to unproductive teamwork, bleak leader-follower relations and an ineffective work environment was achieved. In terms of unproductive team efforts it was noted that *"doesn't want to give some of the responsibilities to one specific person, not making use of the resources underneath you, a leader to be screaming at others, staff or at another leader right in public, I don't think that is good leadership skills, a problem of the managers not listening to our complaints or our thoughts or our way of doing things"*. Undesired leader-follower relations were supported by statements of *"managers try to interfere in other people's duties, I felt like I can't even approach him with anything, got three managers but each one of them tells me a different thing, cannot do anything because we are scared of victimisation, said very disturbing words for a senior employee of the company, would choose to shout at you on the spot and maybe confront you in front of everybody which is not preferably a nice thing to do"*.

Work environment concerns were described as *"good ideas get shot down for nothing, there was a very militaristic response, it's really sort of demoralising, not engaging or shall I say leaders are not engaging with us, there is not much consultation, there is no structure in place, it goes back to demoralisation, no motivation"*. Rated leader behaviours identified areas for improvement; these included identifying opportunities, being cooperative, sharing

the vision, thinking creatively, seeking knowledge, communicating coherently, ensuring cooperative initiatives and acting in a strategic manner. A need to foster better teamwork, nurture people growth, develop, energise, inspire and empower others, improve morale and build leaders were also rated as developmental areas. It was also recommended by followers that leaders enhance their charismatic/charming manners, teach-by-doing, become more trustful and reliable, challenge others in a constructive manner and serve as a role model. It was concluded that followers were able to critically evaluate leadership as applicable to teamwork, leader-follower relations and the work environment. Followers accentuated the important role of successful leadership in the workplace and the need to continuously develop desired leadership within the workplace.

An understanding of emotional competencies of less effective leadership, how followers assessed apathetic leadership behaviours and leader motives permitted the identification of leadership behaviour qualities that did not evoke positive followership. Problematic leader motives and behaviours were evident in statements of *“our leader is not in a good mood for that day, good ideas get shot down, we are scared of victimisation, choose to shout at you, will talk around that question and put little stories around it and he entertains you for a half an hour about the same question but by the time that they leave he’s given you no answer, no direct answer”*. The importance of specific workplace experiences, examples and insights were also highlighted in this regard. A purposeful presentation based on the analyses of vocational groups followed in this instance (mindful that there was no statistically significant difference noted between groups). Common leader traits such as being more pragmatic, practical, efficient, effective, engaging, just, dependable, honest, loyal, charismatic, cooperative and agreeable were identified as in need of development.

Common leader behaviours such as using resources effectively, supporting employees, seeking opportunities, acting in a timely manner, allocating resources, providing advice to employees and providing the necessary resources for the team to succeed were noted. Furthermore acknowledging achievement/effort, being cooperative, gathering all information, sharing the vision, acting proactively, addressing team members’ issues/problems, keeping a competitive edge, seeking to understand and being trusting were also noted. Challenging others in a constructive manner, lending a helping hand/voice, creating a comfortable working atmosphere, showing genuine concern and soliciting/giving feedback were furthermore noted. Being humble/modest, fostering/promoting people growth, positioning individuals for success, evaluating all options, acting in a charismatic/charming manner, developing others and remaining open-minded were also observed as common leading behaviours. Recognising talent, being creative/innovative, communicating openly,

motivating others, evaluating talent, determining people's needs, learning about others, inspiring others, energising others, serving as a role model, removing barriers, building leaders, improving the morale of employees, empowering others and being involved in community initiatives were also identified as areas to be further developed and enhanced. These findings provided insight and understanding of followers' implicit theories of leadership. Again, it became evident that a partiality towards transformational, assertive and pragmatic leadership styles could be confirmed.

6.12. Leader and leadership behaviour qualities, contextualised within the Air Traffic and Navigation Services Company

Ilies, Morgeson and Nahrgang (2005), Fairholm (2004), Hollander (1992a & 1992b), Hill and Lineback (2011), Northouse (2007) and Allio (2009) recognise the importance of positive leader-follower relationships as these relate to productive work environments and satisfaction within the workforce. Follower perspectives provided detail of actual workplace realities (Hollander 1995 and Castro, Perinan & Bueno, 2008: 1842), which were used to define and conceptualise leadership. Leader behaviours were cognitively evaluated, interpreted and labelled by followers. A need to meet organisational objectives concerning safety within the operational workplace (context) was described by followers as a primary concern. A need for both successful leadership and teamwork guided by vocational professionalism was stressed. A realisation that leaders had to understand and accept their organisational, team and employee roles and responsibilities emerged. Specific follower perspectives associated with these mentioned leader and leadership roles and responsibilities were regarded as essential in order to understand constructed realities derived from and within a specific context.

Followers relied upon their individual and shared mental models to identify, reflect, describe and present leader and leadership behaviour qualities. Mentioned mental models represented specific mental representations of information on reality, which encompassed the specific context and which gave sense and meaning to it. Constructed realities had to be understood as a result of followers' introspection and cognition regarding leadership. These were shaped and guided by desired and undesired leadership observed, experienced and perceived in the workplace. Shared mental models encompassed four specific types (Cannon-Bowers & Salas, 2001 and Chou, Wang, Wang, Huang & Cheng, 2008: 1716), being task-specific knowledge, task related knowledge, knowledge of teammates and knowledge of attitudes and beliefs. Furthermore followers stated respect for formal leader positions, understood that following allowed for organisational goal achievement, a need for

leaders that provided advice, order and meaning and wanted to identify with successful leaders. However evidence of an empowering leadership behavioural type (Pearce & Sims, 2002: 175) adopted by followers was not evident. According to Collinson (2006: 183) and Shamir (2004) these follower motivations can be viewed as examples of conformist selves.

Followers revealed knowledge and expertise that enabled them to structure and communicate opinions of leadership and leader behaviours based upon their own reflective realities. These reflective activities suggested a connection to Senge's (1990a & 1990b) discipline of mental models (Agashae & Bratton, 2001: 92). These contextualised realities shared a common basis, characterised by an understanding of follower rights, the importance of effective relations at work, role-modelling needs (follower and leader-inspired), significance of own beliefs and the necessity for vocational professionalism. Followers' descriptions of leadership illustrated that leaders influenced others in terms of their actions, thoughts and feelings. Followers described themselves as being obedient, passive and compliant. Followers therefore identified themselves as conformers (Tepper, 2007 and Padilla, Hogan & Kaiser, 2007: 179). Conformers typically comply with authoritative leaders out of fear (Tepper, 2007 and Padilla, Hogan & Kaiser, 2007: 179). A "willing-follower" role was identified that emphasised leader dependency. In this regard leaders were perceived to manage by exception, which referred to the idea that they were less interested in changing, or transforming the work environment, or employees, but attempted to keep everything constant except where problems occurred. Leader-follower relationships at an emotional level had not yet evolved as an emotional leader-follower bond.

Leadership behaviour qualities that evoked positive followership had to be understood in terms of supporting leader behaviours and emotional intelligence, as well as leadership styles (Graen & Cashman, 1975, Castiglione, 2006, Yukl, O'Donnell & Taber, 2009: 292 and Winsborough, Kaiser & Hogan, 2009). Desired leader and leadership roles and responsibilities captured within a particular context and interpreted from a specific perspective were found to be aligned to assertive, supportive and transformational leadership preferences. It was noted that a process of review and change corresponded with views held by Crawford (2005: 8), being that transformation should be based on empathy, understanding, insight and consideration exhibited by leaders; not manipulation, and power-wielding. Desired leader behaviours illustrated a need for employee support, advice to employees, positioning of individuals for success, inspiring and energising others and providing a helping hand/voice. Positive leader influences, aspirations, individual considerations, teamwork efforts as well as a specific work focus emerged as central tenets of a preferred leadership style. According to Castaneda and Nahavandi (1991) followers

who perceived their leaders' behaviours to exhibit both successful relationship and task orientations reported being the most satisfied and content (Madlock, 2008: 62). Work/task-based and directed leader-follower relationships were highlighted. However these were only considered to be work-focused and outcome-based. These were "doing" competencies (Osbaldeston, 2010: 37) that allowed leaders to cope with constant pressures to deliver. A need for socialising with leaders was highlighted, more focus on employee needs was required and improved relationship building and better teamwork efforts were considered essential. A need for "being" competencies (Osbaldeston, 2010: 37) was identified in terms of leaders' cognitive complexities, emotional energies and psychological maturities. Followers' introspection and cognition signified a need and readiness for an emotional/social bond. It is the role and responsibility of leaders to foster a relationship between themselves and followers within a social group (Andrews & Field, 1998: 128, Haslam, 2001, Van Knippenberg & Hogg, 2003, Mushonga & Torrance, 2008, Hur, 2008 and Winsborough, Kaiser & Hogan, 2009). Despite this awareness, a follower-inspired and derived definition and conceptualisation of followership did not illustrate compliance with a transformational leadership style. Furthermore the impact of followership on leadership did not suggest compliance with perceived transformational followership (in response to transformational leadership).

6.13. Leader and leadership behaviour qualities that inspired followership, contextualised within the Air Traffic and Navigation Services Company

Knight, Shteynberg and Hanges (2004), Gray and Densten (2007), Senge (1990a & 1990b) and Agashae and Bratton (2001) agree that followers' performances can be enhanced by leaders' behaviours that fulfil followers' personal needs. Fulfilled follower needs provided evidence of leadership behaviour qualities and characteristics that inspired followership. Follower agreement was apparent in terms of acceptance and purposefulness of identified leader trait (dedicated, practical, cooperative, assertive, personable and analytical) and behaviour factors (focused, supportive, developer, advisor, competitive, delegator and charismatic).

Noteworthy rated leader traits and behaviours provided information pertaining to desired and existing leadership strengths. According to follower feedback, leaders displayed strong and convincing feelings and beliefs in terms of the organisational goals. Higgs (2003: 278), Glynn and Jamerson (2006) and Van Dick, Hirst, Grojean and Wieseke (2007) agree that leadership competence is inclusive of enabling, focused visioning, engagement and inquiring skills. Leaders were found to be analytical, persistent, hard-working and dedicated. Leaders

acted professionally, strived for success and remained goal-focused and driven. According to Bender (1997) and Bushe (1998) leaders evoke positive and desired followership when they set and describe a vision that is energising and signifies a possible and prosperous future to all concerned parties. Leaders could thus improve followers' achievements by developing and articulating a compelling vision (De Cremer & Van Knippenberg, 2002 and Van Dick, Hirst, Grojean & Wieseke, 2007: 136).

Leaders showed a disciplined, thorough and controlled form of behaviour. Hill and Lineback (2011) and Osbaldeston (2010) agree that successful leaders need to effectively manage themselves as dedicated and cooperative leaders; including human and caring relationships and influencing abilities. Leaders displayed an ability to communicate clearly, consistently and logically. When leaders communicate effectively they win the confidence of followers, which in turn facilitates communication success between the leader and follower (Pavitt, 1999, Moore & Beadle, 2006, Spell & Arnold, 2007, Wright & Goodstein, 2007, Van Dick, Hirst, Grojean & Wieseke, 2007, Flynn, 2008 and Madlock, 2008: 61). In this regard, Newcombe and Ashkanasy (2002) also found that leaders' emotional expressions are more important to followers than the objective content of their communication. Leaders were found to be helpful, organised and productive. Wiley and Brooks (2000: 177 & 178) found that the more energised and productive the workforce, the greater the satisfaction of customers and the stronger the long-term business performance of the organisation.

According to Van Vugt (2006: 367) good leadership correlates with traits and actions that encourage initiative taking (such as ambition, boldness, dedication and self-esteem) and competence. Leaders were found to be enduring, positive, active and perceptive. According to Davidovitz, Mikulincer, Shaver, Izsak and Popper (2007: 646) effective leaders are sensitive and responsive to their followers' needs, provide advice and support followers' desires to take on new challenges. Leaders were rated as being responsible, assertive, authoritative, driven, in control, competitive and bold. Moreover leaders were found to be accessible, approachable and to have a pleasant appearance and manner. Ilies, Morgeson and Nahrgang (2005: 283) maintain that the personal integrity of leaders contributes to better relationships and trust on the part of their followers. Leaders displayed an understanding of the significance of teamwork. According to Hill and Lineback (2011) leaders need to build high performing teams.

Followers expressed a need for favourable relationships in the workplace. Such relationships had to consider organised, focused and dependable teamwork, cooperative efforts (inclusive of trust, fairness and assertive traits) and be driven by a common objective.

A desire to have both workplace (task-focused) and personal (emotional focused) inspired relationships was evident. Followers' feedback from individual interviews and focus group interviews stressed the need and value of social relations between the leader and follower. According to Lang (2001: 55) it is critical for a leader to manifest influence through the followers' emotional bond with the leader. Followers were content with leaders' focus, concern and efforts in support of aviation safety. In this regard rule-following practices, good problem-solving skills and decision-making skills exhibited by leaders were highlighted. Mentioned supported the ATNS mission, which is to provide safe, expeditious and efficient Air Traffic Management solutions and associated services (ATNS, 2010). ATNS also accentuated that management and leadership behaviours needed to be aligned to the organisation's objectives (ATNS, 2009b).

Followers stated that motivation and follower-support provided by leaders had to be acceptable to followers and also encourage follower performance. According to Padilla, Hogan and Kaiser (2007: 179) leadership relies on an individual's motivation, assertion and ability to lead, subordinates' desire for direction and authority and events calling for leadership. According to followers, leaders that exhibited people skills managed in an encouraging, helpful and caring manner (positive emotions). These leaders were also found to handle conflict situations successfully. George (2000) found that leaders who possessed high emotional intelligence (enthusiasm, excitement, optimism, cooperation, empowerment and trust) were better able to benefit from positive moods and emotions due to constructive interpersonal relations (George, 2000). Leaders that emphasised teamwork, encouraged unity, allowed for comfortable interaction and stressed team-building and development inspired followership. In this regard it was noted that a supportive safety culture is inspired by the Air Traffic and Navigation Services Company values. These values are safety, honesty, openness, quality service, innovation, equity and teamwork (ATNS, 2010).

Followers reported that assertive and driven leaders who led-by-example, strived for ideals, executed plans, focused on work outcomes/objectives, displayed a "can do" attitude and were solution-focused were admired and preferred. Furthermore these leaders also provided support, space and opportunity to employees to work towards and realise the desired end-results. In this regard Higgs (2003: 278) affirmed that successful leaders were dedicated, reliable, dependable, willing, cooperative, self-aware and displayed integrity. Followers commended leaders who were helpful, a role-model, trustworthy, honest and humble. According to Graen and Cashman (1975), Castiglione (2006), Yukl, O'Donnell and Taber (2009: 292) and Winsborough, Kaiser and Hogan (2009) setting an example of exemplary behaviour for subordinates and modelling behaviours that reflect the leader's

values and standards are supportive of effective leadership. Followers also indicated a readiness towards delegation. According to Baicher (2005: 40) and Sendjaya and Pekerti (2009) transformational and servant leadership integrate aspects such as influence, vision, trust, respect or credibility, delegation, integrity and modelling. Leaders that shared information served as a source of information and encouraged followers' free-flow of ideas and conversations were praised by followers.

Gao, Li and Clarke (2008: 4) found that organisations had an interest in using both the business knowledge owned by the organisation and the personal knowledge of their employees to improve business performance through their ability to generate and implement ideas (De Jong & Den Hartog, 2007: 41). Charismatic leaders found to be fair, compassionate, non-autocratic, non-discriminatory and involved in the work were admired. These leaders also emphasised follower development and interests and maintained discipline. According to Avolio and Bass (2002) leaders need to become role models who are admired, respected and emulated by followers. Finally leaders that displayed good communication skills (created rapport, ensured correctness of information, being good listeners and being approachable) inspired followership. According to Hall and Lord (1995) and Madlock (2008: 61) successful communication by leaders is considered to contain both affective and cognitive strategies. The importance of successful communication was emphasised by Osbaldeston (2010) with reference to the importance of communication to the leader when processing and making sense of complex issues and changing situations.

Leader and leadership behaviour qualities required for the success of the Air Traffic and Navigation Services Company's Safety Management System were described as collaborative efforts aimed at sharing responsibility to ensure common focus, mutual support, enabling conditions, safe practices and continuous improvements as applicable to an excellent safety management system. It could be stated that followers found leader support and follower development to be important and desired characteristics of a successful leader. According to Higgs (2003: 278), Glynn and Jamerson (2006) and Van Dick, Hirst, Grojean and Wieseke (2007) leadership competence is inclusive of enabling, focused visioning, developing people, engagement and inquiring skills. According to Stone, Russell and Patterson (2004: 354) and Matteson and Irving (2006) both transformational leaders and servant leaders show concern for their followers. However the focus of the servant leader is upon service to their followers and the focus of the transformational leader is to get followers to engage in and support organisational objectives.

Follower feedback signified a need for charisma (vision, trust, respect, risk-sharing, integrity and modelling), individual consideration (personal attention, mentoring, listening and empowerment), intellectual stimulation (rationality, problem-solving and decision-making) and inspiration (commitment to goals, communication, encouragement, motivation and enthusiasm), thus emphasising transformational leadership. Furthermore followers considered an assertive and transformational approach as preferred leadership styles. Four primary behaviours that constitute transformational leadership are idealised influence, inspiration/motivation, innovation and personal attention to followers based on the individual follower's needs for achievement and growth (Kent, Crofts & Azziz, 2001, Higgs, 2003, Avolio & Bass, 2002, Barbuto, 1997, Bass, 1985 and Bass & Avolio, 1994). In this regard it was found that transformational leadership emphasised the importance of appreciating and valuing people, listening, mentoring or teaching and empowering followers (Baicher, 2005, Matteson & Irving, 2006, Parolini, Patterson & Winston, 2009, Hater & Bass, 1988, Stone, Russell & Patterson, 2004, Barbuto & Wheeler, 2006, Herman, 2010 and Savage-Austin & Honeycutt, 2011).

6.14. Leader and leadership behaviour qualities that discouraged followership, contextualised within the Air Traffic and Navigation Services Company

Leader behaviour was cognitively evaluated, interpreted and labelled by followers. Experienced leadership behaviours and qualities shaped followers' mental models and subsequently facilitated critical evaluations of leadership contextualised within the Air Traffic and Navigation Services Company.

To remain competitive ATNS will need to improve ways of doing business, reduce aviation's impact on the environment, improve safety, be more proactive to reduce incidents and accidents, manage information better and pay more attention to client needs. Management and leadership behaviours therefore need to be aligned to the organisation's vision, mission and objectives. Mentioned initiatives require leadership excellence. Followers' feedback from individual interviews and focus group interviews identified leader and leadership behaviour qualities within the Air Traffic and Navigation Services Company that discouraged followership.

An undesired leader sentiment characterised by little concern for followers, poor trust-relations, ignorance displayed towards followers and ineffective apologetic actions were reported by followers. Hill and Lineback (2011: 39) noted that followers may elect not to follow the leader's instructions because they may disagree with the leader, may not perceive

a similar priority, may not understand instructions, may dislike/distrust the manager/leader, may hold different views of authority or be confused. According to Northouse (2007) and Allio (2009) an optimistic, constructive and practical leader-follower relationship ensures a more productive work environment and satisfaction within the workforce. The leader-follower climate was reported as being too militaristic, undesired favouritism, dictatorial and characterised by rule-by-fear actions, low morale, unnecessary interferences, moodiness and a fear of victimisation. According to Collinson (2006: 183) followers fear unfairness, disorder, confusion, disarray and look to leaders to provide advice, order and meaning. Glaso and Einarsen (2006) argue that leader-follower relationships are influenced by encouraging and pessimistic moods, emotions and emotion-laden judgements. Undesired leader-follower interactions such as a lack of work passion and accountability displayed by leaders, lack of learning opportunities created in the workplace, excessive checking of followers' work, ineffective delegation efforts, lack of follower empowerment, lack of trust, lack of recognition and motivation, lack of leader visibility, inconsistent rule application and lacking consultation with followers were reported. According to Holcomb (2008: 779) successful leaders understand that the expectations followers have about how their leaders should behave influence the effectiveness and efficiency of the work unit. According to Osbaldeston (2010: 37) leaders need to make sense of much multifaceted and complex data from almost every source inside and outside the organisation. Associated processing and communication efforts were disrupted by leaders that tolerated rumours, were unwilling to listen to followers, engaged in poor information sharing and exhibited indecisiveness. Work relations were hampered by leaders' inability to handle confrontation, poor conflict management, acceptance of underperformance, being on the defensive and displaying poor conflict management skills.

According to Hogg, Martin and Weeden (2003) followers will endorse leaders they see as naturally embodying and supporting the values of groups with which they strongly identify and agree. According to Lynch (2001) and Parolini (2005: 5) leaders must be able to create a shared vision and rationale, motivate interest and excitement, guide individual and organisational decision-making and convey values. It was reported that not all leaders were familiar with their leader roles, lacked external networking and experienced difficulty in setting a vision for the department. Leadership descriptions and definitions included references made to the leader as an individual and the organisational context. However the network within which leadership transpires was not emphasised by followers. A tri-party culmination (Hill & Lineback, 2011) was thus not found because the networking component was underscored. According to Lytras (2005: 6) and Hill and Lineback (2011) successful individual and team dynamics formulate a contextual environment where value exchanges

are favoured and facilitated. Leadership emphasises the relationship between leaders and followers within a social group (Haslam, 2001, Van Knippenberg & Hogg, 2003, Mushonga & Torrance, 2008, Hur, 2008 and Winsborough, Kaiser & Hogan, 2009). Leaders displayed a work orientation but neglected a social orientation. In response follower isolation, poor teamwork, follower unhappiness at work, excessive strictness displayed by the leader and an unwillingness to delegate was reported. Furthermore in this regard it was noted that communication was hampered by indecisiveness, poor listening and expression skills exhibited by the leader.

A need was identified by followers that the Air Traffic and Navigation Services Company will be required to attend to those leader and leadership behaviour qualities that discouraged followership. It was suggested by followers that current leader and leadership behaviours be enhanced, enriched and developed as well as development of those areas that are absent. As stated previously follower feedback denoted a need for leaders to develop assertiveness, charisma, individual consideration, intellectual stimulation and inspiration, thus emphasising transformational leadership. Further development of specific leader traits and behaviours were proposed by followers in this regard.

Negligible rated leader traits and behaviours provided information pertaining to areas of improvement to existing leader competence. Leaders may benefit by placing greater emphasis on their dedication to their roles and responsibilities. Being more consistent and becoming more dependable, effective, efficient and through teaching others by doing may also be mentioned. Leaders may also benefit by becoming more practical. Requirements in this regard include being more rational, down to earth, tactful, friendly and pragmatic. According to Morris, Ely and Frei (2011: 161) a quest to satisfy only personal goals may lead to self-protection and self-promotion. However these do not advance desirable followership. Leaders may therefore wish to consider becoming more cooperative by displaying more contemporary thinking, increasing their allegiance, honesty, loyalty, patience and becoming more concerned with acceptable and fair behaviours. Leaders may also advance their assertiveness behaviours by taking more advantage of opportunities and by having a more graceful and elegant bearing.

According to Krantz (2006: 231) leaders must be able to deal with their own emotional pressures, stresses and fears. In addition according to Collinson (2006: 186) leaders cannot at all times control followers' perceptions and identities. In this regard leaders may wish to become more personable by becoming more energetic, sociable, interesting, charismatic, engaging and by being more charming. Leaders may also advance their analytical skills by

broadening their skills and by networking. According to Hill and Lineback (2011: 59) followers need to believe that the manager values the work performed and is competent as a leader. Leaders may therefore benefit by further developing behaviours that improve their organisational work focus. In this regard leaders would need to act in a more strategic manner (including the strategic vision), promote better cooperation and understanding, continuously seek opportunities and knowledge, act timely and become more creative and innovative. According to Korte and Wynne (1996) a deterioration of relationships in organisational settings result from reduced interpersonal communication between followers and leaders. Leaders may thus benefit by improving their supportive behaviours through acting more respectfully, being more courteous, ensuring that employees are timely informed, being more cooperative, inviting comments and feedback from others, showing concern for other's welfare, being more humble/modest, encouraging sincere and mutual trust, creating a more comfortable and favourable working atmosphere, lending a helping hand/voice, giving and soliciting more information, improving communication skills, being more open-minded, and admitting and learning from mistakes. In this regard Hill and Lineback (2011: 61 & 65) emphasised the need for followers to trust that the manager is emotionally stable and dependable. Leaders may also benefit by investing more in follower growth/development initiatives through further acknowledgement of follower achievements/efforts, improving morale, promoting and facilitating more effective and productive teamwork, positioning individuals for success, energising, inspiring and motivating others and building leaders. Hill and Lineback (2011: 60) and Osbaldeston (2010) observed the importance of a leader's political competence (knowing how to influence others). Leaders may consequently wish to improve their leadership behaviours by advancing their advisor role. Associated areas for growth and development were identified as being able to provide timely resources to complete tasks, better facilitate work/tasks, improve problem-solving and information gathering skills, act proactively, remove workplace barriers, encourage and acknowledge follower talent, participation and efforts and give timely and informed advice to employees.

According to Padilla, Hogan and Kaiser (2007: 179) destructive leadership has a selfish orientation and it is focused more on the leader's needs than the needs of the larger social group and organisation. Leaders may thus wish to improve their competitive behaviours by increased reflection on work outcomes and by being more involved in external initiatives and networks. According to De Jong and Den Hartog (2007: 56) excessive control of followers by too much monitoring, issuing commands and spending too much time on checking performance and activities may not be favoured by followers. Leaders may accordingly also need to enhance and advance their delegation/empowerment behaviours by establishing

clear strategies and understandable goals, allocating sufficient resources timely, using resources effectively, advancing efficiency and dealing better with associated follower needs, concerns and problems. According to Conger and Kanungo (1998) and Tepper (2007) narcissistic leaders that ignore reality overestimate their personal capabilities and show disregard for views held and expressed by others will not be preferred by followers. Leaders may thus benefit by further developing behaviours that improve their charisma and appeal through acting in a more charismatic, inspiring, motivating and influential manner, challenging others in an acceptable, exciting and constructive manner and enhancing their role modelling efforts.

Leadership development and learning can play a critical role in helping move a company from its current reality to its desired future destination (Bleak & Fulmer, 2009). The Air Traffic and Navigation Services Company is committed to develop, improve and employ suitable plans, policies, management systems, processes and procedures to ensure that all actions uphold the utmost level of safety performance and meet national and international standards and expectations (ATNS, 2009a). Despite this ideal it was found that leader and leadership behaviour qualities that discouraged followership existed. Mentioned were the following: managers did not consistently assume accountability, tolerated underperformance, exhibited indecisiveness, lacked clarity of goals and responsibilities, implemented inefficient business processes and lacked focus on continuous improvements (ATNS, 2009b). Furthermore non-compliance with industry best practices, inability to pursue excellence or world class status and poor succession planning were also reported (ATNS, 2009b). It will be expected of leadership to facilitate organisational and behaviour changes required by the Air Traffic and Navigation Services Company (ATNS, 2009b). According to followers' feedback these changes should encompass extensive and continuous leadership training and development initiatives directed and guided by assertive and transformational leadership styles.

6.15. Leadership training and development

Good organisational performance requires effective leadership (Banutu-Gomez, 2004). According to Masha (2013: 11) effective leaders can organise and mobilise resources and can adapt to challenges and changes effectively. Wilson, DeJoy, Vandenberg, Richardson and McGrath (2004) and Mendes and Stander (2011: 1) note that successful organisations engage in continuous learning in order to effectively address the forces impacting on those organisations. Leadership and learning play a critical role in enabling organisational growth, transformation and ultimately strategic success (Bleak & Fulmer, 2009). Effective leaders

should appreciate the present and future organisational focus and strategies by serving as operational leaders and strategic thinkers (Hartley, 2000, Carmeli & Sheaffer, 2008, Hill & Lineback, 2011 and Osbaldeston, 2010). Leadership development is about the collective leadership capacity of an organisation. Successful leadership development requires a supportive organisational environment, a learning culture and the involvement of leaders in the process of developing leaders (Mazutis & Slawinski, 2008). A goal of leadership education is to provide opportunities for people to learn the skills, attitudes and concepts necessary to become effective leaders (Huber, 2002: 27). In this study followers identified desired and discouraging leader skills, attitudes, traits and behaviours based on their experiences and expectations of leadership behaviours.

Effective leadership education depends on knowing what is required for the individual, the team, the department and the organisation as a whole. A training needs analysis is the starting point in the training process. It is the phase in which an organisation's needs are identified, forming the foundation of an effective training effort. A training needs analysis is thus considered an important phase in ensuring the effectiveness of the planned training (Knowles, 1984 and Van Dyk, Nel, Loedolff & Haasbroek, 1997). According to Goldstein and Ford (2002) and Salas and Canon-Bowers (2001) training needs analyses must precede any type of training intervention. Elbadri (2001) and Rothwell and Kazanas (1998) noted that training needs analyses not only ensures that investment in training by organisations pay, but also as the first stage in the training cycle, minimises errors possibly made in future training programmes. This research study highlighted leader-follower relations from a transformational perspective and stressed associated task/work and people/emotional relationship behaviours. Herbst and Maree (2008: 39) stated that leadership comprises both intellectual and emotional facets and both of these facets need to be attended to during the training of managers in order to equip them with sufficient leadership skills. Task-oriented and person-oriented behaviours require different but related sets of competencies. Effectiveness of task-oriented behaviours relies on the ability to clarify task requirements and structure tasks around an organisation's mission and objectives (Bass, 1990 and Osbaldeston, 2010).

Effectiveness of person-oriented behaviours relies on the ability to demonstrate consideration of others as well as to take into account one's own and others' emotions (Gerstner & Day, 1997 and Osbaldeston, 2010). Shamir, House and Arthur (1993) found that transformational leaders that are emotionally attuned may motivate followers in three key ways: by increasing follower self-efficacy (Stetz, Stetz & Bliese, 2006), by facilitating followers' social identification with their group or organisation and by linking the

organisation's work values to follower values. It was noted that followers described and preferred leaders that displayed the required and accepted contextual competence as well as desired leader-follower interpersonal associations. Followers' support in terms of transformational leadership was thus found in terms of their reported workplace experiences. It may be asserted that a derived leadership training and development needs analysis would at least include this value-driven attentiveness aimed at the needs of followers.

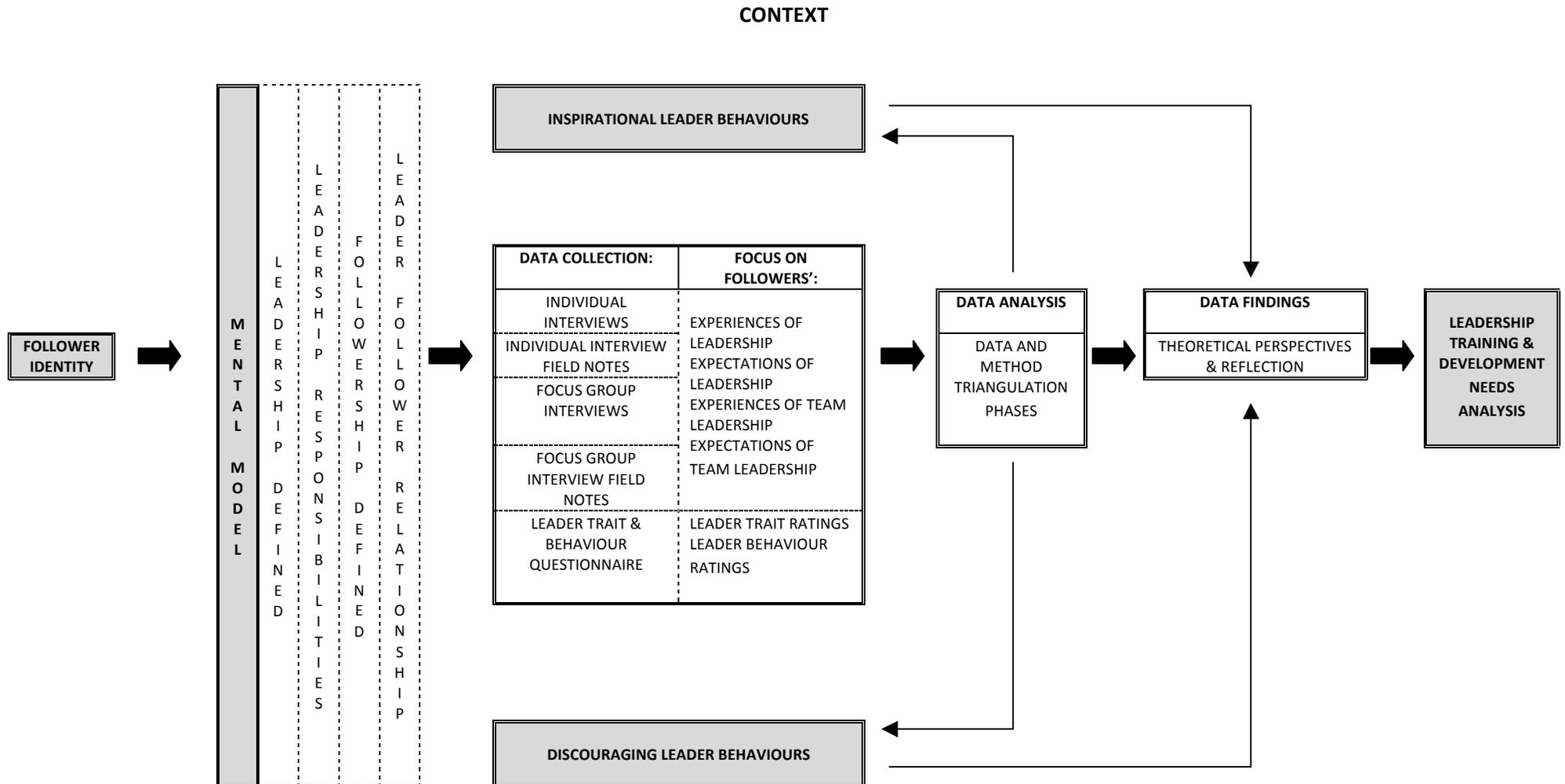
Leaders play an important role in terms of improving the ability of individuals, teams and departments to work cooperatively to meet organisational objectives. Successful leadership training and development may be viewed as a medium for continuous change, improvement and innovation. Following a systematic approach of identifying and addressing leadership training and development needs could culminate in a leadership planning programme that may ensure sustainable organisational leadership capability.

Avolio, Walumbwa and Weber (2009) and Prilipko, Antelo and Henderson (2011: 80) contend that little attention has been given to followers' contributions to the leadership process. According to Graen & Uhl-Bien (1995) and Day (2000) most research on leadership development fails to appreciate and consider the relational elements of leadership. This research project endeavoured to explain and provide evidence of the importance of the relational elements of leadership. Mentioned was facilitated by an understanding of followers' mental models, experiences and expectations of leadership behaviours. Derived understanding suggested that followers could provide valuable and beneficial insights regarding leadership training and development needs analyses. This finding was found to be supportive of the pre-contemplation stage (identifying and addressing observable behaviours as perceived by others) of the Trans-Theoretical Model of Prochaska and Norcross (2006) as applicable to leadership development (Bernal, 2009). Followers' experiences and expectations of desired and discouraging leadership behaviours should probably be considered as part of a comprehensive training needs analysis that is also inclusive of *inter alia* strategic needs, organisational needs and leader needs. Mentioned assertion may be beneficial if an organisational readiness, favouring a transition from a perceived transactional leadership style to a more transformational leadership style, could also be motivated.

The researcher depicted a summary of the sequence of activities associated with a leadership training and development needs analysis framed within a specific context as derived from a follower perspective (Figure 6.1). This needs analysis stresses the importance of gaining insight into the collective follower identity in order to determine the

theories-in-use and espoused theories held by followers that constitute prevailing mental models. Guidance in terms of methods considered to collect data regarding both inspirational and discouraging leader behaviours (directed by followers' experiences and expectations within a defined context) is also offered. Data analysis phases regarding both inspirational and discouraging leader behaviours follow. The significance and value of triangulation should be noted as a precursor for the interpretation of findings. Subsequent research findings have the potential to present and outline a detailed leadership training and development needs analysis (albeit from a follower-specific focus) that may serve as an essential component of associated instructional design and curriculum development initiatives.

Figure 6.1. A leadership training and development needs analysis framed within a specific context as derived from a follower perspective



6.16. Theoretical review

This study addressed leader and leadership behaviours within a specific context. Mentioned perspective aimed to create deeper understanding regarding the nature and characteristics of a preferred leadership style within a defined context. This framed the theoretical foundation as applicable to this study. In this regard it was noted that contingency theories hold that leadership effectiveness is related to the interplay of a leader's traits or behaviours and situational factors (Seyranian, 2009: 152, Zaccaro & Horn, 2003 and Fiedler, 1971).

This research project endeavoured to assess the role and impact of the social exchange theory of leadership and the social contingency theory of leadership in order to create a better understanding of leadership by emphasising the importance of context when studying leaders and leadership from a follower perspective.

6.16.1. Social exchange theory of leadership

The social exchange theory served as a theoretical base for investigating individuals' knowledge-sharing behaviour and results. Followers displayed adequate knowledge and expertise that enabled them to compose and present opinions of leadership and leader behaviours based upon their own realities. Social exchange theory specifies that certain workplace experiences lead to interpersonal connections, referred to as social exchange relationships. Followers reported that relational and emotional bonds between followers and their leaders existed. Desirable leader and leadership traits and behaviours were identified, described and viewed as sought-after workplace experiences. Perceptions of leaders' commitment to and support of followers were identified. Workplace examples were provided by followers and these served as evidence of leadership styles that were preferred or not preferred by followers. The nature of the relationship was conceived by followers as a passive relationship (the follower being the passive partner). It was found that followers explored the benefits derived from social interaction in the workplace. Evidence supporting an emotional bond between follower and leader was not obvious. A work-based and directed relationship was apparent. The impression of a willing follower subsequently emerged. It was also found that followers approved of relationships that were valuable to them. In this regard characteristics of a motivating, inspiring and preferred leadership style were synonymous with constructive influences, aspirations, individual considerations, teamwork as well as a distinct work focus. Followers maintained relationships as long as they continued to benefit from leader-follower interactions. Followers required both workplace (task-focused) and personal (emotional focused) inspired relationships. The

perceived impact of followership on leadership was considered limited. Despite these occurrences it may be concluded that a leader-follower relationship at an emotional level was desired, but it had not yet evolved as an emotional leader-follower bond.

According to Blau (1964) exchange relations are causally related and the relationship influences the type of exchange (Cropanzano & Mitchell, 2005). In this study followers reported an obedient, passive and compliant relationship (albeit a follower perspective). Followers' comments identified leadership as a position of formal authority. Followers suggested that although power vested in mentioned formal authority was viewed and accepted as necessary for leadership, it was considered as insufficient on its own to encourage effective leadership. This formal authority was described by followers as being task-oriented. This task-oriented leadership behaviour was primarily concerned with accomplishing the task in an efficient and reliable way. The type of exchanges between followers and leaders were essentially work-focused, however, a need for a social relationship was exemplified. Value derived from this study may be found in the way followers used individual and shared mental models ("inner-voices") to clearly describe desired and undesired leader-follower exchanges.

6.16.2. Social contingency theory of leadership

The social contingency theory suggests that a leader's effectiveness depends on how well the leader's style aligns with the context (Wilson, 2004: 15). It was noted that the Air Traffic and Navigation Services Company functions within a safety-critical commercial environment. The systemic nature and uniqueness synonymous with the Air Traffic and Navigation Services Company affirmed that leaders were concerned with safe and expeditious service delivery, growth of the company, management of the staff, compliance with organisational procedures and directives, achieving company goals and ensuring completion of the required tasks. Followers displayed an ability to identify desired and undesired leadership qualities. It was found that the influence of leadership and the perceived levels of success associated with the type of leadership displayed, contributed to and shaped reported perspectives held by followers regarding leaders and leadership. An understanding of followers' introspection and cognition regarding leadership was evident in terms of participants' questioning attitudes, acceptance of dependence, professional dedication, openness to contribute and excitement.

Followers' feedback suggested that leadership was characterised by a high task focus. In addition, followers indicated that both task and relationship should be combined in order to

maximise both mentioned relationships. In this regard followers observed that high task related leader behaviours were required and found in the safety environment. Followers commented that these leaders focused on the present and kept the organisation functioning smoothly and efficiently. Moreover followers reported knowledge of required follower task orientations and actions dictated by the safety environment. A mutual leader-follower realisation of the task need emphasis came to the fore. In this respect both followers and leaders observed and respected rule-following behaviours in order to ensure control and stability in the organisation. Leaders' task structure and position power were thus known and emphasised by followers. Despite this emphasis on task behaviour and motivation by followers for such leader behaviour, it was noted that followers also desired improved relationship behaviour. According to Hughes and Terrell (2007: 3) it is impossible for a group of people to interact and not have social implications. Followers therefore emphasised a need for enhanced leader-member relations. In accordance with Fiedler's contingency model (Fiedler, 1967 & 1972 and Daft, 2008: 66 & 69) it was thus found that followers experienced a high task-low relationship association. However followers indicated a need to also progress to a high relationship situation. This desire was characterised by *inter alia* greater freedom sought by followers to control their own behaviours, growth and development, and to function as motivated and empowered individuals within a dynamic and changing environment.

It was found that leadership effectiveness and success was related to the interplay of a leader's traits, behaviours and situational factors. The nature of the leader-follower relationship was found to be workplace-focused. Followers reported that the collective effort was primarily experienced as a work-focused endeavour. Furthermore the success of leadership depended on how well the leaders' styles were aligned with the context. It was noted that follower perspectives of actual workplace realities, presented as potential and idealistic desires, guided their definitions and conceptualisation of leadership. Followers explained and described the workplace as a holistic entity within which they noted desired and undesired pragmatic leader attributes as well as leader and follower differences and similarities. Followers reported that successful and desired leader attributes that interacted with situational parameters to influence leader effectiveness were synonymous with a transformational leadership style.

Findings from this study support views held by Zaccaro and Horn (2003: 774) and Zaccaro and Klimoski (2001: 13) that organisational contexts influence and mediate the fundamental nature of leadership work, including those forces that animate or retard leadership initiatives or behaviours. Of specific importance was to note the value of follower experiences and

expectations of leadership behaviours as accentuated by followers and also to note the particular impact of the organisational context emphasised by this study.

6.17. Contributions

Leader and leadership studies have favoured leader and organisational foci (Kellerman, 2007, Shamir, 2007, Kirchhubel, 2010, Collinson, 2006: 179, Boezeman & Ellemers, 2008, Vroom & Jago, 1988 and Shamir & Howell, 1999). A research need was identified to determine follower experiences and expectations of leadership behaviour, thereby favouring a follower-inspired investigation (Holcomb, 2008: 779, Jackson & Parry, 2008 and Mushonga & Torrance, 2008). Mentioned omissions in theory and research were confirmed by Avolio, Walumbwa and Weber (2009). Research findings provided a deeper understanding of followers' epistemological and ontological views. Follower specific individual and mental modelling was detailed in this regard. This study was conducted in a specific organisation. The organisation from which the participants were drawn operates within a specific and defined context. Findings should therefore not be generalised to managers/leaders in other organisational contexts without a degree of circumspection.

The role and significance of context (the case of the Air Traffic and Navigation Services Company) provided evidence of the value associated with mentioned focus. Research findings provided meaningful understanding of a shared need to meet organisational objectives concerning safety within the operational workplace (context). Followers reported insight that illustrated understanding of aviation safety as a primary business concern. Furthermore followers noted that organisational culture and climate influenced leader behaviours, relationships within teams and followership. It was found that successful leadership should allow for the fostering and nurturing of a climate of trust, cooperation and stability in order to achieve a harmonious and productive work environment. This systematic approach of identifying and assessing leadership needs also considered a safety management orientation according to which leadership risks that could have a positive or negative impact on the realisation of the organisational objectives were identified and explored. Insight and knowledge of context specific information was therefore considered necessary in order to understand organisation-specific attributes and associated influences.

Fiedler's (1967 & 1972) contingency theory suggested that leaders can conclude whether the situation is favourable to their leadership style (Daft, 2008: 89). This research study provided evidence that followers can also determine whether leadership within a specific context is desirable or undesirable (based on said followers' experiences and expectations

of leadership behaviours). This research study suggested that task-oriented leadership (as defined by contingency theory) experienced and described by followers was explained and characterised as a transactional leadership style (as defined by relational theory). In this regard, task structure and leaders' position power were prominent in followers' reports. Furthermore relationship-oriented leadership (as defined by contingency) desired by followers was portrayed and characterised by a transformational leadership style (as defined by relational theory). In this regard enhanced leader-member relations were accentuated by followers. In terms of leadership development a need was identified (by followers) to equip leaders with an ability to connect their leadership strategies to the people in their organisational spheres of influence.

Wilson (2004: 14) asserted that leadership consists of two general types of behaviours: task and relationship behaviours. Research findings showed definite evidence of the presence of work/task behaviours. However social relationship behaviours were considered to be less prominent. Furthermore followers viewed themselves as submissive and dutiful partners. Despite this unequal distribution it was of interest to note that organisational objectives were nonetheless met. This lack of agreement may have been compounded by a lack of understanding amongst followers of their own levels of personal and practical competence, successes and failures. Creating or restoring a relational balance may be the result of future emotional intelligence and transformational leadership-focused training and development. This was considered because emotional intelligence could support leaders in more precisely perceiving reality through accepting and relating to others' emotions (Parolini, 2005: 1). Considering and relating to others by taking followers' thoughts, beliefs, judgements and feelings into account may assist leaders when they contemplate the future and empower followers (Cherniss, 2001 and Parolini, 2005). Transformational leaders that are emotionally attuned may inspire followers in three key ways: by escalating follower self-efficacy (Stetz, Stetz & Bliese, 2006), by facilitating followers' social identification with their group or organisation and by connecting the organisation's work values to follower values (Shamir, House & Arthur, 1993). De Kock and Slabbert (2003: 5) verify the requirement for a leadership cadre that needs to improve significantly on their role as transformational leaders, to enable South African business organisations to attain world-class status. Bass (1990) observed that transformational leadership occurs when leaders broaden and elevate the interests of their employees, generate awareness and acceptance of the purposes and mission of the group and stir their employees to look beyond their own self-interest for the good of the group (Sanda, 2011: 19). Kapp (2012: 1119) too found that greater levels of transformational leadership could be associated with greater levels of safety compliance and safety participation behaviour. Transformational leaders possess a developed philosophy of

service, the ability to critically and comprehensively examine important issues and the motivation to effectively achieve long-term systemic transformation. There is a significant body of research literature that documents validity of the transformational leadership framework (Bass, 1998) and there is also significant evidence that this model is being successfully used in leadership training and development in industry (Ardichvili & Manderscheid, 2008: 623, Avolio, 2005 and Avolio & Gardner, 2005).

According to Nieder-Heitmann (2013: 22) leadership development is not a new concept. However the approach has changed to ensure the continuous cultivation of leadership potential. Leadership development as a crucial organisational strategy needs to transform in congruence with the growth stage of the organisation, the contextual nature of the business and environmental demands (Nieder-Heitmann, 2013: 22). Organisations may consequently wish to understand leadership behaviours, recognise leadership dynamics and develop leaders to ensure continuous organisational development in pursuit of the corporate strategy. The importance of this research is therefore evident in terms of the leadership training and development needs analysis process followed and associated needs identified (Figure 6.1). In this case leader competence was restricted to an investigation guided by follower reports. Tett, Guterman, Bleier and Murphy (2000: 212) agree to a greater specificity of behavioural dimensions in the analysis of leadership competencies (Smith & Carstens, 2003: 46). Furthermore the need for the contextualisation of leadership competencies where the focus is on behaviour was highlighted (Smith & Carstens, 2003: 46 and Tett, Guterman, Bleier & Murphy, 2000: 212). Such a person-analysis focused on identifying who should be trained and what training was needed by individuals.

According to Smith and Carstens (2003: 46) a popular approach to explaining leadership competencies is through expressing competencies in terms of more effective leaders and less effective leaders, called competency theory by Cairns (2000). According to Mbokazi, Visser and Fourie (2004: 2) three broad domains of managerial competence appear to emerge: Firstly the competency to manage the task; secondly, the competency to manage people and thirdly, the competency to manage the "self". Findings from this study supported the presence of these broad domains. However the need to manage the leader's network was also identified. This systematic approach provided for a context-specific contribution towards leadership training and development. A leader and leadership needs analysis process and results informed by followers resulted (Figure 6.1). Mentioned needs analysis may assist with the planning and implementation of enabling interventions to achieve desired leadership excellence. This systematic approach of identifying and understanding

leadership needs can thus be used for developing, retaining and optimising of leadership talent.

A causal relationship between follower cognisance and leadership styles within a defined context served as an important contribution. This inductive analysis provided evidence that leadership training and development needs can be determined by including follower insights. However the researcher noted the importance and significance of leader and organisational espoused needs associated with leader roles, responsibilities and areas of development and training. Mentioned is further understood by considering that a training needs analysis identifies training needs on employee, departmental or organisational level in order to help the organisation to perform effectively. This study was aimed specifically at leadership competencies. Insights gained by determining followers' perceptions of their leaders' current performances may support future leader training and development needs analyses. This approach may allow an organisation to focus training expenditure on the most important areas of need, align training with the organisation's strategic plans and make a contribution towards employee retention by continuously increasing employees' engagement in their own development.

The researcher accepted that imbalances may occur during leaders' development and that these are often exacerbated or mitigated by the environments in which they lead and the people whom they lead. Followers' feedback highlighted a need to design leadership development programmes (aimed at enhancing leadership competency) in order to affect long-lasting change in individuals and organisations. It was considered that research findings could potentially contribute to knowledge of leadership development theory as applicable to a safety-critical commercial environment. Training and learning needs may be viewed as iterative and constantly open to revision, change and growth. Continued training and learning together with the attainment of organisational goals and objectives should be emphasised. This systematic approach of identifying, understanding and addressing leadership needs relied upon a continuous process of gathering, analysing, interpreting and applying quantitative and qualitative data to assess the impact of leadership training and development practices in support of continuous improvement. Mentioned approach and intent may lead to the creation of a learning culture that enables individual, team and organisational learning, development and enhancement of desired leadership competencies and behaviours. Furthermore it was evident that leadership development cannot be a sole outcome of training programmes. A variety of development initiatives may be required and leadership development should remain a continuous activity.

According to the SHL Talent Report for 2012 (Masha, 2013: 11) finding individuals with a rounded repertoire of leadership talents is a challenge. Recent SHL survey results suggest that 25% of employees believe their organisations have the leaders to succeed in the future (Masha, 2013: 11). According to Bleak and Fulmer (2009) this is a concern because leadership development is seen as a strategic imperative, in and of itself, and when tied closely to the strategy and needs of the business, excellent organisational results will follow.

Clear implications for practice and recommendations for future research can be regarded as essentially based on a strong educational message conveyed through this research project. It is suggested that future research should include leadership's experiences of followership. Another interesting area of future research may be to determine the necessity to educate followers to critically appreciate and evaluate leadership performance. The study can possibly be replicated in other Air Navigation Service Providers and maybe even in other industries. There may be merit in exploring whether the same results will be found when the study is conducted in a different industry or different organisational context.

6.18. Responses to research questions

This research study allowed for understanding and appreciation of the experiences and expectations of followers with regard to leadership behaviour qualities within the Air Traffic and Navigation Services Company in terms of inspirational and discouraging leadership styles.

How do followers within the Air Traffic and Navigation Services Company delineate leadership behaviour qualities in terms of significance of these behaviour qualities? Cognition of followers' introspection and cognition regarding leadership was evident in terms of participants' questioning attitudes, acceptance of dependence, professional dedication, openness to contribute, enthusiasm and excitement. Followers' introspection and cognition were shaped and guided by episodes, versions, experiences, perceptions and interpretations of leadership found in the workplace. Followers understood, noted, rated, presented and described the workplace as an entity (comprising both work and social environments) within which they observed desired and undesired leader attributes as well as leader and follower differences and similarities. An important and valuable "own follower voice" was discovered. Followers' introspection and cognition regarding leadership suggested that followers view and describe themselves from an obedient, passive and compliant perspective.

How do observed current leadership behaviour qualities inspire followership within the Air Traffic and Navigation Services Company? Followers' descriptions of characteristics associated with leadership competence illustrated that desired leader traits, behaviours, interactions and experiences were identifiable and could be explained in terms of value and benefit. Leader behaviours that could signify increased follower performance and leadership behaviour qualities that may evoke positive followership were recognised. It was found that leadership experiences and expectations associated with successful leader support, follower development, assertive leadership and pragmatic leadership that culminated in transformational leadership were favoured and desired by followers.

How do observed current leadership behaviour qualities discourage followership within the Air Traffic and Navigation Services Company? Followers' descriptions of characteristics coupled to undesired/discouraging leadership illustrated that associated leader traits, behaviours, interactions and experiences were identifiable and could be explained in terms of concern and disapproval. Undesired leader behaviours that could threaten follower performance and leadership behaviour qualities that did not evoke positive followership were recognised. In response to these undesired/discouraging leadership qualities and actions it was found that leadership experiences and expectations associated with successful leader support, follower development, assertive leadership and pragmatic leadership that culminated in transformational leadership were favoured and desired by followers. According to Avolio, Waldman and Einstein (1988), Singer and Singer (1990), Yammarino and Bass (1990) and Roberts (1985) positive relationships with transformational leadership relates positively to increased group process, work satisfaction, work productivity and increased personal empowerment.

How can follower experiences and expectations of leadership behaviours within the Air Traffic and Navigation Services Company inform leadership training and development needs analyses? It was evident that followers could cognitively evaluate, interpret and label leader and leadership behaviours. In this regard followers identified a need for both successful leadership and teamwork guided by vocational professionalism. A realisation that leaders had to understand and accept their organisational, team and employee roles and responsibilities emerged. This study provided a systematic process aimed at leadership development, improvement and success by collecting, analysing and reporting data that can be used to design, implement and evaluate appropriate leadership training and development solutions and interventions. Furthermore it may be expected that this approach can assist an organisation to identify, select and implement an integrated training and development approach that will meet the identified needs and enable leaders to learn, develop and

experience desired knowledge, skills and attitudes. It was postulated that leadership training and development aimed at developing, strengthening and inculcating desired leadership behaviour qualities may inspire positive and increased followership. It was also evident that the roles and responsibilities of leaders are constantly changing as a result of workplace and workforce transformations. Leadership training and development initiatives were therefore considered as continued activities.

6.19. Synthesis

The research problem statement was: “How can follower experiences and expectations of leadership behaviours in a safety-critical commercial environment be collected, analysed, understood, structured and utilised to aid leadership development?” The Leader Trait and Behaviour Questionnaire, individual interviews and focus group interviews successfully identified and created deeper understanding regarding follower experiences and expectations of leadership behaviours within a specific context. Followers illustrated competence to reflect upon, describe, rate and interpret leader and leadership behaviours from a mental model perspective. Guided follower reflection was favoured because a request to merely describe and rate leader qualities (thereby relying on estimation only) would not necessarily delve deeper into “lived” follower experiences and expectations anchored within a known organisational setting.

In response to this statement it should also be observed that organisations are dynamic and that continuous changes will lead to new demands and needs. These constant demands and needs will also influence followership, leadership and the leader-follower relationship. Leadership training and development should therefore be viewed as a continued activity based on leader requirements (possibly construed from a current leadership perspective), organisational requirements (possibly elucidated from a future vision and competitive perspective) and follower perspectives (possibly explained from followers’ experience and expectation perspectives). This research study emphasised the merit and value of the latter element.

CHAPTER 7: FINAL OVERVIEW OF THIS STUDY

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CHAPTER 7: FINAL OVERVIEW OF THIS STUDY

7.1. Introduction

Collins (2001: 195) found that enduring companies preserve their core values and purpose while their business strategies and operating practices endlessly adapt to a changing world. Gagliardi (2007: 61) noted that successful solutions always depend on people. According to Hagemann, Mattone and Maketa (2014) the ability to create a vision and convey it to others is the single most important capability needed in the emerging generation of leaders. Hagemann, Mattone and Maketa (2014) conclude that the next generation of leaders lack this critical ability to inspire and engage followers and executive education should be extended to specifically include inspiring and engaging others. Tichy (2007: 160) found that winning leaders are focused, determined, motivate others with enthusiasm and inspire ambitious efforts. The researcher reasoned that a deeper understanding of leader traits and behaviours within a defined context could possibly be found in pronounced follower experiences, views and reflections. A fair and balanced approach that ensured a comprehensive analysis of both encouraging and discouraging leader behaviours was considered and sought. A meaningful follower-inspired research study was thus justified in order to appreciate apparent leadership behaviours. Leaders can gain invaluable insight into how followers perceive them, particularly as leaders tend to behave differently in different situations and with differing groups of people, especially in a work situation (Burrows, 2013: 8). Moreover, a leader may only see a follower behave in a subordinate role and would thus not otherwise gain insight into how he or she treats followers (Burrows, 2013: 8). The value of such insight can be apparent in terms of leadership training and development.

A structured and rigorous research process ensued with the aim of providing a targeted way of determining and interpreting perceptions and providing an opportunity to develop competencies and encourage leadership within an organisation. A case description involving a single case that included experienced events as well as the listing of idiosyncrasies and exceptions was employed. The researcher attentively provided research findings truthfully based on the research design, informants and context. He also ensured credibility in terms of the research process by providing accurate descriptions and understandable interpretations of reported human experiences found within a defined unique human setting and specific situation.

This research study provided for a planned and ordered process to be followed when observing leaders, leadership and when considering leadership training and development needs within a specific setting. It was found that this process strictly complied with requirements to ensure academic acceptance and relevance. Mentioned process and methodological relevance are considered to be evident in the rigour, reliability and replication possibilities associated with this research study. Furthermore the implementation of the detailed process within a safety-critical commercial environment ensured evidence of industry and organisational application, value and relevance.

7.2. Overview of this study

Baghai and Quigley (2011: 2) agree that leadership can come in different shapes and sizes. They assert that it is all about further defining and describing these different shapes and sizes and applying them to a unique situation (Baghai & Quigley, 2011: 2). This research study aimed to define and describe followers' experiences and expectations of leadership behaviours in a safety-critical commercial environment. Mentioned discussion was facilitated and structured by means of seven chapters.

In Chapter 1 an overview of the study was provided. This chapter offered an introduction to the study and the rationale for this research. The research problem was described and relevant concepts and terminology were explained in order to serve as an introduction and orientation to the specific aspects relevant to this research project and study.

In Chapter 2 a theoretical framework was presented as a platform for this study. Literature relevant to this research problem was offered to gain insight and to provide understanding regarding conceptual and contextual factors that influenced and framed this research project.

Chapter 3 offered a justification and resolution relating to the conceptual orientation that was deemed appropriate. A philosophical departure point and resulting conceptualisations were presented in support of the research paradigms of inquiry.

Chapter 4 offered a comprehensive discussion, explanation and motivation of research design and methodology as applicable to this research study. This study followed a mixed methods approach (integrating qualitative and quantitative approaches). Data collection techniques incorporated individual interviews, focus group interviews, field notes and the

Leader Trait and Behaviour Questionnaire. An explanation of data analysis and data validation strategies followed. The role of the researcher was also accentuated.

In Chapter 5 the results obtained were presented and analysed. An analysis-focus was placed on both qualitative results and quantitative results.

In Chapter 6 results obtained were presented. A discussion of findings and contextualising of results of this study with information from the literature review ensued. Triangulation was central in this process and ensured a synthesis of findings.

Chapter 7 presented a final overview of this study with reference to the entire research process.

7.3. Limitations of this study

The researcher identified with Bonner and Tolhurst's (2002) three key advantages of being an insider to the research domain. In this regard the researcher found that he understood the group's culture, could interact naturally with individuals and groups and had previously established and therefore had greater relational intimacy with the participants. The concept of validity had to be ensured because of the researcher's involvement with the subject of study. The researcher, as an "insider", observed specific rules of conduct during this study in order to support trustworthiness and validity. The researcher did not mention/rely upon his personal relationship with any of the participants. This arrangement served to pay no heed to the researcher's relationships with participants that could possibly have an influence on their behaviours. The researcher was also careful not to voice his own opinions and knowledge regarding known leadership theories, actions and practices found within the organisation. This measure was deemed necessary in order to monitor that the researcher's tacit knowledge could not lead participants to misinterpret data or make false assumptions.

The researcher was careful not to make use of leading questions and scenarios that may have narrowed or limited participant responses. This arrangement veiled the researcher's insider knowledge that could have led participants to miss potentially important information. The researcher did not mention nor suggest to participants any allegiances with any operational management staff members. Possibilities that participants may intentionally or subsequently be influenced by the researcher's politics, loyalties, views or hidden agendas were thus isolated. As another limitation of this study it could also be mentioned that the view of leadership was not included. Therefore no interpretations of the other's views were

made. Finally the researcher continuously reminded himself to regard the research participants as keen, active and willing informants with their own diverse views and voices that had to be captured without distortions.

The researcher accepts that research findings and contextualising of results are only relevant to this study. Generalisation outside of the ambit of this specific project is not claimed. The researcher also acknowledges that different data collection instruments and different research paradigms could be used to further enhance understanding of this topic. The researcher also acknowledges that different researchers may or may not arrive at different findings by means of a re-analysis of collected data.

7.4. Ethical aspects

The researcher ensured that rigour within the research process was maximised via the data collection and analysis procedures as well as the mixed methods procedural compliances observed. In this regard the researcher employed multiple sources of data and methods of data collection, kept field notes, checked interpretations with the participants to ensure accuracy and employed an external codifier to review coding and interpretive actions and findings.

In support of self-scrutiny the researcher relied on research practice safeguards such as member-checking, use of a statistics expert and an external codifier. Collective research strategies for bias reduction were also employed. Moreover the researcher did not engage in conscious efforts to fabricate, conceal or distort evidence. No possible and/or preconceived academic or practical outcomes and benefits influenced the researcher to engage in mentioned unscrupulous activities. Furthermore the researcher conducted a critical analysis of phenomena and had no reason to selectively use and emphasise evidence to promote a hypothesis or cause.

Finally the researcher provided a detailed description of the process followed, the setting and the participants involved in this study in order to enhance credibility and any attempted transferability of findings to different contexts based on the level of similarity between this research setting and other settings.

7.5. Summary of findings

This research study provided insight into terms of views held by followers regarding leadership and followership as constructs. In terms of a definition of followership it was observed that followership was mainly conceptualised in terms of leadership behaviours. A general definition and conceptualisation of leadership was not possible. However aspects signifying desired and undesired leader traits and behaviours as well as context-specific requirements were expressed in this regard. Furthermore perspectives held by followers regarding leaders and leadership, characteristics of preferred and undesired leadership styles, relational and emotional bonds between followers and their leaders and acknowledging the presence and influence of follower mental models emerged.

Followers could contextualise leadership roles and responsibilities by means of their understanding and observations of how leaders manage and conduct themselves. In this regard followers paid attention to workplace performances and emotional occurrences. However followers could not easily identify how leaders manage their networks.

Followers provided comprehensive insights into the type, nature and desire for leader-follower relationships. Individual follower reports identified leader behaviour imperatives synonymous with effective and less effective leadership from a follower mental model perception. Mention was also made of leader behaviour imperatives synonymous with effective and less effective leadership from a team perspective. These follower insights were directed and substantiated with reference to leader behaviour found within a specific defined organisational context. In the case of this study a transformational leadership style emerged as a desired state. However the significance of a prevailing transactional leadership style was observed.

Obtained follower insights enabled the researcher to grasp followers' support for a movement towards more intensified transformational leadership initiatives. A leadership training and development needs analysis framed within a specific context as derived from a follower perspective was consequently compiled. It could therefore be asserted that a leadership training and development needs analysis may benefit by including this value-driven attentiveness aimed at the needs of followers.

Finally this research study emphasised a need to appreciate the importance of the social exchange and the social contingency theories of leadership in order to create a better understanding of leadership by emphasising the importance of context when studying

leaders and leadership from a follower perspective. The way followers used individual and shared mental models to clearly describe desired and undesired leader-follower exchanges associated with a specific organisational setting was considered to be of specific value.

7.6. Answering the research questions

This research study created understanding and appreciation of the experiences and expectations of followers with regard to leadership behaviour qualities within the Air Traffic and Navigation Services Company by considering both inspirational and discouraging leadership styles.

In response to the first general focus research question – How do followers within the Air Traffic and Navigation Services Company delineate leadership behaviour qualities in terms of significance of these behaviour qualities? – it was found that cognition of followers' introspection and cognition regarding leadership was evident and could be explained in terms of followers' experiences, questioning attitudes, acceptance of dependence, professional dedication, openness to contribute, enthusiasm and excitement.

In response to the second general focus research question – How do observed current leadership behaviour qualities inspire followership within the Air Traffic and Navigation Services Company? – it was found that followers' descriptions of characteristics associated with desired and favoured leadership performances illustrated that leader traits, behaviours, interactions and experiences were identifiable, reflected upon and could be explained in terms of context, classification, value and impact.

In response to the third general focus research question – How do observed current leadership behaviour qualities discourage followership within the Air Traffic and Navigation Services Company? – it was found that followers' descriptions of characteristics coupled to undesired/discouraging leadership performances illustrated that leader traits, behaviours, interactions and experiences were identifiable, reflected upon and could be explained in terms of context, classification, impact and could be clarified in terms of concern and disapproval.

In response to the last general focus research question – How can follower experiences and expectations of leadership behaviours within the Air Traffic and Navigation Services Company inform leadership training and development needs analyses? – It was found that followers could cognitively evaluate, interpret and label leader and leadership behaviours. A

systematic process aimed at leadership training and development resulted. Mentioned process highlighted the collection, analysis and reporting of data that can possibly be used to design, implement and evaluate appropriate leadership training and development solutions and interventions.

These answers provide insight into leadership and followership dynamics. The answers also encourage pragmatic understanding and contribute to the body of scientific knowledge applicable to leadership and followership theory, as well as leadership development theory.

7.7. Possible contributions

The International Civil Aviation Organisation encourages a transition from reactive to proactive measures in terms of approaches to aviation safety (Graham, 2013: 5). The Global Aviation Safety Plan is critical to achieving the International Civil Aviation Organisation's strategic objective of enhancing global civil aviation safety by guiding the implementation of international safety standards to ensure consistent regulatory oversight, and by advancing the development of safety programmes and management systems that proactively identify hazards and manage associated risks (Illson & MacFarlane, 2013: 7). Such a proactive approach supports holistic and risk-based analyses that define clearer safety targets and priorities (Graham, 2013: 5). Illson and MacFarlane (2013: 7) stress the need to train and develop aviation professionals required to manage the aviation system safely in the future. According to Collins (2001: 88) a primary leadership task in taking a company from good to great is to create a culture wherein followers are provided with opportunities to be heard and ultimately for the truth to be heard. In this regard leaders should adopt a questioning attitude, engage in dialogue and debate, conduct investigations without blame and seek information that inspires continuous improvement (Collins, 2001). These activities are synonymous with a successful safety culture (Barrass, 2009, Reason, 1997 and Isaac & McCabe, 2009).

It was found that relatively little research had been done in the Air Traffic Management sector regarding leadership development. It was also found that investigations of follower characteristics have not been prevalent and consequently such investigations are considered to be essential for forming a comprehensive model of leader effectiveness. Research results contribute to the body of knowledge in terms of leadership behaviours, qualities and styles that are interpreted and understood by associated follower epistemological expertise reports. The findings of this research study thus make a valuable contribution to this body of knowledge.

Research findings contribute to knowledge of leadership development theory as applicable to a safety-critical commercial environment. Specifically this research study provided evidence that followers can also determine whether leadership within a specific context is desirable or undesirable. Context-specific research findings can be used as part of a systematic approach of identifying and assessing leadership training and development needs. The importance of this research is therefore evident in terms of the leadership training and development needs analysis process presented and associated needs identified. This methodical approach of identifying and assessing leadership training and development needs considered a safety management orientation whereby leadership consequences that could have a positive or negative impact on the realisation of the organisational objectives were identified and explored. Research findings provided a deeper understanding of followers' epistemological and ontological views, which were underpinned by a shared need to meet organisational objectives concerning safety within the operational workplace.

This systematic approach of identifying and understanding leader behaviours, leadership and leadership needs can thus be used for developing, retaining and optimising of leadership talent. Mentioned approach of identifying, understanding and addressing leadership makes provision for a continuous process of gathering, analysing, interpreting and applying quantitative and qualitative data to assess the impact of leadership training and development practices in support of continuous improvement.

7.8. Recommendations

This research study provides for a process that explains how follower experiences and expectations of leadership behaviours in a safety-critical commercial environment can be collected, analysed, understood, structured and utilised to aid leadership development. Research findings suggest recommendations for practice and specific recommendations for training and development.

7.8.1. Recommendations for practice

This research methodology can be used to ensure the establishment and use of a communicative and participative process, including an interactive approach, between management and staff members within Air Navigation Service Provider Organisations. It is also recommended that research findings be used by these organisations to transform

leadership training and development initiatives. Mentioned transformation needs to support the Civil Air Navigation Service Organisation's global vision and thus achieve desired transition and change objectives; including safety management, regulatory measures, civil-military collaboration, business approaches, customer-focus, people management initiatives, air traffic management optimisation, environmental concerns and security issues.

This research methodology can be used to attain an appreciation of leadership behaviour qualities within Air Navigation Service Provider Organisations by identifying individual (follower) current realities and emergent issues. The aim of such an investigation will be to gain current knowledge regarding leadership efficiency and effectiveness within the Air Traffic Management sector. The purpose of such a recommended exploratory inquiry will be to create opportunities for followers to communicate an appreciation of leadership behaviours encountered by them in a specific organisational work setting.

This research methodology can also be used to attain an appreciation of followers' behaviour qualities within Air Navigation Service Provider Organisations by identifying followership schemas that develop through socialisation and past experiences with leaders and other followers.

7.8.2. Recommendations for training and development

The scarcest resource in the world today is leadership talent capable of continuously transforming organisations and thereby ensuring organisational success (Tichy, 2007: 10). According to Tichy (2007: 3) winning organisations nurture leader development.

This research study provided insight into perspectives of leadership held by followers and these perspectives can effectively inform leadership development and training needs analyses. It is postulated that when used repeatedly and responsibly within an organisation, the proposed leadership training and development needs analysis framed within a specific context as derived from a follower perspective, can become the norm and an accepted part of the leadership training and development strategy. Mentioned approach exemplifies an approach to leader development that goes beyond a specification of techniques and strategies of developmental interventions to provide a conceptual basis for understanding leader training and development needs. It is suggested that this systematic approach is completed regularly to measure shifts in the leader-follower-relationships, review leadership training and development needs analyses and to incorporate findings into organisational leadership and development initiatives.

It is suggested that the organisation can identify leadership potential and behaviour and measure this from year to year with feedback promoting leadership training and development initiatives. By resurveying leaders after a period of time it may be possible to determine improvements in behaviour and to allow for the refinement of development plans and actions. In addition regular leadership performance reviews that include a follower review may also enable an organisation to qualify and quantify the return on investment of leadership training and development programmes.

Leadership performance reviews that include a follower review may be able to go beyond traditional key performance indicators by providing valuable insight into the development of leadership behaviours. A culture in which leadership performance is systematically and periodically reviewed by followers should be regarded as a standard process component, rather than an emergency or investigatory measure. Mentioned leadership performance reviews should be performed at least annually and be linked to ongoing professional development as part of a broader talent management strategy. These leadership performance reviews should also be viewed and accepted as a guide for personal growth. If followers understand that their feedback is being used for developmental purposes, they may be enthused and more likely to provide honest and useful feedback regarding their leader's performance and behaviour.

7.8.3. Recommendations for research

Peoples' ability to represent the world accurately is limited and unique to each individual (Jones, Ross, Lynam, Perez & Leitch, 2011: 46). Mental models may therefore be characterised as incomplete representations of reality (Jones, Ross, Lynam, Perez & Leitch, 2011: 46). Mental models are also regarded as inconsistent representations because they are context-dependant and may change according to the situation in which they are used (Jones, Ross, Lynam, Perez & Leitch, 2011: 46). Senge (1990a & 1990b) places strong emphasis on the individual examination and recognition of one's own mental models that ultimately shape belief and consequent behaviours as a critical component for learning and change. Gaining a better understanding of how followers' mental models internally represent complex, dynamic systems and how these representations change over time may serve as a topic for future research. Ensuing research results may allow leadership training and development specialists to develop mechanisms to enhance effective leadership training and development. Future research could also address the motivational levels of followers, since it may be helpful in order to better understand how to facilitate and achieve a

high performance culture. Furthermore questions concerning the opinions of followers from different cultures in terms of leader-follower dimensions could be interesting to pursue.

7.9. Concluding comments

The goal of this research project was to explore a worthy issue that deserved investigation – leadership behaviours and follower epistemological expertise within the Aviation Industry; with reference to the Air Traffic Management/Control sector and specifically within the Air Traffic and Navigation Services Company. Of specific significance was the follower emphasis and perspective followed throughout this study. This sector and organisation-specific research contributes to the field of leadership development in a sphere where such work is limited.

The objective of this research was to discover multiple realities that were noted and reported by followers. Following this approach allowed the researcher to seek an understanding of an emergent reality as facilitated by followers' experiences and expectations of leadership behaviours synonymous with a specific safety-critical commercial environment.

The value of this research study may be found in its contribution to contextualised leadership training and development theory and practice. A leadership analysis is presented from a follower-perspective as a diagnostic initiative used to assess the nature of the challenges and opportunities associated with continuous leadership growth. This follower perspective resulted in research findings that describe leadership qualities and behaviours that need to be included as part of learning and training experiences as well as those that need to be excluded and/or be unlearned. Mentioned analysis serves as the basis for the formulation of targeted and effective leadership training and development interventions. The process followed by the researcher to collect, analyse and interpret follower experiences and expectations as detailed in this report can possibly and hopefully imitate the data collection, analysis and interpretive processes introduced by similar organisations functioning within safety-critical commercial environments.

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RESEARCHER TASK/ACTIVITY GUIDE**INDIVIDUAL INTERVIEWS**PRE-INTERVIEW ACTIVITIES

Ensure that the participant has voluntarily provided his/her consent by means of a completed Researcher-Participant Agreement.

Have notepaper and a pen ready for the participant.

Have the questions ready for the participant.

Arrange not to be disturbed during the interview.

Check that the tape recorder is serviceable and load an audio cassette to record the interview.

Open a page in the field notes and register:

- date and time; and
- participant number.

INTERVIEW

Thank the participant for his/her attendance.

Provide the following information to the participant:

This is an in-depth, face-to-face interview that will enable me to gather current views held by you with regard to Air Traffic Management (ATM) Managers leadership behaviour qualities within the Air Traffic and Navigation Services Company in terms of focus, inspirational value and discouraging conduct. I will conduct a one-on-one interview with every participating Air Traffic and Navigation Services employee at this unit. I will use **10** open-ended questions, thus allowing for a limitless response from you. I will also ask the same questions during each interview. This will allow for reliability, consistency and ease of data analysis. This individual interview will allow me to gain a deeper understanding of “what leadership behaviours do followers pay attention to and why?”, “what leadership behaviours encourage followership and why?” and “what leadership behaviours discourage followership and why?”. I will use interview results (qualitative data) to assist in the creation of deeper understanding. This interview should not

RESEARCHER TASK/ACTIVITY GUIDE

exceed one hour. All interviews will be audio-taped and I will prepare transcripts of these confidential interviews.

Emphasise to the participant that:

There are no correct answers to the **10** questions.

You are welcome to make notes on the paper provided to guide your thoughts and conversation, prior to and during the discussion.

You will receive a written version of the question posed and you will be allowed to study the question prior to providing a response.

Your honest responses are requested.

Identity of participants and the site will remain confidential.

Transcribed information will be made available to the participant for validation purposes.

Obtain and note the following **demographic** information in the field notes:

- Date and time of interview
- Name of the Air Traffic Control Centre
- Participant's name and surname
- Participant's gender
- Participant's race classification (Black African, White, Coloured and Indian/Asian)
- Participant's age bracket

A	B	C	D	E
20 years or less	21 – 30 years	31 – 40 years	41 – 50 years	Older than 50 years

- Participant's occupational information:
 - Participant's specialist area

A	B	C
ATSO	AIMO	ATCO

- Current post/position
- Service commencement date at the specific Air Traffic Control Centre
- Number of years employed by Air Traffic and Navigation Services Company

RESEARCHER TASK/ACTIVITY GUIDE

Activate the tape recorder.

Ask the first question and hand the question to the participant.

Note all own prompts and notes as field notes.

Do not interrupt (unless necessary).

Seek clarity when required and probe for depth when required.

Continue with the next questions, conduct to be similar to that for question 1.

Note all own prompts and notes in the field notes.

Thank the participant.

Deactivate the tape recorder.

Obtain contact details from participants to which transcribed info can be forwarded and note in the field notes.

Collect the question cards.

QUESTIONS

- 1. Provide your own definition of leadership.**
- 2. Provide your own definition of followership.**
- 3. Explain the responsibilities of ATNS leaders.**
- 4. Describe your relationship with ATNS leadership.**
- 5. What do leaders of effective work teams within ATNS do?**
- 6. What do leaders of less effective work teams within ATNS do?**
- 7. What leadership behaviours come to mind when you think of an effective ATNS leader?**
- 8. What leadership behaviours come to mind when you think of a less effective ATNS leader?**
- 9. Recall a specific situation within the ATNS workplace that serves as an example of effective leadership.**
- 10. Recall a specific situation within the ATNS workplace that serves as an example of less effective leadership.**

RESEARCHER TASK/ACTIVITY GUIDE

Each participant will be handed a card containing the question that will receive attention. This question card is handed to the participant when the specific question is asked by the researcher.

RESEARCHER-PARTICIPANT AGREEMENT

Allow me to introduce myself: My name is C.G. (Ian) Joubert. I am conducting a post-graduate research project as a student of the University of South Africa. Your assistance is requested in this regard.

As the **Researcher** I wish to inform you, the **Participant**, that I intend to determine current views held by followers with regard to leadership behaviour qualities within the Air Traffic and Navigation Services Company in terms of focus, inspirational value and discouraging conduct.

The title of this proposed study is: **Follower experiences and expectations of leadership behaviours in a safety-critical commercial environment: The case of the Air Traffic and Navigation Services Company.**

The research project will examine the nature, characteristics and impact of leadership behaviour qualities in the Air Traffic and Navigation Services Company.

During the investigation of the research problem stated above I intend to determine and understand:

- What current views are held by followers with regard to leadership behaviour qualities within the Air Traffic and Navigation Services Company in terms of focus, inspirational value and discouraging conduct? General focus research questions are:
 - How do followers within the Air Traffic and Navigation Services Company delineate leadership behaviour qualities in terms of significance of these behaviour qualities?
 - How do observed current leadership behaviour qualities inspire follower demeanour within the Air Traffic and Navigation Services Company?
 - How do observed current leadership behaviour qualities discourage follower demeanour within the Air Traffic and Navigation Services Company?
 - How can follower experiences and expectations of leadership behaviours within the Air Traffic and Navigation Services Company inform leadership training and development needs analyses?

I undertake to focus on the research questions and will not interfere in any manner that may jeopardize the integrity of data and the study as a whole. I acknowledge that your participation is voluntary. There will be no unpleasant or damaging effects on the individual, the team and the setting (workplace/site). I will communicate the aim, objectives, nature and future use of findings to you and all other participants prior to commencement of data collection activities. I acknowledge and respect your participation as being voluntary.

I will comply with the listed ethical issues.

- Protection of the rights of human subjects by not causing emotional harm, by not infringing their right to maintain self-respect and human dignity.
- Provide all the facts without distortion or misrepresentation.
- Avoid being biased in the interpretation and presentation of data.
- Only use measurements that are suited to the research problem.
- To not knowingly ascribe greater confidence than the measurements warrant.

RESEARCHER-PARTICIPANT AGREEMENT

- Reporting of conflicting evidence.
- Reporting of any flaws or limitations in the research.

No reasons can be cited as necessary for disclosing the identity of participants, therefore:

- I will ensure confidence by not disclosing your identity and the identity of other participants; and
- research sites will receive random numbers in order to protect sites and individuals.

My visit to this Air Traffic and Navigation Services Company centre has been authorised by corporate and unit management. The importance of workplace safety needs and requirements are fully realised by me. These will be respected at all times and it is accepted that no infringement will be tolerated. No unprofessional behaviour will be required from you as participant.

I will provide all participants with an opportunity to learn from their participation. Therefore the outcome of my study will be made available to all participants and will be communicated by means of internal organisational means.

Data collection will be performed by means of an interview with you.

*This agreement is entered into by the **Researcher**, Christiaan Gerhardus Joubert, being a University of South Africa post-graduate student, at the _____ Air Traffic and Navigation Services Company Site on _____; and the **Participant**, _____ (name and surname), as an acknowledgement of providing my (participant) informed consent to voluntarily participate in this research project in accordance with the conditions and requirements presented and contained in this agreement.*

*Signed by the **Researcher**:* _____

*Signed by the **Participant**:* _____

Dear Participant

TRANSCRIPT: RESEARCH PROJECT (Follower experiences and expectations of leadership behaviours in a safety-critical commercial environment: The case of the Air Traffic and Navigation Services Company)

Attached please find your transcript copy of the interview conducted by Ian Joubert in which you participated.

You are requested to check this transcript and ensure that the transcript content is an accurate reflection of your thoughts, perceptions, opinions and observations as expressed during said interview. Grammar and spelling corrections are not required.

This interview data will be categorised and analysed and patterns of similarity and differences will be explored by me in order to explain the current views held by followers with regard to leadership behaviour qualities within the Air Traffic and Navigation Services Company in terms of focus, inspirational value and discouraging conduct. I wish to reiterate that your identity will remain known only to me, and will not be disclosed in any form in the final research report.

You are most welcome to provide me with further information and/or comments in response to the interview questions stated if you wish. Any changes/amendments to the transcript and/or further information/comments must please reach me within one week after receipt (e-mail responses are preferred).

Contact information:

- Fax: 011 390 1209 (clearly indicate: For attention Ian Joubert)
- Telephone: 011 570 0400
- Mobile: 083 231 6246
- e-mail: ianj@atns.co.za

A no-return action will be regarded as an indication of agreement with the attached transcript content.

Your assistance is greatly appreciated.

Kind regards

Ian Joubert

Memorandum to the Chief Executive Officer ATNS

Memorandum received from the Chief Executive Officer ATNS

Memorandum to the Executive Operations ATNS

Memorandum to the Senior Managers Operations ATNS



MEMORANDUM

To ATNS CEO
From C.G. (Ian) Joubert
Date 05 Oct 2010
Subject A request for approval and support to conduct a doctoral research study within ATNS

As part of my post-graduate work (DBL thesis) I plan to conduct research in the ATNS operational environment. This proposed research study is aimed at discovering leadership behaviours reported by followers within the Air Traffic and Navigation Services Company.

A likely outcome of this proposed research project, as guided by its purpose, is to attain an appreciation of leadership behaviour qualities within the Air Traffic and Navigation Services Company by identifying individual (follower) current realities and emergent issues. The purpose of an inquiry of this nature is considered to be exploratory. An aim of the planned research project is thus to create an opportunity for followers to communicate an appreciation of leadership behaviours encountered by them in organisational work settings. Understanding the effectiveness of leadership behaviours as reported by followers and found within ATNS may provide insight into leadership success. This insight may highlight dynamics and influencing forces that may assist with amongst other relationship management, leadership training, leadership development and performance management.

The success of this planned research will rely on sample data accumulated at various ATNS Operational Centres. The size of the required sample has not yet been finalised. I plan to collect data during 2011 by means of interviews and/or questionnaires (pending final decision by my Supervisor and the UNISA Graduate School of Business Leadership) that will be completed by ATNS staff members.

Approval is hereby requested from ATNS to permit me to conduct said research. I understand and undertake to comply with all the ethical and confidentiality requirements as imposed and applicable to an academic and workplace research project and as stipulated/determined by both ATNS and the UNISA Graduate School of Business Leadership.

Assistance in this matter is appreciated.



C.G. (Ian) Joubert
Instructor: ATS Training (ATA)





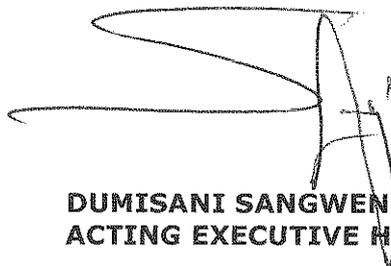
MEMORANDUM

To C.G. (Ian) Joubert
From Dumisani Sangweni, Acting Executive Human Capital
Copy Patrick Dlamini, Chief Executive Officer
Date 12 November 2010
Subject Request for approval and support to conduct a doctoral research study within ATNS

We refer to your memorandum addressed to the CEO, dated 05 October 2010, requesting permission to conduct research in the ATNS operational environment (aimed at discovering leadership behaviours reported by followers within the Air Traffic and Navigation Services Company).

Approval is hereby granted to permit you to conduct said research. You are instructed to comply with all the ethical and confidentiality requirements as imposed and applicable to an academic and workplace research project and as stipulated/determined by both ATNS and the UNISA Graduate School of Business Leadership.

Please note that we would like to have access to the research material and final thesis. This could assist ATNS efforts to implement its leadership programme and initiatives and we may request your participation from time to time in these forums to assist and add value.



DUMISANI SANGWENI
ACTING EXECUTIVE HUMAN CAPITAL



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MEMORANDUM

To Executive: Operations
From C.G. (Ian) Joubert
Date 07 February 2013
Subject BRIEF TO E: OPS ON 07 FEB 2013

The purpose of the meeting: To brief E: Ops of my university research project, as approved by ATNS Act CEO 12 Nov 2010, with specific reference to the envisaged participation of ATNS Ops personnel.

INTRODUCTION

Research: Approved Doctorate research at the University of South Africa's Graduate School of Business Leadership, supervised by Dr Joseph Feldman.

Working title: Follower experiences and expectations of leadership behaviours in a safety-critical commercial environment: The case of the Air Traffic and Navigation Services Company.

CONCEPT

Premise: Current knowledge of the leadership-follower relationship subject from an academic perspective suggests that research in leadership studies may tend to focus on the leader as the focal point and prime element of the leader-follower relationship. Furthermore academics agree that the lack of research and emphasis on followership relative to leadership in the business world is ironic considering that the two are so intertwined. Current knowledge regarding leadership efficiency, effectiveness and development within the Air Traffic Management sector has to date received limited attention. This research project explores leadership-follower relationships with specific reference to leadership behaviour insights obtained from followers. A need has been revealed to understand how and what followers pay attention to when reflecting on leadership behaviours and why. Such understanding may be beneficial to leadership development because it provides a leadership development needs analysis.

Benefit: It was deemed that a deeper understanding of existing leader traits and behaviours could possibly be found in pronounced follower experiences, views and reflections. These follower views would identify and describe leadership behaviours that persuade or dissuade followership. A meaningful follower-inspired research study was thus justified in order to appreciate apparent leadership traits (distinguishing qualities or characteristics) and behaviours (ways in which people behave or act).

CONTEXT

Research questions: The research project examines the nature, characteristics and impact of leadership behaviour qualities in the Air Traffic and Navigation Services Company. The research aims to identify current views held by followers with regard to leadership behaviour qualities within the Air Traffic and Navigation Services Company in terms of focus, inspirational value and discouraging conduct?



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General focus research questions are:

1. How do followers within the Air Traffic and Navigation Services Company delineate leadership behaviour qualities in terms of significance of these behaviour qualities?
2. How do observed current leadership behaviour qualities inspire follower demeanour within the Air Traffic and Navigation Services Company?
3. How do observed current leadership behaviour qualities discourage follower demeanour within the Air Traffic and Navigation Services Company?

Benefit: Potential value of this research may be comprehended in terms of context and pragmatic outcomes. This research project is contextualised within a safety-conscious, highly regulated and technology-driven industry (the South African Aviation Industry), a safety-critical sector (Air Navigation Services) and specifically the Air Traffic and Navigation Services Company. Research findings will be drawn on to support/enhance/guide future management training and development initiatives within *inter alia* the Air Traffic and Navigation Services Company.

REQUIREMENT

Sample: The target population comprises all non-management operations employees employed by the Air Traffic and Navigation Services Company (defined and described as “followers”). These positions are limited to operations personnel constituting Air Traffic Control Officers, Air Traffic Service Officers and Aeronautical Information Management Officers. A sample will be drawn from the mentioned population.

Process: Data collection will take place at the various airports and at the Aviation Training Academy (during the period February to July 2013). ATNS operational personnel included in the sample will be required to:

1. Participate in individual interviews; and/or
2. Participate in focus group interviews; and/or
3. Complete the Leader Trait and Behaviour Questionnaire.

Participation by ATNS operational personnel in this research study will be voluntary and will not interfere with operational work and/or training. Assistance from line managers will be appreciated in terms of administering the Leader Trait and Behaviour Questionnaire.

C.G. (Ian) Joubert



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MEMORANDUM

To SM: Operations
From C.G. (Ian) Joubert
Date 08 February 2013
Subject BRIEF TO SM: OPS ON 08 FEB 2013

The purpose of the meeting: To brief SM: Ops of my university research project, as approved by ATNS Act CEO 12 Nov 2010, with specific reference to the envisaged participation of ATNS Ops personnel.

INTRODUCTION

Research: Approved Doctorate research at the University of South Africa's Graduate School of Business Leadership, supervised by Dr Joseph Feldman.

Working title: Follower experiences and expectations of leadership behaviours in a safety-critical commercial environment: The case of the Air Traffic and Navigation Services Company.

CONCEPT

Premise: Current knowledge of the leadership-follower relationship subject from an academic perspective suggests that research in leadership studies may tend to focus on the leader as the focal point and prime element of the leader-follower relationship. Furthermore academics agree that the lack of research and emphasis on followership relative to leadership in the business world is ironic considering that the two are so intertwined. Current knowledge regarding leadership efficiency, effectiveness and development within the Air Traffic Management sector has to date received limited attention. This research project explores leadership-follower relationships with specific reference to leadership behaviour insights obtained from followers. A need has been revealed to understand how and what followers pay attention to when reflecting on leadership behaviours and why. Such understanding may be beneficial to leadership development because it provides a leadership development needs analysis.

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Process: Data collection will take place at the various airports and at the Aviation Training Academy (during the period February to July 2013). ATNS operational personnel included in the sample will be required to:

1. Participate in individual interviews; and/or
2. Participate in focus group interviews; and/or
3. Complete the Leader Trait and Behaviour Questionnaire.

Participation by ATNS operational personnel in this research study will be voluntary and will not interfere with operational work and/or training. Assistance from line managers will be appreciated in terms of administering the Leader Trait and Behaviour Questionnaire.

C.G. (Ian) Joubert



RESEARCHER TASK/ACTIVITY GUIDE**FOCUS GROUP INTERVIEWS**PRE-FOCUS GROUP INTERVIEW ACTIVITIES

Ensure that the participants have voluntarily provided their consent by means of a completed Researcher-Participant Agreement.

Have the questions ready for the participants.

Arrange not to be disturbed during the interview.

Ensure that participants know their participant numbers.

Check that the tape recorder is serviceable and load an audio cassette to record the interview.

Open a page in the field notes and register:

- date and time; and
- participant numbers.

FOCUS GROUP INTERVIEW

Thank the participants for their attendance.

Provide the following information to the participant:

This focus group interview will enable me to gather current views held by the group with regard to leadership behaviour qualities of Air Traffic Management (ATM) Managers within the Air Traffic and Navigation Services Company in terms of focus, inspirational value and discouraging conduct. I will conduct a focus group interview with participating Air Traffic and Navigation Services employees at this unit and other identified units. I will use 4 open-ended questions, thus allowing for a limitless response from the focus group. I will also ask the same questions during each focus group interview. This will allow for reliability, consistency and ease of data analysis. This focus group interview will allow me to gain a deeper understanding of “what leadership behaviours do followers pay attention to and why?”, “what leadership behaviours encourage followership and why?” and “what leadership behaviours discourage followership and why?”. I will use focus group interview results (qualitative data) to assist in

RESEARCHER TASK/ACTIVITY GUIDE

the creation of deeper understanding. This focus group interview should not exceed one hour. All interviews will be audio-taped and I will prepare transcripts of these confidential interviews. The use of focus groups will enable me to capitalize on the group interaction around a topic.

I expect focus groups to share individual and team experiences. I will use focus group results to assist in the creation of deeper understanding.

I will assume the role of facilitator/moderator in order to maintain a supportive and non-evaluative environment.

Emphasise to the participants that:

There are no correct answers to the four questions.

Only one person at a time should talk.

When responding state your unique number first in order to assist with the transcription.

Each participant will receive a written version of the question posed and they will be allowed to study the question prior to providing a response.

Their honest responses are requested.

Identity of participants and the centre will remain confidential.

Transcribed information will be made available to participants for validation purposes.

Obtain and note the following **demographic** information in the field notes for each participant:

- Date and time of interview
- Name of the Air Traffic Control Centre
- Participant's name and surname
- Participant's gender
- Participant's race classification (Black African, White, Coloured and Indian/Asian)
- Participant's age bracket

A	B	C	D	E
20 years or less	21 – 30 years	31 – 40 years	41 – 50 years	Older than 50 years

- Participant's occupational information:

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- Participant's specialist area

A	B	C
ATSO	AIMO	ATCO

- Current post/position
- Service commencement date at the specific Air Traffic Control Centre
- Number of years employed by Air Traffic and Navigation Services Company

Ensure participants know their unique numbers.

Determine the need for a warm-up question (when required ask: "What satisfaction does air traffic controlling provide to you as a team?").

Activate the tape recorder.

Ask the first question and hand the question to the participants.

Note all own prompts and notes in the field notes.

Do not interrupt (unless necessary).

Seek clarity when required and probe for depth when required.

Continue with the next three questions, conduct to be similar as for question 1.

Note all own prompts, notes and own observations made in the field notes.

Upon completion of the interview invite last comments and thank the audience for their participation.

Thank the participants.

Deactivate the tape recorder.

Obtain contact details from participants to which transcribed info can be forwarded and note in the field notes.

Collect question cards.

QUESTIONS

- 1. Explain the differences between leadership and followership within ATNS.**
- 2. What do leaders of effective work teams within ATNS do?**
- 3. What do leaders of less effective work teams within ATNS do?**
- 4. Provide examples of leadership behaviours that come to mind when you think of ATNS leaders.**

RESEARCHER TASK/ACTIVITY GUIDE

Each participant will be handed a card, similar to the examples below, containing the question that will receive attention. This question card is handed to the participant when the specific question is asked by the researcher.

1. Explain the differences between leadership and followership within ATNS.

2. What do leaders of effective work teams within ATNS do?

3. What do leaders of less effective work teams within ATNS do?

4. Provide examples of leadership behaviours that come to mind when you think of ATNS leaders.

19 November 2012

To: C.G. Joubert

From: Matita Tshabalala
Jaco van der Westhuizen

CONTENT VALIDITY: LEADER TRAIT AND BEHAVIOUR QUESTIONNAIRE

INTRODUCTION

The members of this panel were chosen on the basis of their knowledge and work experience in the areas of organisational behaviour, leadership and management within Air Navigation Service Providers. The two members are from two different backgrounds (one from Human Resource Management and the other from Air Traffic Management) to provide a diverse perspective when evaluating the Leader Trait and Behaviour Questionnaire.

COMMENTS

It was noted by the panel that during the original study (reference: *Wilson, M.S. 2004. Effective developmental leadership: A study of the traits and behaviours of a leader who develops both people and the organization. Ph.D. thesis. Louisiana State University, Louisiana*) the questionnaire was administered and the resulting data were analysed using factor analysis to determine the trait factors and behaviour factors.

Activities and outcomes of this diverse expert panel were *inter alia* aimed at:

- Evaluating language used, questioning format applied and ease-of-use of the questionnaire.
- Eliminating duplicates and synonyms.
- Evaluating the appropriateness and relevance of trait words and trait phrases.
- Evaluating the "Likert" scale of 1-5.

FINDINGS

This panel found that:

- The management levels focused upon need to be further explained.
- The occupational groupings require corrected titles.
- Include respondent age groupings and race groupings. These may be beneficial at a later stage.
- Reference behaviours. Consider replacing "culture" with "values".
- Reference behaviours. Consider adding "in a constructive manner" to "challenges others".
- Reference behaviours. Change "create solutions" to read "generate solutions"

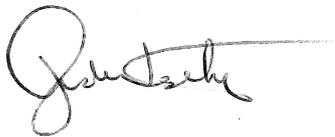
Appendix F

- Ensure that the scale appears at the top of each page of the questionnaire.
- Constructs under investigation are appropriate.
- No complex language, ambiguous concepts and unnecessary items were noted.
- Questions are short, to the point, and appropriate.
- No leading, embarrassing and potentially upsetting questions were noted.
- No merging of two questions into one and/or use of double negatives were noted.
- Questions are grouped together under a common themed heading and the use of lead-in questions, which should help respondents contextualise the questions, are noted.
- The scale used is fit-for-purpose.

In summary it is the opinion of the panel that this Leader Trait and Behaviour Questionnaire be considered valid in terms of content.



Matita Tshabalala (B.Soc.Sci., B.A. Hons., M.A.)
ATNS Human Factors Specialist



Jaco van der Westhuizen (B.A. (Phys Ed), M.B.L.)
ATNS Human Factors Specialist

PILOT TESTING THE LEADER TRAIT AND BEHAVIOUR QUESTIONNAIRE

Introduction

Number of participants: Four.

Purpose: The purpose of the exercise was principally to increase the reliability, validity and practicability of the questionnaire.

Results

Pilot objectives comply with questionnaire design as specified by Cohen, Manion and Morrison (2000: 260). Comments and information received from participants are listed as decisions. Remedial actions undertaken by the Researcher are listed as actions.

Objective 1: Determine the clarity of the questionnaire items, instructions and layout.

Decisions: Use of five-point Likert scale that allows for frequency measurement.

Provide specific instructions and use a standard lay-out.

Actions: Specific and required Likert scale introduced and implemented.

A detailed introduction is provided and specific/focused instructions are provided.

A uniform table lay-out allowing for standard responses was designed.

Objective 2: Eliminate ambiguities or difficulties in wording.

Decisions: Provide a thesaurus description for each trait.

Review behaviours to ensure each item is sufficiently described and will be understood.

Actions: A description of each trait is provided.

Each behaviour is presented as a statement component.

Objective 3: Gain feedback on the response categories for closed questions.

Decision: Use of five-point Likert scale that allows for frequency measurement.

Actions: Specific and required Likert scale introduced and implemented.

Objective 4: Gain feedback on the attractiveness and appearance of the questionnaire.

Decisions: Clearly distinguish between traits and behaviours.

Repeat the scale on each page.

Change the lead-in question to include the words "... your Air Traffic Management (ATM) Managers".

Actions: A definition of trait and behaviour is included and repeated as part of each lead-in question.

Likert scale description repeated on each page.

Lead-in questions were changed to include the words "... your Air Traffic Management (ATM) Managers".

Objective 5: Gain feedback on the lay-out, sectionalising, numbering and item numbering of the questionnaire.

Decision: Statistician preference was for three sections/parts, numbering of each item in a section/part and item numbering.

Action: Three sections/parts were identified and highlighted, numbering of each item in a section/part was introduced and item numbering was ensured.

Objective 6: Check the time taken to complete the questionnaire.

Decision: Change the time from 30 minutes to 40 minutes.

Action: Time changed to 40 minutes.

Objective 7: Check whether the questionnaire is too long or too short, too easy or too difficult, too un-engaging, too threatening, too intrusive, and/or too offensive.

Decisions: The questionnaire is not considered too short. The division between section B and C (and associated change of focus) ensures that the questionnaire is not too long.

The questionnaire stimulates reflective thought and is not considered too easy. Traits are well defined/described and behaviours are provided with statement components in order to alleviate any unnecessary difficulties.

The questionnaire is not un-engaging, not threatening and not offensive.

Actions: Maintain the division between sections B and C.

Keep the well defined/described traits and behaviours with statement components.

Objective 8: Identify and exclude redundant questions.

Decisions: All questions (items) are considered appropriately based on the content validity feedback (Appendix F).

Changes were required in terms of:

- Reference behaviours. Consider replacing “culture” with “values”.
- Reference behaviours. Consider adding “in a constructive manner” to “challenges others”.
- Reference behaviours. Change “create solutions” to read “generate solutions”

Action: Required changes were incorporated.

Objective 9: Try out the coding/classification system for data analysis.

Decision: Statistician concurred that the envisioned data analysis would be possible.

Action: None required.

Objective 10: Ensure that the language used would be understood by the population (considering the South African context).

Decision: Provide for understandable words and phrases.

Action/

Outcome: The following was accepted:

A. Leader Traits:

- 1 Able to organise people (coordinate and arrange activities efficiently)
- 2 Active (moving, working and doing things in a lively manner and quickly)
- 3 Agreeable (pleasant and enjoyable, prepared to consent)
- 4 Analytical (using or involving analyses or logical reasoning)
- 5 Assertive (showing a strong and confident personality)
- 6 Authoritative (being reliable and showing authority)
- 7 Bold (confident and brave, fearless and adventurous)
- 8 Broad skills (extensive, widespread and numerous abilities)
- 9 Calm and poised speech (having a composed and self-assured manner)
- 10 Charismatic (exercising a compelling charm which inspires devotion)
- 11 Coherent (able to communicate clearly, consistently and logically)
- 12 Competitive (displaying a strong desire to be more successful)
- 13 Complex-thinker (complicated and not easy to understand)

- 14 Concentrated (detail-oriented)
- 15 Consistent (unchanging in nature)
- 16 Contemporary thinking (thinking about current, present and pressing matters)
- 17 Control (power to influence people's behaviour or events)
- 18 Cooperative (mutual assistance in working towards a common goal)
- 19 Dedicated (devoted to a task or purpose)
- 20 Dependable (trustworthy and reliable)
- 21 Disciplined (showing a controlled form of behaviour or working)
- 22 Down-to-earth (with no illusions or pretensions; practical and realistic)
- 23 Driven (motivated by a specific factor/feeling)
- 24 Efficient (able to work well without wasting time and resources, producing a satisfactory result)
- 25 Efficient and effective (producing the intended result, making strong impression)
- 26 Eloquent (persuasive in speaking and writing or indicating something)
- 27 Enduring (the ability to see something through)
- 28 Energetic (involving great activity or vitality characterised by energy)
- 29 Engaging personality (charming and attractive or capturing attention)
- 30 Faithful (showing allegiance and attachment to a course of action)
- 31 Fast-thinking (able to decide on an action quickly)
- 32 Focused (directing a great deal of attention or activity towards a particular aim)
- 33 Hard-working (working with energy and care)
- 34 Helpful (ready to give help)
- 35 Honest (free of deceit, truthful and sincere)
- 36 Interesting (holding the attention, causing curiosity)
- 37 Just (characterised by right and fair behaviour)
- 38 Loyal (showing firm and constant support to a person)
- 39 Non-abrasive tone (not abrasive or harsh in speech)
- 40 A micro-manager (controls every part, however small)
- 41 Opportunistic (taking advantage of opportunities)
- 42 Organised (works systematically)
- 43 Outspoken (saying openly exactly what one thinks)
- 44 Passionate (having, showing, or caused by strong feelings or beliefs)
- 45 Patient (able to accept or tolerate delays, problems)
- 46 Patient demeanour (characterised by patience)
- 47 Perceptive (having or showing understanding or insight)
- 48 Persistent (refusing to give up)
- 49 Personable (having a pleasant appearance or manner)
- 50 Poise (graceful and elegant bearing in a person)
- 51 Powerful/strong (having great power-basis, having a strong effect on people)
- 52 Practical (concerned with the actual doing of something rather than with theory)
- 53 Pragmatic (treating things in a sensible and realistic way to produce results)
- 54 Prepared (able to deal with something expected)
- 55 Productive (able to produce goods/results in large quantities)
- 56 Rational (able to think and make decisions based on reason)
- 57 Realistic (having a sensible and practical idea of what can be achieved)
- 58 Sociable (spending time and interacting with other people)
- 59 Strong (able to perform a specified action well, relentlessly and powerfully)
- 60 Tactful (skill and sensitivity in dealing with others or with difficult issues)
- 61 Teach by doing (show someone how to do something)
- 62 Well-spoken (speaking correctly or in an elegant way)
- 63 Willing (being prepared to do something)

B. Leader Behaviours

- 1 Acknowledges achievement/effort
- 2 Acts professionally
- 3 Is adaptive to changing environments
- 4 Addresses team members' issues/problems
- 5 Admits mistakes
- 6 Advocates the "we" and not the "I" in team
- 7 Allocates resources
- 8 Always willing to help others
- 9 Appears confident
- 10 Appears in charge
- 11 Is approachable
- 12 Asks for feedback
- 13 Acts assertively
- 14 Assumes responsibility
- 15 Is aware of the company's values and leads in that direction
- 16 Builds leaders
- 17 Cares about others' welfare
- 18 Challenges others in a constructive manner
- 19 Acts in a charismatic/charming manner
- 20 Communicates openly
- 21 Is convincing
- 22 Is cooperative
- 23 Is courteous
- 24 Creates a comfortable working atmosphere
- 25 Generates solutions
- 26 Acts decisively
- 27 Delegates authorities
- 28 Determines people's needs
- 29 Develops others
- 30 Develops strategies/actions
- 31 Directs/orders followers
- 32 Is efficient
- 33 Empowers others
- 34 Energises others
- 35 Establishes goals
- 36 Evaluates all options
- 37 Evaluates talent
- 38 Facilitates work/tasks
- 39 Remains focused
- 40 Follows through
- 41 Fosters/promotes people growth
- 42 Gathers all information
- 43 Gets involved
- 44 Gives/solicits feedback
- 45 Is hard-working
- 46 Has an open-door policy
- 47 Helps to resolve conflicts
- 48 Is humble/modest
- 49 Improves the morale of employees
- 50 Informs employees
- 51 Inspires others
- 52 Is involved in community initiatives
- 53 Is creative/innovative

- 54 Keeps a competitive edge
- 55 Learns about others
- 56 Lends a helping hand/voice
- 57 Motivates others
- 58 Is not afraid of failure
- 59 Remains open-minded
- 60 Is organised
- 61 Is passionate
- 62 Positions individuals for success
- 63 Predicts needs to complete a task
- 64 Acts proactively
- 65 Promotes cooperation
- 66 Provides the necessary resources for the team to succeed
- 67 Provides advice to employees
- 68 Recognises talent
- 69 Reflects on work outcomes
- 70 Removes barriers
- 71 Acts respectfully
- 72 Is a risk-taker
- 73 Serves as a role model
- 74 Seeks knowledge
- 75 Seeks to understand
- 76 Sees opportunities
- 77 Sets clear goals
- 78 Sets the vision
- 79 Shares the vision
- 80 Shows genuine concern
- 81 Shows a sense of urgency
- 82 Solves problems
- 83 Speaks out
- 84 Stays positive
- 85 Is straightforward
- 86 Acts in a strategic manner
- 87 Strives for success
- 88 Is team-oriented
- 89 Thinks outside the box
- 90 Acts in a thorough manner
- 91 Acts in a timely manner
- 92 Is trusting
- 93 Uses resources effectively
- 94 Willingly supports employees

FACTOR ANALYSIS OF TRAITS AND BEHAVIOURS ADAPTED AND APPLICABLE TO THE LEADER TRAIT AND BEHAVIOUR QUESTIONNAIRE

LEADER TRAITS (B)	
Dedicated	
1	Able to organise people
11	Coherent
15	Consistent
19	Dedicated
20	Dependable
21	Disciplined
24	Efficient
25	Efficient and effective
32	Focused
33	Hard-working
34	Helpful
42	Organised
48	Persistent
54	Prepared
55	Productive
61	Teach by doing
63	Willing
Practical	
2	Active
22	Down-to-earth
27	Enduring
39	Non-abrasive tone
40	Micro-manager
47	Perceptive
52	Practical
53	Pragmatic
56	Rational
57	Realistic
60	Tactful
62	Well-spoken
Cooperative	
3	Agreeable
9	Calm and poised speech
16	Contemporary thinking
18	Cooperative
30	Faithful
35	Honest
37	Just
38	Loyal
45	Patient
46	Patient demeanour
Assertive	
5	Assertive
6	Authoritative

7	Bold
12	Competitive
17	Control
23	Driven
31	Fast-thinking
41	Opportunistic
43	Outspoken
50	Poise
51	Powerful/strong
59	Strong
Personable	
10	Charismatic
26	Eloquent
28	Energetic
29	Engaging personality
36	Interesting
44	Passionate
49	Personable
58	Sociable
Analytical	
4	Analytical
8	Broad skills
13	Complex thinker
14	Concentrated

LEADER BEHAVIOURS (C)	
Focused	
39	Remains focused
40	Follows through
45	Is hard-working
60	Is organised
65	Promotes cooperation
74	Seeks knowledge
75	Seeks to understand
76	Sees opportunities
77	Sets clear goals
78	Sets the vision
79	Shares the vision
85	Is straightforward
86	Acts in a strategic manner
87	Strives for success
89	Thinks outside the box
90	Acts in a thorough manner
91	Acts in a timely manner
Supportive	
2	Acts professionally
5	Admits mistakes
8	Always willing to help others
11	Is approachable
12	Asks for feedback
17	Cares about others' welfare

20	Communicates openly
22	Is cooperative
23	Is courteous
24	Creates a comfortable working atmosphere
44	Gives/solicits feedback
46	Has an open-door policy
47	Helps to resolve conflicts
48	Is humble/modest
50	Informs employees
55	Learns about others
56	Lends a helping hand/voice
59	Remains open-minded
71	Acts respectfully
80	Shows genuine concern
84	Stays positive
92	Is trusting
94	Willingly supports employees
Developer	
1	Acknowledges achievement/effort
6	Advocates the “we” and not the “I” in team
16	Builds leaders
29	Develops others
33	Empowers others
34	Energises others
41	Fosters/promotes people growth
49	Improves the morale of employees
51	Inspires others
57	Motivates others
62	Positions individuals for success
88	Is team-oriented
Advisor	
36	Evaluates all options
37	Evaluates talent
38	Facilitates work/tasks
42	Gathers all information
43	Gets involved
63	Predicts needs to complete a task
64	Acts proactively
66	Provides the necessary resources for the team to succeed
67	Provides advice to employees
68	Recognises talent
70	Removes barriers
82	Solves problems
Competitive	
52	Is involved in community initiatives
53	Is creative/innovative
54	Keeps a competitive edge
58	Is not afraid of failure
61	Is passionate
69	Reflects on work outcomes
72	Is a risk taker
81	Shows a sense of urgency
83	Speaks out

Delegator	
3	Is adaptive to changing environments
4	Addresses team members' issues/problems
7	Allocates resources
9	Appears confident
10	Appears in charge
15	Is aware of the company's values and leads in that direction
25	Generates solutions
26	Acts decisively
27	Delegates authorities
28	Determines people's needs
30	Develops strategies/actions
31	Directs/orders followers
32	Is efficient
35	Establishes goals
93	Uses resources effectively
Charismatic	
13	Acts assertively
14	Assumes responsibility
18	Challenges others in a constructive manner
19	Acts in a charismatic/charming manner
21	Is convincing
73	Serves as a role model

Source: Wilson, M.S. 2004. Effective developmental leadership: A study of the traits and behaviours of a leader who develops both people and the organization. Ph.D. thesis. Louisiana State University, Louisiana.

PRESENTATION OF DATA COLLECTED: TRAITS AND BEHAVIOURS COLLATED FROM THE LEADER TRAIT AND BEHAVIOUR QUESTIONNAIRE RESPONSES

Table I.1. Leader trait items custom table for three vocational groups

Air Traffic Service Officers (ATSO)		Never	Rarely	Sometimes	Often	Always	Total
B1 Able to organise people (coordinate and arrange activities efficiently)	Count	3	8	10	20	5	46
	Row N %	6.5%	17.4%	21.7%	43.5%	10.9%	100.0%
B2 Active (moving, working and doing things in a lively manner and quickly)	Count	0	9	13	19	5	46
	Row N %	0.0%	19.6%	28.3%	41.3%	10.9%	100.0%
B3 Agreeable (pleasant and enjoyable, prepared to consent)	Count	2	8	16	14	6	46
	Row N %	4.3%	17.4%	34.8%	30.4%	13.0%	100.0%
B4 Analytical (using or involving analyses or logical reasoning)	Count	2	4	16	16	8	46
	Row N %	4.3%	8.7%	34.8%	34.8%	17.4%	100.0%
B5 Assertive (showing a strong and confident personality)	Count	1	3	10	19	13	46
	Row N %	2.2%	6.5%	21.7%	41.3%	28.3%	100.0%
B6 Authoritative (being reliable and showing authority)	Count	0	2	17	20	7	46
	Row N %	0.0%	4.3%	37.0%	43.5%	15.2%	100.0%
B7 Bold (confident and brave, fearless and adventurous)	Count	1	8	9	17	11	46
	Row N %	2.2%	17.4%	19.6%	37.0%	23.9%	100.0%
B8 Broad skills (extensive, widespread and numerous abilities)	Count	0	8	13	20	5	46
	Row N %	0.0%	17.4%	28.3%	43.5%	10.9%	100.0%
B9 Calm and poised speech (having a composed and self-assured manner)	Count	1	9	17	9	10	46
	Row N %	2.2%	19.6%	37.0%	19.6%	21.7%	100.0%
B10 Charismatic (exercising a compelling charm which inspires devotion)	Count	5	3	16	13	9	46
	Row N %	10.9%	6.5%	34.8%	28.3%	19.6%	100.0%
B11 Coherent (able to communicate clearly, consistently and logically)	Count	1	6	15	14	10	46
	Row N %	2.2%	13.0%	32.6%	30.4%	21.7%	100.0%
B12 Competitive (displaying a strong desire to be more successful)	Count	1	3	20	11	11	46
	Row N %	2.2%	6.5%	43.5%	23.9%	23.9%	100.0%
B13 Complex-thinker (complicated and not easy to understand)	Count	2	12	19	7	5	45
	Row N %	4.4%	26.7%	42.2%	15.6%	11.1%	100.0%
B14 Concentrated (detail-oriented)	Count	0	7	21	13	5	46
	Row N %	0.0%	15.2%	45.7%	28.3%	10.9%	100.0%

Appendix I

B15 Consistent (unchanging in nature)	Count	2	8	20	12	4	46
	Row N %	4.3%	17.4%	43.5%	26.1%	8.7%	100.0%
B16 Contemporary thinking (thinking about current, present and pressing matters)	Count	0	9	17	13	7	46
	Row N %	0.0%	19.6%	37.0%	28.3%	15.2%	100.0%
B17 Control (power to influence people's behaviour or events)	Count	2	2	14	18	10	46
	Row N %	4.3%	4.3%	30.4%	39.1%	21.7%	100.0%
B18 Cooperative (mutual assistance in working towards a common goal)	Count	1	4	25	9	7	46
	Row N %	2.2%	8.7%	54.3%	19.6%	15.2%	100.0%
B19 Dedicated (devoted to a task or purpose)	Count	0	1	20	14	11	46
	Row N %	0.0%	2.2%	43.5%	30.4%	23.9%	100.0%
B20 Dependable (trustworthy and reliable)	Count	2	7	18	13	6	46
	Row N %	4.3%	15.2%	39.1%	28.3%	13.0%	100.0%
B21 Disciplined (showing a controlled form of behaviour or working)	Count	1	4	17	14	10	46
	Row N %	2.2%	8.7%	37.0%	30.4%	21.7%	100.0%
B22 Down-to-earth (with no illusions or pretensions; practical and realistic)	Count	1	6	17	13	9	46
	Row N %	2.2%	13.0%	37.0%	28.3%	19.6%	100.0%
B23 Driven (motivated by a specific factor/feeling)	Count	1	4	18	10	13	46
	Row N %	2.2%	8.7%	39.1%	21.7%	28.3%	100.0%
B24 Efficient (able to work well without wasting time and resources, producing a satisfactory result)	Count	3	8	16	11	8	46
	Row N %	6.5%	17.4%	34.8%	23.9%	17.4%	100.0%
B25 Efficient and effective (producing the intended result, making strong impression)	Count	3	6	16	14	7	46
	Row N %	6.5%	13.0%	34.8%	30.4%	15.2%	100.0%
B26 Eloquent (persuasive in speaking and writing or indicating something)	Count	0	6	17	17	6	46
	Row N %	0.0%	13.0%	37.0%	37.0%	13.0%	100.0%
B27 Enduring (the ability to see something through)	Count	0	1	24	14	7	46
	Row N %	0.0%	2.2%	52.2%	30.4%	15.2%	100.0%
B28 Energetic (involving great activity or vitality characterised by energy)	Count	3	5	17	12	9	46
	Row N %	6.5%	10.9%	37.0%	26.1%	19.6%	100.0%
B29 Engaging personality (charming and attractive or capturing attention)	Count	5	9	16	6	10	46
	Row N %	10.9%	19.6%	34.8%	13.0%	21.7%	100.0%
B30 Faithful (showing allegiance and attachment to a course of action)	Count	3	5	17	9	12	46
	Row N %	6.5%	10.9%	37.0%	19.6%	26.1%	100.0%
B31 Fast-thinking (able to decide on an action quickly)	Count	0	8	18	8	12	46
	Row N %	0.0%	17.4%	39.1%	17.4%	26.1%	100.0%
B32 Focused (directing a great deal of attention or activity towards a particular aim)	Count	0	8	16	12	10	46
	Row N %	0.0%	17.4%	34.8%	26.1%	21.7%	100.0%
B33 Hard-working (working with energy and care)	Count	0	5	18	14	9	46
	Row N %	0.0%	10.9%	39.1%	30.4%	19.6%	100.0%

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	Row N %	0.0%	10.9%	39.1%	30.4%	19.6%	100.0%
B34 Helpful (ready to give help)	Count	2	5	15	9	15	46
	Row N %	4.3%	10.9%	32.6%	19.6%	32.6%	100.0%
B35 Honest (free of deceit, truthful and sincere)	Count	3	7	15	12	9	46
	Row N %	6.5%	15.2%	32.6%	26.1%	19.6%	100.0%
B36 Interesting (holding the attention, causing curiosity)	Count	3	6	18	13	6	46
	Row N %	6.5%	13.0%	39.1%	28.3%	13.0%	100.0%
B37 Just (characterised by right and fair behaviour)	Count	5	4	20	9	8	46
	Row N %	10.9%	8.7%	43.5%	19.6%	17.4%	100.0%
B38 Loyal (showing firm and constant support to a person)	Count	5	4	18	11	8	46
	Row N %	10.9%	8.7%	39.1%	23.9%	17.4%	100.0%
B39 Non-abrasive tone (not abrasive or harsh in speech)	Count	1	6	17	13	9	46
	Row N %	2.2%	13.0%	37.0%	28.3%	19.6%	100.0%
B40 A micro-manager (controls every part, however small)	Count	3	6	22	10	5	46
	Row N %	6.5%	13.0%	47.8%	21.7%	10.9%	100.0%
B41 Opportunistic (taking advantage of opportunities)	Count	2	2	24	11	7	46
	Row N %	4.3%	4.3%	52.2%	23.9%	15.2%	100.0%
B42 Organised (works systematically)	Count	1	4	23	10	8	46
	Row N %	2.2%	8.7%	50.0%	21.7%	17.4%	100.0%
B43 Outspoken (saying openly exactly what one thinks)	Count	1	5	11	15	14	46
	Row N %	2.2%	10.9%	23.9%	32.6%	30.4%	100.0%
B44 Passionate (having, showing, or caused by strong feelings or beliefs)	Count	0	5	22	10	9	46
	Row N %	0.0%	10.9%	47.8%	21.7%	19.6%	100.0%
B45 Patient (able to accept or tolerate delays, problems)	Count	2	9	18	11	6	46
	Row N %	4.3%	19.6%	39.1%	23.9%	13.0%	100.0%
B46 Patient demeanour (characterised by patience)	Count	2	10	17	12	5	46
	Row N %	4.3%	21.7%	37.0%	26.1%	10.9%	100.0%
B47 Perceptive (having or showing understanding or insight)	Count	0	4	21	12	9	46
	Row N %	0.0%	8.7%	45.7%	26.1%	19.6%	100.0%
B48 Persistent (refusing to give up)	Count	0	3	24	12	7	46
	Row N %	0.0%	6.5%	52.2%	26.1%	15.2%	100.0%
B49 Personable (having a pleasant appearance or manner)	Count	1	5	17	18	5	46
	Row N %	2.2%	10.9%	37.0%	39.1%	10.9%	100.0%
B50 Poise (graceful and elegant bearing in a person)	Count	1	6	20	15	4	46
	Row N %	2.2%	13.0%	43.5%	32.6%	8.7%	100.0%
B51 Powerful/strong (having great power-basis, having a strong effect on people)	Count	1	5	16	16	8	46
	Row N %	2.2%	10.9%	34.8%	34.8%	17.4%	100.0%

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B52 Practical (concerned with the actual doing of something rather than with theory)	Count	3	3	18	14	8	46
	Row N %	6.5%	6.5%	39.1%	30.4%	17.4%	100.0%
B53 Pragmatic (treating things in a sensible and realistic way to produce results)	Count	2	6	20	12	6	46
	Row N %	4.3%	13.0%	43.5%	26.1%	13.0%	100.0%
B54 Prepared (able to deal with something expected)	Count	2	3	19	15	7	46
	Row N %	4.3%	6.5%	41.3%	32.6%	15.2%	100.0%
B55 Productive (able to produce goods/results in large quantities)	Count	1	6	23	11	5	46
	Row N %	2.2%	13.0%	50.0%	23.9%	10.9%	100.0%
B56 Rational (able to think and make decisions based on reason)	Count	4	3	18	12	9	46
	Row N %	8.7%	6.5%	39.1%	26.1%	19.6%	100.0%
B57 Realistic (having a sensible and practical idea of what can be achieved)	Count	4	2	17	16	7	46
	Row N %	8.7%	4.3%	37.0%	34.8%	15.2%	100.0%
B58 Sociable (spending time and interacting with other people)	Count	3	5	17	12	9	46
	Row N %	6.5%	10.9%	37.0%	26.1%	19.6%	100.0%
B59 Strong (able to perform a specified action well, relentlessly and powerfully)	Count	0	3	17	13	13	46
	Row N %	0.0%	6.5%	37.0%	28.3%	28.3%	100.0%
B60 Tactful (skill and sensitivity in dealing with others or with difficult issues)	Count	3	6	18	12	7	46
	Row N %	6.5%	13.0%	39.1%	26.1%	15.2%	100.0%
B61 Teach by doing (show someone how to do something)	Count	5	7	13	13	8	46
	Row N %	10.9%	15.2%	28.3%	28.3%	17.4%	100.0%
B62 Well-spoken (speaking correctly or in an elegant way)	Count	2	4	15	17	8	46
	Row N %	4.3%	8.7%	32.6%	37.0%	17.4%	100.0%
B63 Willing (being prepared to do something)	Count	2	4	18	13	9	46
	Row N %	4.3%	8.7%	39.1%	28.3%	19.6%	100.0%

Aeronautical Information Management Officers (AIMO)		Never	Rarely	Sometimes	Often	Always	Total
B1 Able to organise people (coordinate and arrange activities efficiently)	Count	0	1	6	7	0	14
	Row N %	0.0%	7.1%	42.9%	50.0%	0.0%	100.0%
B2 Active (moving, working and doing things in a lively manner and quickly)	Count	0	0	8	5	1	14
	Row N %	0.0%	0.0%	57.1%	35.7%	7.1%	100.0%
B3 Agreeable (pleasant and enjoyable, prepared to consent)	Count	0	1	10	3	0	14
	Row N %	0.0%	7.1%	71.4%	21.4%	0.0%	100.0%
B4 Analytical (using or involving analyses or logical reasoning)	Count	0	1	6	6	1	14
	Row N %	0.0%	7.1%	42.9%	42.9%	7.1%	100.0%
B5 Assertive (showing a strong and confident personality)	Count	0	1	3	10	0	14
	Row N %	0.0%	7.1%	21.4%	71.4%	0.0%	100.0%
B6 Authoritative (being reliable and showing authority)	Count	1	0	4	7	2	14

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	Row N %	7.1%	0.0%	28.6%	50.0%	14.3%	100.0%
B7 Bold (confident and brave, fearless and adventurous)	Count	1	2	5	6	0	14
	Row N %	7.1%	14.3%	35.7%	42.9%	0.0%	100.0%
B8 Broad skills (extensive, widespread and numerous abilities)	Count	1	1	3	8	1	14
	Row N %	7.1%	7.1%	21.4%	57.1%	7.1%	100.0%
B9 Calm and poised speech (having a composed and self-assured manner)	Count	0	1	5	7	1	14
	Row N %	0.0%	7.1%	35.7%	50.0%	7.1%	100.0%
B10 Charismatic (exercising a compelling charm which inspires devotion)	Count	0	3	6	5	0	14
	Row N %	0.0%	21.4%	42.9%	35.7%	0.0%	100.0%
B11 Coherent (able to communicate clearly, consistently and logically)	Count	0	0	6	6	2	14
	Row N %	0.0%	0.0%	42.9%	42.9%	14.3%	100.0%
B12 Competitive (displaying a strong desire to be more successful)	Count	1	2	4	6	1	14
	Row N %	7.1%	14.3%	28.6%	42.9%	7.1%	100.0%
B13 Complex-thinker (complicated and not easy to understand)	Count	0	3	5	6	0	14
	Row N %	0.0%	21.4%	35.7%	42.9%	0.0%	100.0%
B14 Concentrated (detail-oriented)	Count	0	2	3	8	1	14
	Row N %	0.0%	14.3%	21.4%	57.1%	7.1%	100.0%
B15 Consistent (unchanging in nature)	Count	0	2	9	1	2	14
	Row N %	0.0%	14.3%	64.3%	7.1%	14.3%	100.0%
B16 Contemporary thinking (thinking about current, present and pressing matters)	Count	1	1	3	9	0	14
	Row N %	7.1%	7.1%	21.4%	64.3%	0.0%	100.0%
B17 Control (power to influence people's behaviour or events)	Count	0	0	6	5	3	14
	Row N %	0.0%	0.0%	42.9%	35.7%	21.4%	100.0%
B18 Cooperative (mutual assistance in working towards a common goal)	Count	0	3	7	3	1	14
	Row N %	0.0%	21.4%	50.0%	21.4%	7.1%	100.0%
B19 Dedicated (devoted to a task or purpose)	Count	0	1	4	6	3	14
	Row N %	0.0%	7.1%	28.6%	42.9%	21.4%	100.0%
B20 Dependable (trustworthy and reliable)	Count	0	2	5	7	0	14
	Row N %	0.0%	14.3%	35.7%	50.0%	0.0%	100.0%
B21 Disciplined (showing a controlled form of behaviour or working)	Count	0	2	4	6	2	14
	Row N %	0.0%	14.3%	28.6%	42.9%	14.3%	100.0%
B22 Down-to-earth (with no illusions or pretensions; practical and realistic)	Count	0	2	5	7	0	14
	Row N %	0.0%	14.3%	35.7%	50.0%	0.0%	100.0%
B23 Driven (motivated by a specific factor/feeling)	Count	0	1	6	6	1	14
	Row N %	0.0%	7.1%	42.9%	42.9%	7.1%	100.0%
B24 Efficient (able to work well without wasting time and resources, producing a satisfactory result)	Count	0	2	5	7	0	14
	Row N %	0.0%	14.3%	35.7%	50.0%	0.0%	100.0%

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B25 Efficient and effective (producing the intended result, making strong impression)	Count	0	1	8	5	0	14
	Row N %	0.0%	7.1%	57.1%	35.7%	0.0%	100.0%
B26 Eloquent (persuasive in speaking and writing or indicating something)	Count	0	1	6	5	2	14
	Row N %	0.0%	7.1%	42.9%	35.7%	14.3%	100.0%
B27 Enduring (the ability to see something through)	Count	0	2	4	6	2	14
	Row N %	0.0%	14.3%	28.6%	42.9%	14.3%	100.0%
B28 Energetic (involving great activity or vitality characterised by energy)	Count	0	2	5	5	2	14
	Row N %	0.0%	14.3%	35.7%	35.7%	14.3%	100.0%
B29 Engaging personality (charming and attractive or capturing attention)	Count	0	1	7	6	0	14
	Row N %	0.0%	7.1%	50.0%	42.9%	0.0%	100.0%
B30 Faithful (showing allegiance and attachment to a course of action)	Count	0	2	5	5	2	14
	Row N %	0.0%	14.3%	35.7%	35.7%	14.3%	100.0%
B31 Fast-thinking (able to decide on an action quickly)	Count	0	3	2	7	2	14
	Row N %	0.0%	21.4%	14.3%	50.0%	14.3%	100.0%
B32 Focused (directing a great deal of attention or activity towards a particular aim)	Count	1	0	5	7	1	14
	Row N %	7.1%	0.0%	35.7%	50.0%	7.1%	100.0%
B33 Hard-working (working with energy and care)	Count	0	1	2	8	3	14
	Row N %	0.0%	7.1%	14.3%	57.1%	21.4%	100.0%
B34 Helpful (ready to give help)	Count	0	2	6	5	1	14
	Row N %	0.0%	14.3%	42.9%	35.7%	7.1%	100.0%
B35 Honest (free of deceit, truthful and sincere)	Count	0	3	4	7	0	14
	Row N %	0.0%	21.4%	28.6%	50.0%	0.0%	100.0%
B36 Interesting (holding the attention, causing curiosity)	Count	0	2	7	5	0	14
	Row N %	0.0%	14.3%	50.0%	35.7%	0.0%	100.0%
B37 Just (characterised by right and fair behaviour)	Count	1	3	2	7	1	14
	Row N %	7.1%	21.4%	14.3%	50.0%	7.1%	100.0%
B38 Loyal (showing firm and constant support to a person)	Count	0	3	5	5	1	14
	Row N %	0.0%	21.4%	35.7%	35.7%	7.1%	100.0%
B39 Non-abrasive tone (not abrasive or harsh in speech)	Count	0	2	9	2	1	14
	Row N %	0.0%	14.3%	64.3%	14.3%	7.1%	100.0%
B40 A micro-manager (controls every part, however small)	Count	2	2	3	5	2	14
	Row N %	14.3%	14.3%	21.4%	35.7%	14.3%	100.0%
B41 Opportunistic (taking advantage of opportunities)	Count	0	4	7	2	1	14
	Row N %	0.0%	28.6%	50.0%	14.3%	7.1%	100.0%
B42 Organised (works systematically)	Count	1	3	3	4	3	14
	Row N %	7.1%	21.4%	21.4%	28.6%	21.4%	100.0%
B43 Outspoken (saying openly exactly what one thinks)	Count	1	2	2	5	4	14

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	Row N %	7.1%	14.3%	14.3%	35.7%	28.6%	100.0%
B44 Passionate (having, showing, or caused by strong feelings or beliefs)	Count	0	2	4	4	4	14
	Row N %	0.0%	14.3%	28.6%	28.6%	28.6%	100.0%
B45 Patient (able to accept or tolerate delays, problems)	Count	0	1	7	2	4	14
	Row N %	0.0%	7.1%	50.0%	14.3%	28.6%	100.0%
B46 Patient demeanour (characterised by patience)	Count	0	2	6	2	4	14
	Row N %	0.0%	14.3%	42.9%	14.3%	28.6%	100.0%
B47 Perceptive (having or showing understanding or insight)	Count	0	1	7	5	1	14
	Row N %	0.0%	7.1%	50.0%	35.7%	7.1%	100.0%
B48 Persistent (refusing to give up)	Count	0	2	6	4	2	14
	Row N %	0.0%	14.3%	42.9%	28.6%	14.3%	100.0%
B49 Personable (having a pleasant appearance or manner)	Count	0	1	4	7	2	14
	Row N %	0.0%	7.1%	28.6%	50.0%	14.3%	100.0%
B50 Poise (graceful and elegant bearing in a person)	Count	0	1	7	4	2	14
	Row N %	0.0%	7.1%	50.0%	28.6%	14.3%	100.0%
B51 Powerful/strong (having great power-basis, having a strong effect on people)	Count	0	0	6	6	2	14
	Row N %	0.0%	0.0%	42.9%	42.9%	14.3%	100.0%
B52 Practical (concerned with the actual doing of something rather than with theory)	Count	0	1	8	3	2	14
	Row N %	0.0%	7.1%	57.1%	21.4%	14.3%	100.0%
B53 Pragmatic (treating things in a sensible and realistic way to produce results)	Count	0	1	7	5	1	14
	Row N %	0.0%	7.1%	50.0%	35.7%	7.1%	100.0%
B54 Prepared (able to deal with something expected)	Count	1	0	5	7	1	14
	Row N %	7.1%	0.0%	35.7%	50.0%	7.1%	100.0%
B55 Productive (able to produce goods/results in large quantities)	Count	0	1	4	9	0	14
	Row N %	0.0%	7.1%	28.6%	64.3%	0.0%	100.0%
B56 Rational (able to think and make decisions based on reason)	Count	0	1	7	5	1	14
	Row N %	0.0%	7.1%	50.0%	35.7%	7.1%	100.0%
B57 Realistic (having a sensible and practical idea of what can be achieved)	Count	0	2	4	7	1	14
	Row N %	0.0%	14.3%	28.6%	50.0%	7.1%	100.0%
B58 Sociable (spending time and interacting with other people)	Count	0	3	2	7	2	14
	Row N %	0.0%	21.4%	14.3%	50.0%	14.3%	100.0%
B59 Strong (able to perform a specified action well, relentlessly and powerfully)	Count	0	1	5	5	3	14
	Row N %	0.0%	7.1%	35.7%	35.7%	21.4%	100.0%
B60 Tactful (skill and sensitivity in dealing with others or with difficult issues)	Count	0	0	6	5	3	14
	Row N %	0.0%	0.0%	42.9%	35.7%	21.4%	100.0%
B61 Teach by doing (show someone how to do something)	Count	1	0	4	4	5	14
	Row N %	7.1%	0.0%	28.6%	28.6%	35.7%	100.0%

B62 Well-spoken (speaking correctly or in an elegant way)	Count	0	0	6	5	3	14
	Row N %	0.0%	0.0%	42.9%	35.7%	21.4%	100.0%
B63 Willing (being prepared to do something)	Count	0	1	5	2	6	14
	Row N %	0.0%	7.1%	35.7%	14.3%	42.9%	100.0%

Air Traffic Control Officers (ATCO)		Never	Rarely	Sometimes	Often	Always	Total
B1 Able to organise people (coordinate and arrange activities efficiently)	Count	0	8	27	38	12	85
	Row N %	0.0%	9.4%	31.8%	44.7%	14.1%	100.0%
B2 Active (moving, working and doing things in a lively manner and quickly)	Count	0	8	28	35	14	85
	Row N %	0.0%	9.4%	32.9%	41.2%	16.5%	100.0%
B3 Agreeable (pleasant and enjoyable, prepared to consent)	Count	0	11	31	36	7	85
	Row N %	0.0%	12.9%	36.5%	42.4%	8.2%	100.0%
B4 Analytical (using or involving analyses or logical reasoning)	Count	0	8	35	30	12	85
	Row N %	0.0%	9.4%	41.2%	35.3%	14.1%	100.0%
B5 Assertive (showing a strong and confident personality)	Count	0	2	23	37	23	85
	Row N %	0.0%	2.4%	27.1%	43.5%	27.1%	100.0%
B6 Authoritative (being reliable and showing authority)	Count	0	2	23	40	20	85
	Row N %	0.0%	2.4%	27.1%	47.1%	23.5%	100.0%
B7 Bold (confident and brave, fearless and adventurous)	Count	3	7	32	30	13	85
	Row N %	3.5%	8.2%	37.6%	35.3%	15.3%	100.0%
B8 Broad skills (extensive, widespread and numerous abilities)	Count	1	10	36	28	10	85
	Row N %	1.2%	11.8%	42.4%	32.9%	11.8%	100.0%
B9 Calm and poised speech (having a composed and self-assured manner)	Count	1	9	27	36	12	85
	Row N %	1.2%	10.6%	31.8%	42.4%	14.1%	100.0%
B10 Charismatic (exercising a compelling charm which inspires devotion)	Count	3	25	30	19	8	85
	Row N %	3.5%	29.4%	35.3%	22.4%	9.4%	100.0%
B11 Coherent (able to communicate clearly, consistently and logically)	Count	1	7	25	40	12	85
	Row N %	1.2%	8.2%	29.4%	47.1%	14.1%	100.0%
B12 Competitive (displaying a strong desire to be more successful)	Count	1	4	26	38	16	85
	Row N %	1.2%	4.7%	30.6%	44.7%	18.8%	100.0%
B13 Complex-thinker (complicated and not easy to understand)	Count	3	23	38	16	5	85
	Row N %	3.5%	27.1%	44.7%	18.8%	5.9%	100.0%
B14 Concentrated (detail-oriented)	Count	0	8	28	36	13	85
	Row N %	0.0%	9.4%	32.9%	42.4%	15.3%	100.0%
B15 Consistent (unchanging in nature)	Count	5	16	23	30	11	85
	Row N %	5.9%	18.8%	27.1%	35.3%	12.9%	100.0%
B16 Contemporary thinking (thinking about current, present and pressing)	Count	2	9	33	34	7	85

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matters)	Row N %	2.4%	10.6%	38.8%	40.0%	8.2%	100.0%
B17 Control (power to influence people's behaviour or events)	Count	0	8	27	37	13	85
	Row N %	0.0%	9.4%	31.8%	43.5%	15.3%	100.0%
B18 Cooperative (mutual assistance in working towards a common goal)	Count	2	14	31	28	10	85
	Row N %	2.4%	16.5%	36.5%	32.9%	11.8%	100.0%
B19 Dedicated (devoted to a task or purpose)	Count	0	4	29	35	17	85
	Row N %	0.0%	4.7%	34.1%	41.2%	20.0%	100.0%
B20 Dependable (trustworthy and reliable)	Count	2	17	22	31	13	85
	Row N %	2.4%	20.0%	25.9%	36.5%	15.3%	100.0%
B21 Disciplined (showing a controlled form of behaviour or working)	Count	1	7	26	36	15	85
	Row N %	1.2%	8.2%	30.6%	42.4%	17.6%	100.0%
B22 Down-to-earth (with no illusions or pretensions; practical and realistic)	Count	2	12	38	17	16	85
	Row N %	2.4%	14.1%	44.7%	20.0%	18.8%	100.0%
B23 Driven (motivated by a specific factor/feeling)	Count	0	6	23	42	14	85
	Row N %	0.0%	7.1%	27.1%	49.4%	16.5%	100.0%
B24 Efficient (able to work well without wasting time and resources, producing a satisfactory result)	Count	3	10	33	27	12	85
	Row N %	3.5%	11.8%	38.8%	31.8%	14.1%	100.0%
B25 Efficient and effective (producing the intended result, making strong impression)	Count	3	9	36	26	11	85
	Row N %	3.5%	10.6%	42.4%	30.6%	12.9%	100.0%
B26 Eloquent (persuasive in speaking and writing or indicating something)	Count	0	11	31	34	9	85
	Row N %	0.0%	12.9%	36.5%	40.0%	10.6%	100.0%
B27 Enduring (the ability to see something through)	Count	0	6	30	34	15	85
	Row N %	0.0%	7.1%	35.3%	40.0%	17.6%	100.0%
B28 Energetic (involving great activity or vitality characterised by energy)	Count	0	5	43	26	11	85
	Row N %	0.0%	5.9%	50.6%	30.6%	12.9%	100.0%
B29 Engaging personality (charming and attractive or capturing attention)	Count	2	14	35	25	9	85
	Row N %	2.4%	16.5%	41.2%	29.4%	10.6%	100.0%
B30 Faithful (showing allegiance and attachment to a course of action)	Count	2	11	26	35	11	85
	Row N %	2.4%	12.9%	30.6%	41.2%	12.9%	100.0%
B31 Fast-thinking (able to decide on an action quickly)	Count	1	9	33	29	13	85
	Row N %	1.2%	10.6%	38.8%	34.1%	15.3%	100.0%
B32 Focused (directing a great deal of attention or activity towards a particular aim)	Count	0	2	29	42	12	85
	Row N %	0.0%	2.4%	34.1%	49.4%	14.1%	100.0%
B33 Hard-working (working with energy and care)	Count	1	1	26	36	21	85
	Row N %	1.2%	1.2%	30.6%	42.4%	24.7%	100.0%
B34 Helpful (ready to give help)	Count	0	10	28	29	18	85
	Row N %	0.0%	11.8%	32.9%	34.1%	21.2%	100.0%

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B35 Honest (free of deceit, truthful and sincere)	Count	1	13	28	30	13	85
	Row N %	1.2%	15.3%	32.9%	35.3%	15.3%	100.0%
B36 Interesting (holding the attention, causing curiosity)	Count	0	12	40	28	5	85
	Row N %	0.0%	14.1%	47.1%	32.9%	5.9%	100.0%
B37 Just (characterised by right and fair behaviour)	Count	1	13	39	20	12	85
	Row N %	1.2%	15.3%	45.9%	23.5%	14.1%	100.0%
B38 Loyal (showing firm and constant support to a person)	Count	1	15	28	28	13	85
	Row N %	1.2%	17.6%	32.9%	32.9%	15.3%	100.0%
B39 Non-abrasive tone (not abrasive or harsh in speech)	Count	4	17	34	22	8	85
	Row N %	4.7%	20.0%	40.0%	25.9%	9.4%	100.0%
B40 A micro-manager (controls every part, however small)	Count	2	15	31	28	9	85
	Row N %	2.4%	17.6%	36.5%	32.9%	10.6%	100.0%
B41 Opportunistic (taking advantage of opportunities)	Count	1	4	39	33	8	85
	Row N %	1.2%	4.7%	45.9%	38.8%	9.4%	100.0%
B42 Organised (works systematically)	Count	0	9	35	25	16	85
	Row N %	0.0%	10.6%	41.2%	29.4%	18.8%	100.0%
B43 Outspoken (saying openly exactly what one thinks)	Count	0	7	29	29	20	85
	Row N %	0.0%	8.2%	34.1%	34.1%	23.5%	100.0%
B44 Passionate (having, showing, or caused by strong feelings or beliefs)	Count	0	6	22	45	12	85
	Row N %	0.0%	7.1%	25.9%	52.9%	14.1%	100.0%
B45 Patient (able to accept or tolerate delays, problems)	Count	2	11	36	28	8	85
	Row N %	2.4%	12.9%	42.4%	32.9%	9.4%	100.0%
B46 Patient demeanour (characterised by patience)	Count	1	15	35	26	8	85
	Row N %	1.2%	17.6%	41.2%	30.6%	9.4%	100.0%
B47 Perceptive (having or showing understanding or insight)	Count	0	11	32	33	9	85
	Row N %	0.0%	12.9%	37.6%	38.8%	10.6%	100.0%
B48 Persistent (refusing to give up)	Count	0	5	26	43	11	85
	Row N %	0.0%	5.9%	30.6%	50.6%	12.9%	100.0%
B49 Personable (having a pleasant appearance or manner)	Count	0	9	31	31	14	85
	Row N %	0.0%	10.6%	36.5%	36.5%	16.5%	100.0%
B50 Poise (graceful and elegant bearing in a person)	Count	1	8	40	28	8	85
	Row N %	1.2%	9.4%	47.1%	32.9%	9.4%	100.0%
B51 Powerful/strong (having great power-basis, having a strong effect on people)	Count	0	8	29	39	9	85
	Row N %	0.0%	9.4%	34.1%	45.9%	10.6%	100.0%
B52 Practical (concerned with the actual doing of something rather than with theory)	Count	0	11	32	35	7	85
	Row N %	0.0%	12.9%	37.6%	41.2%	8.2%	100.0%
B53 Pragmatic (treating things in a sensible and realistic way to produce	Count	1	14	32	29	9	85

results)	Row N %	1.2%	16.5%	37.6%	34.1%	10.6%	100.0%
B54 Prepared (able to deal with something expected)	Count	0	8	31	31	15	85
	Row N %	0.0%	9.4%	36.5%	36.5%	17.6%	100.0%
B55 Productive (able to produce goods/results in large quantities)	Count	1	5	36	27	16	85
	Row N %	1.2%	5.9%	42.4%	31.8%	18.8%	100.0%
B56 Rational (able to think and make decisions based on reason)	Count	0	6	37	32	10	85
	Row N %	0.0%	7.1%	43.5%	37.6%	11.8%	100.0%
B57 Realistic (having a sensible and practical idea of what can be achieved)	Count	0	6	34	34	11	85
	Row N %	0.0%	7.1%	40.0%	40.0%	12.9%	100.0%
B58 Sociable (spending time and interacting with other people)	Count	1	17	24	36	7	85
	Row N %	1.2%	20.0%	28.2%	42.4%	8.2%	100.0%
B59 Strong (able to perform a specified action well, relentlessly and powerfully)	Count	0	8	37	30	10	85
	Row N %	0.0%	9.4%	43.5%	35.3%	11.8%	100.0%
B60 Tactful (skill and sensitivity in dealing with others or with difficult issues)	Count	3	20	33	19	10	85
	Row N %	3.5%	23.5%	38.8%	22.4%	11.8%	100.0%
B61 Teach by doing (show someone how to do something)	Count	2	20	28	20	15	85
	Row N %	2.4%	23.5%	32.9%	23.5%	17.6%	100.0%
B62 Well-spoken (speaking correctly or in an elegant way)	Count	1	9	30	34	11	85
	Row N %	1.2%	10.6%	35.3%	40.0%	12.9%	100.0%
B63 Willing (being prepared to do something)	Count	0	7	35	27	16	85
	Row N %	0.0%	8.2%	41.2%	31.8%	18.8%	100.0%

Compiled by the researcher

Table I.2. Leader behaviour items custom table for three vocational groups

Air Traffic Service Officers (ATSO)		Never	Rarely	Sometimes	Often	Always	Total
C1 Acknowledges achievement/effort	Count	2	8	14	15	7	46
	Row N %	4.3%	17.4%	30.4%	32.6%	15.2%	100.0%
C2 Acts professionally	Count	0	6	13	17	10	46
	Row N %	0.0%	13.0%	28.3%	37.0%	21.7%	100.0%
C3 Is adaptive to changing environments	Count	1	2	22	15	6	46
	Row N %	2.2%	4.3%	47.8%	32.6%	13.0%	100.0%
C4 Addresses team members' issues/problems	Count	3	7	18	8	10	46
	Row N %	6.5%	15.2%	39.1%	17.4%	21.7%	100.0%
C5 Admits mistakes	Count	9	8	15	9	5	46

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	Row N %	19.6%	17.4%	32.6%	19.6%	10.9%	100.0%
C6 Advocates the "we" and not the "I" in team	Count	7	5	15	11	8	46
	Row N %	15.2%	10.9%	32.6%	23.9%	17.4%	100.0%
C7 Allocates resources	Count	2	6	13	18	7	46
	Row N %	4.3%	13.0%	28.3%	39.1%	15.2%	100.0%
C8 Always willing to help others	Count	3	6	12	16	9	46
	Row N %	6.5%	13.0%	26.1%	34.8%	19.6%	100.0%
C9 Appears confident	Count	0	2	12	14	18	46
	Row N %	0.0%	4.3%	26.1%	30.4%	39.1%	100.0%
C10 Appears in charge	Count	0	4	12	15	15	46
	Row N %	0.0%	8.7%	26.1%	32.6%	32.6%	100.0%
C11 Is approachable	Count	3	8	15	11	9	46
	Row N %	6.5%	17.4%	32.6%	23.9%	19.6%	100.0%
C12 Asks for feedback	Count	2	9	10	18	7	46
	Row N %	4.3%	19.6%	21.7%	39.1%	15.2%	100.0%
C13 Acts assertively	Count	0	1	16	20	9	46
	Row N %	0.0%	2.2%	34.8%	43.5%	19.6%	100.0%
C14 Assumes responsibility	Count	1	4	16	17	8	46
	Row N %	2.2%	8.7%	34.8%	37.0%	17.4%	100.0%
C15 Is aware of the company's values and leads in that direction	Count	1	0	19	15	11	46
	Row N %	2.2%	0.0%	41.3%	32.6%	23.9%	100.0%
C16 Builds leaders	Count	3	10	19	8	6	46
	Row N %	6.5%	21.7%	41.3%	17.4%	13.0%	100.0%
C17 Cares about others' welfare	Count	3	12	14	11	6	46
	Row N %	6.5%	26.1%	30.4%	23.9%	13.0%	100.0%
C18 Challenges others in a constructive manner	Count	1	11	18	12	4	46
	Row N %	2.2%	23.9%	39.1%	26.1%	8.7%	100.0%
C19 Acts in a charismatic/charming manner	Count	2	8	17	15	4	46
	Row N %	4.3%	17.4%	37.0%	32.6%	8.7%	100.0%
C20 Communicates openly	Count	5	5	18	13	5	46
	Row N %	10.9%	10.9%	39.1%	28.3%	10.9%	100.0%
C21 Is convincing	Count	1	7	15	17	6	46
	Row N %	2.2%	15.2%	32.6%	37.0%	13.0%	100.0%
C22 Is cooperative	Count	1	8	18	15	4	46
	Row N %	2.2%	17.4%	39.1%	32.6%	8.7%	100.0%
C23 Is courteous	Count	2	5	21	12	6	46
	Row N %	4.3%	10.9%	45.7%	26.1%	13.0%	100.0%

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C24 Creates a comfortable working atmosphere	Count	2	10	17	11	6	46
	Row N %	4.3%	21.7%	37.0%	23.9%	13.0%	100.0%
C25 Generates solutions	Count	1	5	19	14	7	46
	Row N %	2.2%	10.9%	41.3%	30.4%	15.2%	100.0%
C26 Acts decisively	Count	0	3	15	23	5	46
	Row N %	0.0%	6.5%	32.6%	50.0%	10.9%	100.0%
C27 Delegates authorities	Count	1	3	19	17	6	46
	Row N %	2.2%	6.5%	41.3%	37.0%	13.0%	100.0%
C28 Determines people's needs	Count	4	10	21	7	4	46
	Row N %	8.7%	21.7%	45.7%	15.2%	8.7%	100.0%
C29 Develops others	Count	4	7	16	12	7	46
	Row N %	8.7%	15.2%	34.8%	26.1%	15.2%	100.0%
C30 Develops strategies/actions	Count	1	6	23	10	6	46
	Row N %	2.2%	13.0%	50.0%	21.7%	13.0%	100.0%
C31 Directs/orders followers	Count	1	5	16	15	9	46
	Row N %	2.2%	10.9%	34.8%	32.6%	19.6%	100.0%
C32 Is efficient	Count	1	6	22	12	5	46
	Row N %	2.2%	13.0%	47.8%	26.1%	10.9%	100.0%
C33 Empowers others	Count	2	9	15	14	6	46
	Row N %	4.3%	19.6%	32.6%	30.4%	13.0%	100.0%
C34 Energises others	Count	3	10	16	10	7	46
	Row N %	6.5%	21.7%	34.8%	21.7%	15.2%	100.0%
C35 Establishes goals	Count	2	5	17	17	5	46
	Row N %	4.3%	10.9%	37.0%	37.0%	10.9%	100.0%
C36 Evaluates all options	Count	2	4	19	15	6	46
	Row N %	4.3%	8.7%	41.3%	32.6%	13.0%	100.0%
C37 Evaluates talent	Count	3	5	18	15	5	46
	Row N %	6.5%	10.9%	39.1%	32.6%	10.9%	100.0%
C38 Facilitates work/tasks	Count	1	3	21	16	5	46
	Row N %	2.2%	6.5%	45.7%	34.8%	10.9%	100.0%
C39 Remains focused	Count	1	2	16	21	6	46
	Row N %	2.2%	4.3%	34.8%	45.7%	13.0%	100.0%
C40 Follows through	Count	1	2	22	13	8	46
	Row N %	2.2%	4.3%	47.8%	28.3%	17.4%	100.0%
C41 Fosters/promotes people growth	Count	3	6	19	12	6	46
	Row N %	6.5%	13.0%	41.3%	26.1%	13.0%	100.0%
C42 Gathers all information	Count	3	5	17	15	6	46

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	Row N %	6.5%	10.9%	37.0%	32.6%	13.0%	100.0%
C43 Gets involved	Count	3	6	14	17	6	46
	Row N %	6.5%	13.0%	30.4%	37.0%	13.0%	100.0%
C44 Gives/solicits feedback	Count	2	9	17	11	7	46
	Row N %	4.3%	19.6%	37.0%	23.9%	15.2%	100.0%
C45 Is hard-working	Count	1	5	16	13	11	46
	Row N %	2.2%	10.9%	34.8%	28.3%	23.9%	100.0%
C46 Has an open-door policy	Count	3	8	12	11	12	46
	Row N %	6.5%	17.4%	26.1%	23.9%	26.1%	100.0%
C47 Helps to resolve conflicts	Count	2	7	15	15	7	46
	Row N %	4.3%	15.2%	32.6%	32.6%	15.2%	100.0%
C48 Is humble/modest	Count	2	2	23	15	4	46
	Row N %	4.3%	4.3%	50.0%	32.6%	8.7%	100.0%
C49 Improves the morale of employees	Count	4	7	20	10	5	46
	Row N %	8.7%	15.2%	43.5%	21.7%	10.9%	100.0%
C50 Informs employees	Count	1	2	21	13	9	46
	Row N %	2.2%	4.3%	45.7%	28.3%	19.6%	100.0%
C51 Inspires others	Count	3	13	15	9	6	46
	Row N %	6.5%	28.3%	32.6%	19.6%	13.0%	100.0%
C52 Is involved in community initiatives	Count	7	5	23	7	4	46
	Row N %	15.2%	10.9%	50.0%	15.2%	8.7%	100.0%
C53 Is creative/innovative	Count	3	8	21	11	3	46
	Row N %	6.5%	17.4%	45.7%	23.9%	6.5%	100.0%
C54 Keeps a competitive edge	Count	1	9	21	11	4	46
	Row N %	2.2%	19.6%	45.7%	23.9%	8.7%	100.0%
C55 Learns about others	Count	4	6	16	18	2	46
	Row N %	8.7%	13.0%	34.8%	39.1%	4.3%	100.0%
C56 Lends a helping hand/voice	Count	3	7	18	13	5	46
	Row N %	6.5%	15.2%	39.1%	28.3%	10.9%	100.0%
C57 Motivates others	Count	5	8	17	10	6	46
	Row N %	10.9%	17.4%	37.0%	21.7%	13.0%	100.0%
C58 Is not afraid of failure	Count	1	3	21	14	7	46
	Row N %	2.2%	6.5%	45.7%	30.4%	15.2%	100.0%
C59 Remains open-minded	Count	2	10	17	11	6	46
	Row N %	4.3%	21.7%	37.0%	23.9%	13.0%	100.0%
C60 Is organised	Count	1	6	14	21	4	46
	Row N %	2.2%	13.0%	30.4%	45.7%	8.7%	100.0%

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C61 Is passionate	Count	2	6	12	16	10	46
	Row N %	4.3%	13.0%	26.1%	34.8%	21.7%	100.0%
C62 Positions individuals for success	Count	4	5	19	9	9	46
	Row N %	8.7%	10.9%	41.3%	19.6%	19.6%	100.0%
C63 Predicts needs to complete a task	Count	2	7	16	15	6	46
	Row N %	4.3%	15.2%	34.8%	32.6%	13.0%	100.0%
C64 Acts proactively	Count	1	6	22	10	7	46
	Row N %	2.2%	13.0%	47.8%	21.7%	15.2%	100.0%
C65 Promotes cooperation	Count	1	6	20	13	6	46
	Row N %	2.2%	13.0%	43.5%	28.3%	13.0%	100.0%
C66 Provides the necessary resources for the team to succeed	Count	3	5	17	15	6	46
	Row N %	6.5%	10.9%	37.0%	32.6%	13.0%	100.0%
C67 Provides advice to employees	Count	4	4	22	13	3	46
	Row N %	8.7%	8.7%	47.8%	28.3%	6.5%	100.0%
C68 Recognises talent	Count	4	9	16	12	5	46
	Row N %	8.7%	19.6%	34.8%	26.1%	10.9%	100.0%
C69 Reflects on work outcomes	Count	3	7	18	13	5	46
	Row N %	6.5%	15.2%	39.1%	28.3%	10.9%	100.0%
C70 Removes barriers	Count	3	10	20	6	7	46
	Row N %	6.5%	21.7%	43.5%	13.0%	15.2%	100.0%
C71 Acts respectfully	Count	3	7	15	16	5	46
	Row N %	6.5%	15.2%	32.6%	34.8%	10.9%	100.0%
C72 Is a risk-taker	Count	2	6	23	13	2	46
	Row N %	4.3%	13.0%	50.0%	28.3%	4.3%	100.0%
C73 Serves as a role model	Count	4	8	18	13	3	46
	Row N %	8.7%	17.4%	39.1%	28.3%	6.5%	100.0%
C74 Seeks knowledge	Count	0	7	20	15	4	46
	Row N %	0.0%	15.2%	43.5%	32.6%	8.7%	100.0%
C75 Seeks to understand	Count	2	6	20	13	5	46
	Row N %	4.3%	13.0%	43.5%	28.3%	10.9%	100.0%
C76 Sees opportunities	Count	0	5	22	15	4	46
	Row N %	0.0%	10.9%	47.8%	32.6%	8.7%	100.0%
C77 Sets clear goals	Count	2	5	14	20	5	46
	Row N %	4.3%	10.9%	30.4%	43.5%	10.9%	100.0%
C78 Sets the vision	Count	2	3	23	12	6	46
	Row N %	4.3%	6.5%	50.0%	26.1%	13.0%	100.0%
C79 Shares the vision	Count	4	5	19	11	7	46

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	Row N %	8.7%	10.9%	41.3%	23.9%	15.2%	100.0%
C80 Shows genuine concern	Count	4	10	17	12	3	46
	Row N %	8.7%	21.7%	37.0%	26.1%	6.5%	100.0%
C81 Shows a sense of urgency	Count	4	2	19	11	10	46
	Row N %	8.7%	4.3%	41.3%	23.9%	21.7%	100.0%
C82 Solves problems	Count	2	8	19	11	6	46
	Row N %	4.3%	17.4%	41.3%	23.9%	13.0%	100.0%
C83 Speaks out	Count	0	1	19	15	11	46
	Row N %	0.0%	2.2%	41.3%	32.6%	23.9%	100.0%
C84 Stays positive	Count	0	3	22	15	6	46
	Row N %	0.0%	6.5%	47.8%	32.6%	13.0%	100.0%
C85 Is straightforward	Count	2	1	16	15	12	46
	Row N %	4.3%	2.2%	34.8%	32.6%	26.1%	100.0%
C86 Acts in a strategic manner	Count	1	5	20	14	6	46
	Row N %	2.2%	10.9%	43.5%	30.4%	13.0%	100.0%
C87 Strives for success	Count	1	1	20	13	11	46
	Row N %	2.2%	2.2%	43.5%	28.3%	23.9%	100.0%
C88 Is team-oriented	Count	2	4	19	16	5	46
	Row N %	4.3%	8.7%	41.3%	34.8%	10.9%	100.0%
C89 Thinks outside the box	Count	2	7	19	11	7	46
	Row N %	4.3%	15.2%	41.3%	23.9%	15.2%	100.0%
C90 Acts in a thorough manner	Count	1	7	18	11	9	46
	Row N %	2.2%	15.2%	39.1%	23.9%	19.6%	100.0%
C91 Acts in a timely manner	Count	2	6	19	14	5	46
	Row N %	4.3%	13.0%	41.3%	30.4%	10.9%	100.0%
C92 Is trusting	Count	3	7	14	16	6	46
	Row N %	6.5%	15.2%	30.4%	34.8%	13.0%	100.0%
C93 Uses resources effectively	Count	3	5	16	16	6	46
	Row N %	6.5%	10.9%	34.8%	34.8%	13.0%	100.0%
C94 Willingly supports employees	Count	4	8	14	9	11	46
	Row N %	8.7%	17.4%	30.4%	19.6%	23.9%	100.0%

Aeronautical Information Management Officers (AIMO)		Never	Rarely	Sometimes	Often	Always	Total
C1 Acknowledges achievement/effort	Count	0	3	6	2	3	14
	Row N %	0.0%	21.4%	42.9%	14.3%	21.4%	100.0%
C2 Acts professionally	Count	0	0	4	7	3	14
	Row N %	0.0%	0.0%	28.6%	50.0%	21.4%	100.0%

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C3 Is adaptive to changing environments	Count	0	1	4	6	3	14
	Row N %	0.0%	7.1%	28.6%	42.9%	21.4%	100.0%
C4 Addresses team members' issues/problems	Count	0	5	6	2	1	14
	Row N %	0.0%	35.7%	42.9%	14.3%	7.1%	100.0%
C5 Admits mistakes	Count	1	4	3	5	1	14
	Row N %	7.1%	28.6%	21.4%	35.7%	7.1%	100.0%
C6 Advocates the "we" and not the "I" in team	Count	0	1	8	2	3	14
	Row N %	0.0%	7.1%	57.1%	14.3%	21.4%	100.0%
C7 Allocates resources	Count	0	2	8	3	1	14
	Row N %	0.0%	14.3%	57.1%	21.4%	7.1%	100.0%
C8 Always willing to help others	Count	0	2	5	1	6	14
	Row N %	0.0%	14.3%	35.7%	7.1%	42.9%	100.0%
C9 Appears confident	Count	0	0	4	5	5	14
	Row N %	0.0%	0.0%	28.6%	35.7%	35.7%	100.0%
C10 Appears in charge	Count	1	0	2	5	6	14
	Row N %	7.1%	0.0%	14.3%	35.7%	42.9%	100.0%
C11 Is approachable	Count	0	2	5	2	5	14
	Row N %	0.0%	14.3%	35.7%	14.3%	35.7%	100.0%
C12 Asks for feedback	Count	0	4	3	2	5	14
	Row N %	0.0%	28.6%	21.4%	14.3%	35.7%	100.0%
C13 Acts assertively	Count	0	1	5	2	6	14
	Row N %	0.0%	7.1%	35.7%	14.3%	42.9%	100.0%
C14 Assumes responsibility	Count	1	1	5	3	4	14
	Row N %	7.1%	7.1%	35.7%	21.4%	28.6%	100.0%
C15 Is aware of the company's values and leads in that direction	Count	0	0	5	3	6	14
	Row N %	0.0%	0.0%	35.7%	21.4%	42.9%	100.0%
C16 Builds leaders	Count	0	5	5	4	0	14
	Row N %	0.0%	35.7%	35.7%	28.6%	0.0%	100.0%
C17 Cares about others' welfare	Count	0	2	6	3	3	14
	Row N %	0.0%	14.3%	42.9%	21.4%	21.4%	100.0%
C18 Challenges others in a constructive manner	Count	1	3	6	4	0	14
	Row N %	7.1%	21.4%	42.9%	28.6%	0.0%	100.0%
C19 Acts in a charismatic/charming manner	Count	1	2	5	4	2	14
	Row N %	7.1%	14.3%	35.7%	28.6%	14.3%	100.0%
C20 Communicates openly	Count	1	3	3	3	4	14
	Row N %	7.1%	21.4%	21.4%	21.4%	28.6%	100.0%
C21 Is convincing	Count	0	2	5	2	5	14

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	Row N %	0.0%	14.3%	35.7%	14.3%	35.7%	100.0%
C22 Is cooperative	Count	0	1	8	3	2	14
	Row N %	0.0%	7.1%	57.1%	21.4%	14.3%	100.0%
C23 Is courteous	Count	0	0	7	4	3	14
	Row N %	0.0%	0.0%	50.0%	28.6%	21.4%	100.0%
C24 Creates a comfortable working atmosphere	Count	1	1	6	6	0	14
	Row N %	7.1%	7.1%	42.9%	42.9%	0.0%	100.0%
C25 Generates solutions	Count	0	1	6	4	3	14
	Row N %	0.0%	7.1%	42.9%	28.6%	21.4%	100.0%
C26 Acts decisively	Count	0	0	5	7	2	14
	Row N %	0.0%	0.0%	35.7%	50.0%	14.3%	100.0%
C27 Delegates authorities	Count	0	3	3	6	2	14
	Row N %	0.0%	21.4%	21.4%	42.9%	14.3%	100.0%
C28 Determines people's needs	Count	2	5	2	5	0	14
	Row N %	14.3%	35.7%	14.3%	35.7%	0.0%	100.0%
C29 Develops others	Count	1	6	4	2	1	14
	Row N %	7.1%	42.9%	28.6%	14.3%	7.1%	100.0%
C30 Develops strategies/actions	Count	0	0	9	3	2	14
	Row N %	0.0%	0.0%	64.3%	21.4%	14.3%	100.0%
C31 Directs/orders followers	Count	0	1	6	4	3	14
	Row N %	0.0%	7.1%	42.9%	28.6%	21.4%	100.0%
C32 Is efficient	Count	0	2	6	4	2	14
	Row N %	0.0%	14.3%	42.9%	28.6%	14.3%	100.0%
C33 Empowers others	Count	1	3	7	3	0	14
	Row N %	7.1%	21.4%	50.0%	21.4%	0.0%	100.0%
C34 Energises others	Count	0	4	6	4	0	14
	Row N %	0.0%	28.6%	42.9%	28.6%	0.0%	100.0%
C35 Establishes goals	Count	0	2	7	5	0	14
	Row N %	0.0%	14.3%	50.0%	35.7%	0.0%	100.0%
C36 Evaluates all options	Count	0	2	7	3	2	14
	Row N %	0.0%	14.3%	50.0%	21.4%	14.3%	100.0%
C37 Evaluates talent	Count	0	7	4	2	1	14
	Row N %	0.0%	50.0%	28.6%	14.3%	7.1%	100.0%
C38 Facilitates work/tasks	Count	0	0	9	3	2	14
	Row N %	0.0%	0.0%	64.3%	21.4%	14.3%	100.0%
C39 Remains focused	Count	0	1	6	4	3	14
	Row N %	0.0%	7.1%	42.9%	28.6%	21.4%	100.0%

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C40 Follows through	Count	0	2	5	5	2	14
	Row N %	0.0%	14.3%	35.7%	35.7%	14.3%	100.0%
C41 Fosters/promotes people growth	Count	1	5	5	3	0	14
	Row N %	7.1%	35.7%	35.7%	21.4%	0.0%	100.0%
C42 Gathers all information	Count	0	3	5	4	2	14
	Row N %	0.0%	21.4%	35.7%	28.6%	14.3%	100.0%
C43 Gets involved	Count	0	1	8	3	2	14
	Row N %	0.0%	7.1%	57.1%	21.4%	14.3%	100.0%
C44 Gives/solicits feedback	Count	1	6	3	1	3	14
	Row N %	7.1%	42.9%	21.4%	7.1%	21.4%	100.0%
C45 Is hard-working	Count	0	1	3	4	6	14
	Row N %	0.0%	7.1%	21.4%	28.6%	42.9%	100.0%
C46 Has an open-door policy	Count	1	1	7	1	4	14
	Row N %	7.1%	7.1%	50.0%	7.1%	28.6%	100.0%
C47 Helps to resolve conflicts	Count	0	1	8	2	3	14
	Row N %	0.0%	7.1%	57.1%	14.3%	21.4%	100.0%
C48 Is humble/modest	Count	1	2	7	1	3	14
	Row N %	7.1%	14.3%	50.0%	7.1%	21.4%	100.0%
C49 Improves the morale of employees	Count	2	2	8	2	0	14
	Row N %	14.3%	14.3%	57.1%	14.3%	0.0%	100.0%
C50 Informs employees	Count	2	0	7	3	2	14
	Row N %	14.3%	0.0%	50.0%	21.4%	14.3%	100.0%
C51 Inspires others	Count	0	4	7	3	0	14
	Row N %	0.0%	28.6%	50.0%	21.4%	0.0%	100.0%
C52 Is involved in community initiatives	Count	4	2	5	2	1	14
	Row N %	28.6%	14.3%	35.7%	14.3%	7.1%	100.0%
C53 Is creative/innovative	Count	0	7	3	2	2	14
	Row N %	0.0%	50.0%	21.4%	14.3%	14.3%	100.0%
C54 Keeps a competitive edge	Count	0	5	4	3	2	14
	Row N %	0.0%	35.7%	28.6%	21.4%	14.3%	100.0%
C55 Learns about others	Count	2	3	5	4	0	14
	Row N %	14.3%	21.4%	35.7%	28.6%	0.0%	100.0%
C56 Lends a helping hand/voice	Count	1	3	6	3	1	14
	Row N %	7.1%	21.4%	42.9%	21.4%	7.1%	100.0%
C57 Motivates others	Count	1	5	7	1	0	14
	Row N %	7.1%	35.7%	50.0%	7.1%	0.0%	100.0%
C58 Is not afraid of failure	Count	0	4	7	3	0	14

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	Row N %	0.0%	28.6%	50.0%	21.4%	0.0%	100.0%
C59 Remains open-minded	Count	0	3	7	3	1	14
	Row N %	0.0%	21.4%	50.0%	21.4%	7.1%	100.0%
C60 Is organised	Count	1	2	4	6	1	14
	Row N %	7.1%	14.3%	28.6%	42.9%	7.1%	100.0%
C61 Is passionate	Count	0	3	6	2	3	14
	Row N %	0.0%	21.4%	42.9%	14.3%	21.4%	100.0%
C62 Positions individuals for success	Count	1	5	6	1	1	14
	Row N %	7.1%	35.7%	42.9%	7.1%	7.1%	100.0%
C63 Predicts needs to complete a task	Count	1	1	9	2	1	14
	Row N %	7.1%	7.1%	64.3%	14.3%	7.1%	100.0%
C64 Acts proactively	Count	0	2	7	3	2	14
	Row N %	0.0%	14.3%	50.0%	21.4%	14.3%	100.0%
C65 Promotes cooperation	Count	0	3	5	3	3	14
	Row N %	0.0%	21.4%	35.7%	21.4%	21.4%	100.0%
C66 Provides the necessary resources for the team to succeed	Count	0	1	10	3	0	14
	Row N %	0.0%	7.1%	71.4%	21.4%	0.0%	100.0%
C67 Provides advice to employees	Count	0	5	3	4	2	14
	Row N %	0.0%	35.7%	21.4%	28.6%	14.3%	100.0%
C68 Recognises talent	Count	1	3	6	4	0	14
	Row N %	7.1%	21.4%	42.9%	28.6%	0.0%	100.0%
C69 Reflects on work outcomes	Count	0	0	8	4	2	14
	Row N %	0.0%	0.0%	57.1%	28.6%	14.3%	100.0%
C70 Removes barriers	Count	0	2	8	2	2	14
	Row N %	0.0%	14.3%	57.1%	14.3%	14.3%	100.0%
C71 Acts respectfully	Count	0	1	7	3	3	14
	Row N %	0.0%	7.1%	50.0%	21.4%	21.4%	100.0%
C72 Is a risk-taker	Count	0	2	8	2	2	14
	Row N %	0.0%	14.3%	57.1%	14.3%	14.3%	100.0%
C73 Serves as a role model	Count	1	3	6	3	1	14
	Row N %	7.1%	21.4%	42.9%	21.4%	7.1%	100.0%
C74 Seeks knowledge	Count	0	1	9	3	1	14
	Row N %	0.0%	7.1%	64.3%	21.4%	7.1%	100.0%
C75 Seeks to understand	Count	0	5	4	3	2	14
	Row N %	0.0%	35.7%	28.6%	21.4%	14.3%	100.0%
C76 Sees opportunities	Count	0	2	7	4	1	14
	Row N %	0.0%	14.3%	50.0%	28.6%	7.1%	100.0%

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C77 Sets clear goals	Count	1	1	7	3	2	14
	Row N %	7.1%	7.1%	50.0%	21.4%	14.3%	100.0%
C78 Sets the vision	Count	1	1	6	3	3	14
	Row N %	7.1%	7.1%	42.9%	21.4%	21.4%	100.0%
C79 Shares the vision	Count	1	3	4	3	3	14
	Row N %	7.1%	21.4%	28.6%	21.4%	21.4%	100.0%
C80 Shows genuine concern	Count	1	4	3	3	3	14
	Row N %	7.1%	28.6%	21.4%	21.4%	21.4%	100.0%
C81 Shows a sense of urgency	Count	1	0	8	3	2	14
	Row N %	7.1%	0.0%	57.1%	21.4%	14.3%	100.0%
C82 Solves problems	Count	0	2	7	3	2	14
	Row N %	0.0%	14.3%	50.0%	21.4%	14.3%	100.0%
C83 Speaks out	Count	0	0	5	6	3	14
	Row N %	0.0%	0.0%	35.7%	42.9%	21.4%	100.0%
C84 Stays positive	Count	0	1	8	3	2	14
	Row N %	0.0%	7.1%	57.1%	21.4%	14.3%	100.0%
C85 Is straightforward	Count	0	2	6	3	3	14
	Row N %	0.0%	14.3%	42.9%	21.4%	21.4%	100.0%
C86 Acts in a strategic manner	Count	0	1	6	6	1	14
	Row N %	0.0%	7.1%	42.9%	42.9%	7.1%	100.0%
C87 Strives for success	Count	0	0	7	4	3	14
	Row N %	0.0%	0.0%	50.0%	28.6%	21.4%	100.0%
C88 Is team-oriented	Count	0	2	4	4	4	14
	Row N %	0.0%	14.3%	28.6%	28.6%	28.6%	100.0%
C89 Thinks outside the box	Count	0	1	8	1	4	14
	Row N %	0.0%	7.1%	57.1%	7.1%	28.6%	100.0%
C90 Acts in a thorough manner	Count	0	2	5	6	1	14
	Row N %	0.0%	14.3%	35.7%	42.9%	7.1%	100.0%
C91 Acts in a timely manner	Count	1	1	9	1	2	14
	Row N %	7.1%	7.1%	64.3%	7.1%	14.3%	100.0%
C92 Is trusting	Count	1	4	6	2	1	14
	Row N %	7.1%	28.6%	42.9%	14.3%	7.1%	100.0%
C93 Uses resources effectively	Count	0	2	6	4	2	14
	Row N %	0.0%	14.3%	42.9%	28.6%	14.3%	100.0%
C94 Willingly supports employees	Count	1	3	6	4	0	14
	Row N %	7.1%	21.4%	42.9%	28.6%	0.0%	100.0%

Air Traffic Control Officers (ATCO)		Never	Rarely	Sometimes	Often	Always	Total
C1 Acknowledges achievement/effort	Count	1	11	31	32	10	85
	Row N %	1.2%	12.9%	36.5%	37.6%	11.8%	100.0%
C2 Acts professionally	Count	0	2	31	33	19	85
	Row N %	0.0%	2.4%	36.5%	38.8%	22.4%	100.0%
C3 Is adaptive to changing environments	Count	1	8	33	30	13	85
	Row N %	1.2%	9.4%	38.8%	35.3%	15.3%	100.0%
C4 Addresses team members' issues/problems	Count	0	12	35	28	10	85
	Row N %	0.0%	14.1%	41.2%	32.9%	11.8%	100.0%
C5 Admits mistakes	Count	8	24	31	15	7	85
	Row N %	9.4%	28.2%	36.5%	17.6%	8.2%	100.0%
C6 Advocates the "we" and not the "I" in team	Count	2	8	38	25	12	85
	Row N %	2.4%	9.4%	44.7%	29.4%	14.1%	100.0%
C7 Allocates resources	Count	0	7	41	27	10	85
	Row N %	0.0%	8.2%	48.2%	31.8%	11.8%	100.0%
C8 Always willing to help others	Count	1	7	39	27	11	85
	Row N %	1.2%	8.2%	45.9%	31.8%	12.9%	100.0%
C9 Appears confident	Count	0	3	17	48	17	85
	Row N %	0.0%	3.5%	20.0%	56.5%	20.0%	100.0%
C10 Appears in charge	Count	0	2	23	44	16	85
	Row N %	0.0%	2.4%	27.1%	51.8%	18.8%	100.0%
C11 Is approachable	Count	1	9	33	22	20	85
	Row N %	1.2%	10.6%	38.8%	25.9%	23.5%	100.0%
C12 Asks for feedback	Count	1	16	33	24	11	85
	Row N %	1.2%	18.8%	38.8%	28.2%	12.9%	100.0%
C13 Acts assertively	Count	0	1	29	41	14	85
	Row N %	0.0%	1.2%	34.1%	48.2%	16.5%	100.0%
C14 Assumes responsibility	Count	0	7	30	29	19	85
	Row N %	0.0%	8.2%	35.3%	34.1%	22.4%	100.0%
C15 Is aware of the company's values and leads in that direction	Count	1	5	22	35	22	85
	Row N %	1.2%	5.9%	25.9%	41.2%	25.9%	100.0%
C16 Builds leaders	Count	2	19	38	18	8	85
	Row N %	2.4%	22.4%	44.7%	21.2%	9.4%	100.0%
C17 Cares about others' welfare	Count	2	8	37	25	13	85
	Row N %	2.4%	9.4%	43.5%	29.4%	15.3%	100.0%
C18 Challenges others in a constructive manner	Count	1	12	37	25	10	85

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	Row N %	1.2%	14.1%	43.5%	29.4%	11.8%	100.0%
C19 Acts in a charismatic/charming manner	Count	2	15	35	23	10	85
	Row N %	2.4%	17.6%	41.2%	27.1%	11.8%	100.0%
C20 Communicates openly	Count	1	16	40	19	9	85
	Row N %	1.2%	18.8%	47.1%	22.4%	10.6%	100.0%
C21 Is convincing	Count	0	7	33	32	13	85
	Row N %	0.0%	8.2%	38.8%	37.6%	15.3%	100.0%
C22 Is cooperative	Count	0	9	40	26	10	85
	Row N %	0.0%	10.6%	47.1%	30.6%	11.8%	100.0%
C23 Is courteous	Count	1	9	34	33	8	85
	Row N %	1.2%	10.6%	40.0%	38.8%	9.4%	100.0%
C24 Creates a comfortable working atmosphere	Count	4	16	26	25	14	85
	Row N %	4.7%	18.8%	30.6%	29.4%	16.5%	100.0%
C25 Generates solutions	Count	1	8	36	28	12	85
	Row N %	1.2%	9.4%	42.4%	32.9%	14.1%	100.0%
C26 Acts decisively	Count	0	4	35	32	14	85
	Row N %	0.0%	4.7%	41.2%	37.6%	16.5%	100.0%
C27 Delegates authorities	Count	1	10	27	37	10	85
	Row N %	1.2%	11.8%	31.8%	43.5%	11.8%	100.0%
C28 Determines people's needs	Count	2	12	46	17	8	85
	Row N %	2.4%	14.1%	54.1%	20.0%	9.4%	100.0%
C29 Develops others	Count	1	15	37	24	8	85
	Row N %	1.2%	17.6%	43.5%	28.2%	9.4%	100.0%
C30 Develops strategies/actions	Count	1	7	37	32	8	85
	Row N %	1.2%	8.2%	43.5%	37.6%	9.4%	100.0%
C31 Directs/orders followers	Count	0	3	34	38	10	85
	Row N %	0.0%	3.5%	40.0%	44.7%	11.8%	100.0%
C32 Is efficient	Count	1	5	41	25	13	85
	Row N %	1.2%	5.9%	48.2%	29.4%	15.3%	100.0%
C33 Empowers others	Count	2	19	41	17	6	85
	Row N %	2.4%	22.4%	48.2%	20.0%	7.1%	100.0%
C34 Energises others	Count	1	19	36	22	7	85
	Row N %	1.2%	22.4%	42.4%	25.9%	8.2%	100.0%
C35 Establishes goals	Count	0	9	32	33	11	85
	Row N %	0.0%	10.6%	37.6%	38.8%	12.9%	100.0%
C36 Evaluates all options	Count	1	11	42	24	7	85
	Row N %	1.2%	12.9%	49.4%	28.2%	8.2%	100.0%

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C37 Evaluates talent	Count	1	16	38	24	6	85
	Row N %	1.2%	18.8%	44.7%	28.2%	7.1%	100.0%
C38 Facilitates work/tasks	Count	1	6	43	28	7	85
	Row N %	1.2%	7.1%	50.6%	32.9%	8.2%	100.0%
C39 Remains focused	Count	0	1	38	32	14	85
	Row N %	0.0%	1.2%	44.7%	37.6%	16.5%	100.0%
C40 Follows through	Count	1	8	35	30	11	85
	Row N %	1.2%	9.4%	41.2%	35.3%	12.9%	100.0%
C41 Fosters/promotes people growth	Count	1	12	39	25	8	85
	Row N %	1.2%	14.1%	45.9%	29.4%	9.4%	100.0%
C42 Gathers all information	Count	2	9	37	24	13	85
	Row N %	2.4%	10.6%	43.5%	28.2%	15.3%	100.0%
C43 Gets involved	Count	0	5	34	30	16	85
	Row N %	0.0%	5.9%	40.0%	35.3%	18.8%	100.0%
C44 Gives/solicits feedback	Count	2	15	34	21	13	85
	Row N %	2.4%	17.6%	40.0%	24.7%	15.3%	100.0%
C45 Is hard-working	Count	0	4	21	36	24	85
	Row N %	0.0%	4.7%	24.7%	42.4%	28.2%	100.0%
C46 Has an open-door policy	Count	1	5	27	30	22	85
	Row N %	1.2%	5.9%	31.8%	35.3%	25.9%	100.0%
C47 Helps to resolve conflicts	Count	0	8	28	36	13	85
	Row N %	0.0%	9.4%	32.9%	42.4%	15.3%	100.0%
C48 Is humble/modest	Count	3	11	39	20	12	85
	Row N %	3.5%	12.9%	45.9%	23.5%	14.1%	100.0%
C49 Improves the morale of employees	Count	5	21	31	16	12	85
	Row N %	5.9%	24.7%	36.5%	18.8%	14.1%	100.0%
C50 Informs employees	Count	1	17	26	30	11	85
	Row N %	1.2%	20.0%	30.6%	35.3%	12.9%	100.0%
C51 Inspires others	Count	1	20	37	17	10	85
	Row N %	1.2%	23.5%	43.5%	20.0%	11.8%	100.0%
C52 Is involved in community initiatives	Count	9	24	30	16	6	85
	Row N %	10.6%	28.2%	35.3%	18.8%	7.1%	100.0%
C53 Is creative/innovative	Count	2	13	40	23	7	85
	Row N %	2.4%	15.3%	47.1%	27.1%	8.2%	100.0%
C54 Keeps a competitive edge	Count	3	7	33	35	7	85
	Row N %	3.5%	8.2%	38.8%	41.2%	8.2%	100.0%
C55 Learns about others	Count	1	19	36	20	9	85

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	Row N %	1.2%	22.4%	42.4%	23.5%	10.6%	100.0%
C56 Lends a helping hand/voice	Count	1	13	34	29	8	85
	Row N %	1.2%	15.3%	40.0%	34.1%	9.4%	100.0%
C57 Motivates others	Count	2	16	36	24	7	85
	Row N %	2.4%	18.8%	42.4%	28.2%	8.2%	100.0%
C58 Is not afraid of failure	Count	3	15	41	18	8	85
	Row N %	3.5%	17.6%	48.2%	21.2%	9.4%	100.0%
C59 Remains open-minded	Count	1	14	40	22	8	85
	Row N %	1.2%	16.5%	47.1%	25.9%	9.4%	100.0%
C60 Is organised	Count	0	8	33	26	17	84
	Row N %	0.0%	9.5%	39.3%	31.0%	20.2%	100.0%
C61 Is passionate	Count	1	3	29	38	14	85
	Row N %	1.2%	3.5%	34.1%	44.7%	16.5%	100.0%
C62 Positions individuals for success	Count	0	12	45	19	9	85
	Row N %	0.0%	14.1%	52.9%	22.4%	10.6%	100.0%
C63 Predicts needs to complete a task	Count	1	6	35	32	11	85
	Row N %	1.2%	7.1%	41.2%	37.6%	12.9%	100.0%
C64 Acts proactively	Count	1	10	38	24	12	85
	Row N %	1.2%	11.8%	44.7%	28.2%	14.1%	100.0%
C65 Promotes cooperation	Count	1	9	33	30	12	85
	Row N %	1.2%	10.6%	38.8%	35.3%	14.1%	100.0%
C66 Provides the necessary resources for the team to succeed	Count	0	9	36	32	8	85
	Row N %	0.0%	10.6%	42.4%	37.6%	9.4%	100.0%
C67 Provides advice to employees	Count	0	11	35	28	11	85
	Row N %	0.0%	12.9%	41.2%	32.9%	12.9%	100.0%
C68 Recognises talent	Count	1	14	42	19	9	85
	Row N %	1.2%	16.5%	49.4%	22.4%	10.6%	100.0%
C69 Reflects on work outcomes	Count	0	7	36	33	9	85
	Row N %	0.0%	8.2%	42.4%	38.8%	10.6%	100.0%
C70 Removes barriers	Count	1	19	40	18	7	85
	Row N %	1.2%	22.4%	47.1%	21.2%	8.2%	100.0%
C71 Acts respectfully	Count	0	8	31	34	12	85
	Row N %	0.0%	9.4%	36.5%	40.0%	14.1%	100.0%
C72 Is a risk-taker	Count	4	20	40	16	5	85
	Row N %	4.7%	23.5%	47.1%	18.8%	5.9%	100.0%
C73 Serves as a role model	Count	3	23	31	15	13	85
	Row N %	3.5%	27.1%	36.5%	17.6%	15.3%	100.0%

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C74 Seeks knowledge	Count	1	7	33	35	9	85
	Row N %	1.2%	8.2%	38.8%	41.2%	10.6%	100.0%
C75 Seeks to understand	Count	1	11	35	30	8	85
	Row N %	1.2%	12.9%	41.2%	35.3%	9.4%	100.0%
C76 Sees opportunities	Count	0	7	37	34	7	85
	Row N %	0.0%	8.2%	43.5%	40.0%	8.2%	100.0%
C77 Sets clear goals	Count	0	3	39	28	15	85
	Row N %	0.0%	3.5%	45.9%	32.9%	17.6%	100.0%
C78 Sets the vision	Count	0	7	36	27	15	85
	Row N %	0.0%	8.2%	42.4%	31.8%	17.6%	100.0%
C79 Shares the vision	Count	1	11	35	27	11	85
	Row N %	1.2%	12.9%	41.2%	31.8%	12.9%	100.0%
C80 Shows genuine concern	Count	2	12	39	19	13	85
	Row N %	2.4%	14.1%	45.9%	22.4%	15.3%	100.0%
C81 Shows a sense of urgency	Count	1	3	38	34	9	85
	Row N %	1.2%	3.5%	44.7%	40.0%	10.6%	100.0%
C82 Solves problems	Count	2	5	38	28	12	85
	Row N %	2.4%	5.9%	44.7%	32.9%	14.1%	100.0%
C83 Speaks out	Count	0	2	29	37	17	85
	Row N %	0.0%	2.4%	34.1%	43.5%	20.0%	100.0%
C84 Stays positive	Count	0	10	32	30	13	85
	Row N %	0.0%	11.8%	37.6%	35.3%	15.3%	100.0%
C85 Is straightforward	Count	1	10	29	26	19	85
	Row N %	1.2%	11.8%	34.1%	30.6%	22.4%	100.0%
C86 Acts in a strategic manner	Count	1	8	35	28	13	85
	Row N %	1.2%	9.4%	41.2%	32.9%	15.3%	100.0%
C87 Strives for success	Count	0	2	26	41	16	85
	Row N %	0.0%	2.4%	30.6%	48.2%	18.8%	100.0%
C88 Is team-oriented	Count	1	4	40	27	13	85
	Row N %	1.2%	4.7%	47.1%	31.8%	15.3%	100.0%
C89 Thinks outside the box	Count	1	11	39	22	12	85
	Row N %	1.2%	12.9%	45.9%	25.9%	14.1%	100.0%
C90 Acts in a thorough manner	Count	0	5	38	28	14	85
	Row N %	0.0%	5.9%	44.7%	32.9%	16.5%	100.0%
C91 Acts in a timely manner	Count	0	11	36	24	14	85
	Row N %	0.0%	12.9%	42.4%	28.2%	16.5%	100.0%
C92 Is trusting	Count	2	15	31	24	13	85

	Row N %	2.4%	17.6%	36.5%	28.2%	15.3%	100.0%
C93 Uses resources effectively	Count	0	9	34	33	9	85
	Row N %	0.0%	10.6%	40.0%	38.8%	10.6%	100.0%
C94 Willingly supports employees	Count	1	10	36	23	15	85
	Row N %	1.2%	11.8%	42.4%	27.1%	17.6%	100.0%

Compiled by the researcher

Table I.3. Leader trait items custom table for three vocational groups combined

ATCO, AIMO & ATSO combined		Never	Rarely	Sometimes	Often	Always	Total
B1 Able to organise people (coordinate and arrange activities efficiently)	Count	3	17	43	65	17	145
	Row N %	2.1%	11.7%	29.7%	44.8%	11.7%	100.0%
B2 Active (moving, working and doing things in a lively manner and quickly)	Count	0	17	49	59	20	145
	Row N %	0.0%	11.7%	33.8%	40.7%	13.8%	100.0%
B3 Agreeable (pleasant and enjoyable, prepared to consent)	Count	2	20	57	53	13	145
	Row N %	1.4%	13.8%	39.3%	36.6%	9.0%	100.0%
B4 Analytical (using or involving analyses or logical reasoning)	Count	2	13	57	52	21	145
	Row N %	1.4%	9.0%	39.3%	35.9%	14.5%	100.0%
B5 Assertive (showing a strong and confident personality)	Count	1	6	36	66	36	145
	Row N %	.7%	4.1%	24.8%	45.5%	24.8%	100.0%
B6 Authoritative (being reliable and showing authority)	Count	1	4	44	67	29	145
	Row N %	.7%	2.8%	30.3%	46.2%	20.0%	100.0%
B7 Bold (confident and brave, fearless and adventurous)	Count	5	17	46	53	24	145
	Row N %	3.4%	11.7%	31.7%	36.6%	16.6%	100.0%
B8 Broad skills (extensive, widespread and numerous abilities)	Count	2	19	52	56	16	145
	Row N %	1.4%	13.1%	35.9%	38.6%	11.0%	100.0%
B9 Calm and poised speech (having a composed and self-assured manner)	Count	2	19	49	52	23	145
	Row N %	1.4%	13.1%	33.8%	35.9%	15.9%	100.0%

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B10 Charismatic (exercising a compelling charm which inspires devotion)	Count	8	31	52	37	17	145
	Row N %	5.5%	21.4%	35.9%	25.5%	11.7%	100.0%
B11 Coherent (able to communicate clearly, consistently and logically)	Count	2	13	46	60	24	145
	Row N %	1.4%	9.0%	31.7%	41.4%	16.6%	100.0%
B12 Competitive (displaying a strong desire to be more successful)	Count	3	9	50	55	28	145
	Row N %	2.1%	6.2%	34.5%	37.9%	19.3%	100.0%
B13 Complex-thinker (complicated and not easy to understand)	Count	5	38	62	29	10	144
	Row N %	3.5%	26.4%	43.1%	20.1%	6.9%	100.0%
B14 Concentrated (detail-oriented)	Count	0	17	52	57	19	145
	Row N %	0.0%	11.7%	35.9%	39.3%	13.1%	100.0%
B15 Consistent (unchanging in nature)	Count	7	26	52	43	17	145
	Row N %	4.8%	17.9%	35.9%	29.7%	11.7%	100.0%
B16 Contemporary thinking (thinking about current, present and pressing matters)	Count	3	19	53	56	14	145
	Row N %	2.1%	13.1%	36.6%	38.6%	9.7%	100.0%
B17 Control (power to influence people's behaviour or events)	Count	2	10	47	60	26	145
	Row N %	1.4%	6.9%	32.4%	41.4%	17.9%	100.0%
B18 Cooperative (mutual assistance in working towards a common goal)	Count	3	21	63	40	18	145
	Row N %	2.1%	14.5%	43.4%	27.6%	12.4%	100.0%
B19 Dedicated (devoted to a task or purpose)	Count	0	6	53	55	31	145
	Row N %	0.0%	4.1%	36.6%	37.9%	21.4%	100.0%
B20 Dependable (trustworthy and reliable)	Count	4	26	45	51	19	145
	Row N %	2.8%	17.9%	31.0%	35.2%	13.1%	100.0%
B21 Disciplined (showing a controlled form of behaviour or working)	Count	2	13	47	56	27	145
	Row N %	1.4%	9.0%	32.4%	38.6%	18.6%	100.0%
B22 Down-to-earth (with no illusions or pretensions; practical and realistic)	Count	3	20	60	37	25	145
	Row N %	2.1%	13.8%	41.4%	25.5%	17.2%	100.0%
B23 Driven (motivated by a specific factor/feeling)	Count	1	11	47	58	28	145
	Row N %	.7%	7.6%	32.4%	40.0%	19.3%	100.0%

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B24 Efficient (able to work well without wasting time and resources, producing a satisfactory result)	Count	6	20	54	45	20	145
	Row N %	4.1%	13.8%	37.2%	31.0%	13.8%	100.0%
B25 Efficient and effective (producing the intended result, making strong impression)	Count	6	16	60	45	18	145
	Row N %	4.1%	11.0%	41.4%	31.0%	12.4%	100.0%
B26 Eloquent (persuasive in speaking and writing or indicating something)	Count	0	18	54	56	17	145
	Row N %	0.0%	12.4%	37.2%	38.6%	11.7%	100.0%
B27 Enduring (the ability to see something through)	Count	0	9	58	54	24	145
	Row N %	0.0%	6.2%	40.0%	37.2%	16.6%	100.0%
B28 Energetic (involving great activity or vitality characterised by energy)	Count	3	12	65	43	22	145
	Row N %	2.1%	8.3%	44.8%	29.7%	15.2%	100.0%
B29 Engaging personality (charming and attractive or capturing attention)	Count	7	24	58	37	19	145
	Row N %	4.8%	16.6%	40.0%	25.5%	13.1%	100.0%
B30 Faithful (showing allegiance and attachment to a course of action)	Count	5	18	48	49	25	145
	Row N %	3.4%	12.4%	33.1%	33.8%	17.2%	100.0%
B31 Fast-thinking (able to decide on an action quickly)	Count	1	20	53	44	27	145
	Row N %	.7%	13.8%	36.6%	30.3%	18.6%	100.0%
B32 Focused (directing a great deal of attention or activity towards a particular aim)	Count	1	10	50	61	23	145
	Row N %	.7%	6.9%	34.5%	42.1%	15.9%	100.0%
B33 Hard-working (working with energy and care)	Count	1	7	46	58	33	145
	Row N %	.7%	4.8%	31.7%	40.0%	22.8%	100.0%
B34 Helpful (ready to give help)	Count	2	17	49	43	34	145
	Row N %	1.4%	11.7%	33.8%	29.7%	23.4%	100.0%
B35 Honest (free of deceit, truthful and sincere)	Count	4	23	47	49	22	145
	Row N %	2.8%	15.9%	32.4%	33.8%	15.2%	100.0%
B36 Interesting (holding the attention, causing curiosity)	Count	3	20	65	46	11	145
	Row N %	2.1%	13.8%	44.8%	31.7%	7.6%	100.0%

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B37 Just (characterised by right and fair behaviour)	Count	7	20	61	36	21	145
	Row N %	4.8%	13.8%	42.1%	24.8%	14.5%	100.0%
B38 Loyal (showing firm and constant support to a person)	Count	6	22	51	44	22	145
	Row N %	4.1%	15.2%	35.2%	30.3%	15.2%	100.0%
B39 Non-abrasive tone (not abrasive or harsh in speech)	Count	5	25	60	37	18	145
	Row N %	3.4%	17.2%	41.4%	25.5%	12.4%	100.0%
B40 A micro-manager (controls every part, however small)	Count	7	23	56	43	16	145
	Row N %	4.8%	15.9%	38.6%	29.7%	11.0%	100.0%
B41 Opportunistic (taking advantage of opportunities)	Count	3	10	70	46	16	145
	Row N %	2.1%	6.9%	48.3%	31.7%	11.0%	100.0%
B42 Organised (works systematically)	Count	2	16	61	39	27	145
	Row N %	1.4%	11.0%	42.1%	26.9%	18.6%	100.0%
B43 Outspoken (saying openly exactly what one thinks)	Count	2	14	42	49	38	145
	Row N %	1.4%	9.7%	29.0%	33.8%	26.2%	100.0%
B44 Passionate (having, showing, or caused by strong feelings or beliefs)	Count	0	13	48	59	25	145
	Row N %	0.0%	9.0%	33.1%	40.7%	17.2%	100.0%
B45 Patient (able to accept or tolerate delays, problems)	Count	4	21	61	41	18	145
	Row N %	2.8%	14.5%	42.1%	28.3%	12.4%	100.0%
B46 Patient demeanour (characterised by patience)	Count	3	27	58	40	17	145
	Row N %	2.1%	18.6%	40.0%	27.6%	11.7%	100.0%
B47 Perceptive (having or showing understanding or insight)	Count	0	16	60	50	19	145
	Row N %	0.0%	11.0%	41.4%	34.5%	13.1%	100.0%
B48 Persistent (refusing to give up)	Count	0	10	56	59	20	145
	Row N %	0.0%	6.9%	38.6%	40.7%	13.8%	100.0%
B49 Personable (having a pleasant appearance or manner)	Count	1	15	52	56	21	145
	Row N %	.7%	10.3%	35.9%	38.6%	14.5%	100.0%
B50 Poise (graceful and elegant bearing in a person)	Count	2	15	67	47	14	145
	Row N %	1.4%	10.3%	46.2%	32.4%	9.7%	100.0%
B51 Powerful/strong (having great power-basis, having a strong effect on people)	Count	1	13	51	61	19	145
	Row N %	.7%	9.0%	35.2%	42.1%	13.1%	100.0%

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B52 Practical (concerned with the actual doing of something rather than with theory)	Count	3	15	58	52	17	145
	Row N %	2.1%	10.3%	40.0%	35.9%	11.7%	100.0%
B53 Pragmatic (treating things in a sensible and realistic way to produce results)	Count	3	21	59	46	16	145
	Row N %	2.1%	14.5%	40.7%	31.7%	11.0%	100.0%
B54 Prepared (able to deal with something expected)	Count	3	11	55	53	23	145
	Row N %	2.1%	7.6%	37.9%	36.6%	15.9%	100.0%
B55 Productive (able to produce goods/results in large quantities)	Count	2	12	63	47	21	145
	Row N %	1.4%	8.3%	43.4%	32.4%	14.5%	100.0%
B56 Rational (able to think and make decisions based on reason)	Count	4	10	62	49	20	145
	Row N %	2.8%	6.9%	42.8%	33.8%	13.8%	100.0%
B57 Realistic (having a sensible and practical idea of what can be achieved)	Count	4	10	55	57	19	145
	Row N %	2.8%	6.9%	37.9%	39.3%	13.1%	100.0%
B58 Sociable (spending time and interacting with other people)	Count	4	25	43	55	18	145
	Row N %	2.8%	17.2%	29.7%	37.9%	12.4%	100.0%
B59 Strong (able to perform a specified action well, relentlessly and powerfully)	Count	0	12	59	48	26	145
	Row N %	0.0%	8.3%	40.7%	33.1%	17.9%	100.0%
B60 Tactful (skill and sensitivity in dealing with others or with difficult issues)	Count	6	26	57	36	20	145
	Row N %	4.1%	17.9%	39.3%	24.8%	13.8%	100.0%
B61 Teach by doing (show someone how to do something)	Count	8	27	45	37	28	145
	Row N %	5.5%	18.6%	31.0%	25.5%	19.3%	100.0%
B62 Well-spoken (speaking correctly or in an elegant way)	Count	3	13	51	56	22	145
	Row N %	2.1%	9.0%	35.2%	38.6%	15.2%	100.0%
B63 Willing (being prepared to do something)	Count	2	12	58	42	31	145
	Row N %	1.4%	8.3%	40.0%	29.0%	21.4%	100.0%

Compiled by the researcher

Table I.4. Leader behaviour items custom table for three vocational groups combined

ATCO, AIMO & ATSO combined		Never	Rarely	Sometimes	Often	Always	Total
C1 Acknowledges achievement/effort	Count	3	22	51	49	20	145
	Row N %	2.1%	15.2%	35.2%	33.8%	13.8%	100.0%
C2 Acts professionally	Count	0	8	48	57	32	145
	Row N %	0.0%	5.5%	33.1%	39.3%	22.1%	100.0%
C3 Is adaptive to changing environments	Count	2	11	59	51	22	145
	Row N %	1.4%	7.6%	40.7%	35.2%	15.2%	100.0%
C4 Addresses team members' issues/problems	Count	3	24	59	38	21	145
	Row N %	2.1%	16.6%	40.7%	26.2%	14.5%	100.0%
C5 Admits mistakes	Count	18	36	49	29	13	145
	Row N %	12.4%	24.8%	33.8%	20.0%	9.0%	100.0%
C6 Advocates the "we" and not the "I" in team	Count	9	14	61	38	23	145
	Row N %	6.2%	9.7%	42.1%	26.2%	15.9%	100.0%
C7 Allocates resources	Count	2	15	62	48	18	145
	Row N %	1.4%	10.3%	42.8%	33.1%	12.4%	100.0%
C8 Always willing to help others	Count	4	15	56	44	26	145
	Row N %	2.8%	10.3%	38.6%	30.3%	17.9%	100.0%
C9 Appears confident	Count	0	5	33	67	40	145
	Row N %	0.0%	3.4%	22.8%	46.2%	27.6%	100.0%
C10 Appears in charge	Count	1	6	37	64	37	145
	Row N %	.7%	4.1%	25.5%	44.1%	25.5%	100.0%
C11 Is approachable	Count	4	19	53	35	34	145
	Row N %	2.8%	13.1%	36.6%	24.1%	23.4%	100.0%
C12 Asks for feedback	Count	3	29	46	44	23	145
	Row N %	2.1%	20.0%	31.7%	30.3%	15.9%	100.0%
C13 Acts assertively	Count	0	3	50	63	29	145
	Row N %	0.0%	2.1%	34.5%	43.4%	20.0%	100.0%
C14 Assumes responsibility	Count	2	12	51	49	31	145
	Row N %	1.4%	8.3%	35.2%	33.8%	21.4%	100.0%
C15 Is aware of the company's values and leads in that direction	Count	2	5	46	53	39	145
	Row N %	1.4%	3.4%	31.7%	36.6%	26.9%	100.0%
C16 Builds leaders	Count	5	34	62	30	14	145

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	Row N %	3.4%	23.4%	42.8%	20.7%	9.7%	100.0%
C17 Cares about others' welfare	Count	5	22	57	39	22	145
	Row N %	3.4%	15.2%	39.3%	26.9%	15.2%	100.0%
C18 Challenges others in a constructive manner	Count	3	26	61	41	14	145
	Row N %	2.1%	17.9%	42.1%	28.3%	9.7%	100.0%
C19 Acts in a charismatic/charming manner	Count	5	25	57	42	16	145
	Row N %	3.4%	17.2%	39.3%	29.0%	11.0%	100.0%
C20 Communicates openly	Count	7	24	61	35	18	145
	Row N %	4.8%	16.6%	42.1%	24.1%	12.4%	100.0%
C21 Is convincing	Count	1	16	53	51	24	145
	Row N %	.7%	11.0%	36.6%	35.2%	16.6%	100.0%
C22 Is cooperative	Count	1	18	66	44	16	145
	Row N %	.7%	12.4%	45.5%	30.3%	11.0%	100.0%
C23 Is courteous	Count	3	14	62	49	17	145
	Row N %	2.1%	9.7%	42.8%	33.8%	11.7%	100.0%
C24 Creates a comfortable working atmosphere	Count	7	27	49	42	20	145
	Row N %	4.8%	18.6%	33.8%	29.0%	13.8%	100.0%
C25 Generates solutions	Count	2	14	61	46	22	145
	Row N %	1.4%	9.7%	42.1%	31.7%	15.2%	100.0%
C26 Acts decisively	Count	0	7	55	62	21	145
	Row N %	0.0%	4.8%	37.9%	42.8%	14.5%	100.0%
C27 Delegates authorities	Count	2	16	49	60	18	145
	Row N %	1.4%	11.0%	33.8%	41.4%	12.4%	100.0%
C28 Determines people's needs	Count	8	27	69	29	12	145
	Row N %	5.5%	18.6%	47.6%	20.0%	8.3%	100.0%
C29 Develops others	Count	6	28	57	38	16	145
	Row N %	4.1%	19.3%	39.3%	26.2%	11.0%	100.0%
C30 Develops strategies/actions	Count	2	13	69	45	16	145
	Row N %	1.4%	9.0%	47.6%	31.0%	11.0%	100.0%
C31 Directs/orders followers	Count	1	9	56	57	22	145
	Row N %	.7%	6.2%	38.6%	39.3%	15.2%	100.0%
C32 Is efficient	Count	2	13	69	41	20	145
	Row N %	1.4%	9.0%	47.6%	28.3%	13.8%	100.0%
C33 Empowers others	Count	5	31	63	34	12	145
	Row N %	3.4%	21.4%	43.4%	23.4%	8.3%	100.0%
C34 Energises others	Count	4	33	58	36	14	145

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	Row N %	2.8%	22.8%	40.0%	24.8%	9.7%	100.0%
C35 Establishes goals	Count	2	16	56	55	16	145
	Row N %	1.4%	11.0%	38.6%	37.9%	11.0%	100.0%
C36 Evaluates all options	Count	3	17	68	42	15	145
	Row N %	2.1%	11.7%	46.9%	29.0%	10.3%	100.0%
C37 Evaluates talent	Count	4	28	60	41	12	145
	Row N %	2.8%	19.3%	41.4%	28.3%	8.3%	100.0%
C38 Facilitates work/tasks	Count	2	9	73	47	14	145
	Row N %	1.4%	6.2%	50.3%	32.4%	9.7%	100.0%
C39 Remains focused	Count	1	4	60	57	23	145
	Row N %	.7%	2.8%	41.4%	39.3%	15.9%	100.0%
C40 Follows through	Count	2	12	62	48	21	145
	Row N %	1.4%	8.3%	42.8%	33.1%	14.5%	100.0%
C41 Fosters/promotes people growth	Count	5	23	63	40	14	145
	Row N %	3.4%	15.9%	43.4%	27.6%	9.7%	100.0%
C42 Gathers all information	Count	5	17	59	43	21	145
	Row N %	3.4%	11.7%	40.7%	29.7%	14.5%	100.0%
C43 Gets involved	Count	3	12	56	50	24	145
	Row N %	2.1%	8.3%	38.6%	34.5%	16.6%	100.0%
C44 Gives/solicits feedback	Count	5	30	54	33	23	145
	Row N %	3.4%	20.7%	37.2%	22.8%	15.9%	100.0%
C45 Is hard-working	Count	1	10	40	53	41	145
	Row N %	.7%	6.9%	27.6%	36.6%	28.3%	100.0%
C46 Has an open-door policy	Count	5	14	46	42	38	145
	Row N %	3.4%	9.7%	31.7%	29.0%	26.2%	100.0%
C47 Helps to resolve conflicts	Count	2	16	51	53	23	145
	Row N %	1.4%	11.0%	35.2%	36.6%	15.9%	100.0%
C48 Is humble/modest	Count	6	15	69	36	19	145
	Row N %	4.1%	10.3%	47.6%	24.8%	13.1%	100.0%
C49 Improves the morale of employees	Count	11	30	59	28	17	145
	Row N %	7.6%	20.7%	40.7%	19.3%	11.7%	100.0%
C50 Informs employees	Count	4	19	54	46	22	145
	Row N %	2.8%	13.1%	37.2%	31.7%	15.2%	100.0%
C51 Inspires others	Count	4	37	59	29	16	145
	Row N %	2.8%	25.5%	40.7%	20.0%	11.0%	100.0%
C52 Is involved in community initiatives	Count	20	31	58	25	11	145
	Row N %	13.8%	21.4%	40.0%	17.2%	7.6%	100.0%

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C53 Is creative/innovative	Count	5	28	64	36	12	145
	Row N %	3.4%	19.3%	44.1%	24.8%	8.3%	100.0%
C54 Keeps a competitive edge	Count	4	21	58	49	13	145
	Row N %	2.8%	14.5%	40.0%	33.8%	9.0%	100.0%
C55 Learns about others	Count	7	28	57	42	11	145
	Row N %	4.8%	19.3%	39.3%	29.0%	7.6%	100.0%
C56 Lends a helping hand/voice	Count	5	23	58	45	14	145
	Row N %	3.4%	15.9%	40.0%	31.0%	9.7%	100.0%
C57 Motivates others	Count	8	29	60	35	13	145
	Row N %	5.5%	20.0%	41.4%	24.1%	9.0%	100.0%
C58 Is not afraid of failure	Count	4	22	69	35	15	145
	Row N %	2.8%	15.2%	47.6%	24.1%	10.3%	100.0%
C59 Remains open-minded	Count	3	27	64	36	15	145
	Row N %	2.1%	18.6%	44.1%	24.8%	10.3%	100.0%
C60 Is organised	Count	2	16	51	53	22	144
	Row N %	1.4%	11.1%	35.4%	36.8%	15.3%	100.0%
C61 Is passionate	Count	3	12	47	56	27	145
	Row N %	2.1%	8.3%	32.4%	38.6%	18.6%	100.0%
C62 Positions individuals for success	Count	5	22	70	29	19	145
	Row N %	3.4%	15.2%	48.3%	20.0%	13.1%	100.0%
C63 Predicts needs to complete a task	Count	4	14	60	49	18	145
	Row N %	2.8%	9.7%	41.4%	33.8%	12.4%	100.0%
C64 Acts proactively	Count	2	18	67	37	21	145
	Row N %	1.4%	12.4%	46.2%	25.5%	14.5%	100.0%
C65 Promotes cooperation	Count	2	18	58	46	21	145
	Row N %	1.4%	12.4%	40.0%	31.7%	14.5%	100.0%
C66 Provides the necessary resources for the team to succeed	Count	3	15	63	50	14	145
	Row N %	2.1%	10.3%	43.4%	34.5%	9.7%	100.0%
C67 Provides advice to employees	Count	4	20	60	45	16	145
	Row N %	2.8%	13.8%	41.4%	31.0%	11.0%	100.0%
C68 Recognises talent	Count	6	26	64	35	14	145
	Row N %	4.1%	17.9%	44.1%	24.1%	9.7%	100.0%
C69 Reflects on work outcomes	Count	3	14	62	50	16	145
	Row N %	2.1%	9.7%	42.8%	34.5%	11.0%	100.0%
C70 Removes barriers	Count	4	31	68	26	16	145
	Row N %	2.8%	21.4%	46.9%	17.9%	11.0%	100.0%
C71 Acts respectfully	Count	3	16	53	53	20	145

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	Row N %	2.1%	11.0%	36.6%	36.6%	13.8%	100.0%
C72 Is a risk-taker	Count	6	28	71	31	9	145
	Row N %	4.1%	19.3%	49.0%	21.4%	6.2%	100.0%
C73 Serves as a role model	Count	8	34	55	31	17	145
	Row N %	5.5%	23.4%	37.9%	21.4%	11.7%	100.0%
C74 Seeks knowledge	Count	1	15	62	53	14	145
	Row N %	.7%	10.3%	42.8%	36.6%	9.7%	100.0%
C75 Seeks to understand	Count	3	22	59	46	15	145
	Row N %	2.1%	15.2%	40.7%	31.7%	10.3%	100.0%
C76 Sees opportunities	Count	0	14	66	53	12	145
	Row N %	0.0%	9.7%	45.5%	36.6%	8.3%	100.0%
C77 Sets clear goals	Count	3	9	60	51	22	145
	Row N %	2.1%	6.2%	41.4%	35.2%	15.2%	100.0%
C78 Sets the vision	Count	3	11	65	42	24	145
	Row N %	2.1%	7.6%	44.8%	29.0%	16.6%	100.0%
C79 Shares the vision	Count	6	19	58	41	21	145
	Row N %	4.1%	13.1%	40.0%	28.3%	14.5%	100.0%
C80 Shows genuine concern	Count	7	26	59	34	19	145
	Row N %	4.8%	17.9%	40.7%	23.4%	13.1%	100.0%
C81 Shows a sense of urgency	Count	6	5	65	48	21	145
	Row N %	4.1%	3.4%	44.8%	33.1%	14.5%	100.0%
C82 Solves problems	Count	4	15	64	42	20	145
	Row N %	2.8%	10.3%	44.1%	29.0%	13.8%	100.0%
C83 Speaks out	Count	0	3	53	58	31	145
	Row N %	0.0%	2.1%	36.6%	40.0%	21.4%	100.0%
C84 Stays positive	Count	0	14	62	48	21	145
	Row N %	0.0%	9.7%	42.8%	33.1%	14.5%	100.0%
C85 Is straightforward	Count	3	13	51	44	34	145
	Row N %	2.1%	9.0%	35.2%	30.3%	23.4%	100.0%
C86 Acts in a strategic manner	Count	2	14	61	48	20	145
	Row N %	1.4%	9.7%	42.1%	33.1%	13.8%	100.0%
C87 Strives for success	Count	1	3	53	58	30	145
	Row N %	.7%	2.1%	36.6%	40.0%	20.7%	100.0%
C88 Is team-oriented	Count	3	10	63	47	22	145
	Row N %	2.1%	6.9%	43.4%	32.4%	15.2%	100.0%
C89 Thinks outside the box	Count	3	19	66	34	23	145
	Row N %	2.1%	13.1%	45.5%	23.4%	15.9%	100.0%

C90 Acts in a thorough manner	Count	1	14	61	45	24	145
	Row N %	.7%	9.7%	42.1%	31.0%	16.6%	100.0%
C91 Acts in a timely manner	Count	3	18	64	39	21	145
	Row N %	2.1%	12.4%	44.1%	26.9%	14.5%	100.0%
C92 Is trusting	Count	6	26	51	42	20	145
	Row N %	4.1%	17.9%	35.2%	29.0%	13.8%	100.0%
C93 Uses resources effectively	Count	3	16	56	53	17	145
	Row N %	2.1%	11.0%	38.6%	36.6%	11.7%	100.0%
C94 Willingly supports employees	Count	6	21	56	36	26	145
	Row N %	4.1%	14.5%	38.6%	24.8%	17.9%	100.0%

Compiled by the researcher

Table I.5. Noteworthy leader trait items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined)

ATCO, AIMO and ATSO combined			
	N	Mean	Std. Deviation
B5 Assertive (showing a strong and confident personality)	145	3.90	.848
B6 Authoritative (being reliable and showing authority)	145	3.82	.805
B33 Hard-working (working with energy and care)	145	3.79	.873
B19 Dedicated (devoted to a task or purpose)	145	3.77	.833
B43 Outspoken (saying openly exactly what one thinks)	145	3.74	1.000
B23 Driven (motivated by a specific factor/feeling)	145	3.70	.892
B17 Control (power to influence people's behaviour or events)	145	3.68	.897
B12 Competitive (displaying a strong desire to be more successful)	145	3.66	.930
B44 Passionate (having, showing, or caused by strong feelings or beliefs)	145	3.66	.868
B32 Focused (directing a great deal of attention or activity towards a particular aim)	145	3.66	.853
B21 Disciplined (showing a controlled form of behaviour or working)	145	3.64	.933
B27 Enduring (the ability to see something through)	145	3.64	.831
B11 Coherent (able to communicate clearly, consistently and logically)	145	3.63	.912
B34 Helpful (ready to give help)	145	3.62	1.014
B48 Persistent (refusing to give up)	145	3.61	.810
B63 Willing (being prepared to do something)	145	3.61	.960

B59 Strong (able to perform a specified action well, relentlessly and powerfully)	145	3.61	.876
B51 Powerful/strong (having great power-basis, having a strong effect on people)	145	3.58	.855
B2 Active (moving, working and doing things in a lively manner and quickly)	145	3.57	.873
B54 Prepared (able to deal with something expected)	145	3.57	.919
B62 Well-spoken (speaking correctly or in an elegant way)	145	3.56	.927
B49 Personable (having a pleasant appearance or manner)	145	3.56	.889
B14 Concentrated (detail-oriented)	145	3.54	.866
B57 Realistic (having a sensible and practical idea of what can be achieved)	145	3.53	.906
B4 Analytical (using or involving analyses or logical reasoning)	145	3.53	.898
B31 Fast-thinking (able to decide on an action quickly)	145	3.52	.972
B1 Able to organise people (coordinate and arrange activities efficiently)	145	3.52	.921
B9 Calm and poised speech (having a composed and self-assured manner)	145	3.52	.958
B7 Bold (confident and brave, fearless and adventurous)	145	3.51	1.015
B42 Organised (works systematically)	145	3.50	.966
B55 Productive (able to produce goods/results in large quantities)	145	3.50	.891
B26 Eloquent (persuasive in speaking and writing or indicating something)	145	3.50	.859
B47 Perceptive (having or showing understanding or insight)	145	3.50	.859

Compiled by the researcher

Table I.6. Noteworthy leader trait items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups separately)

Air Traffic Control Officers			
	N	Mean	Std. Deviation
B5 Assertive (showing a strong and confident personality)	85	3.95	.800
B6 Authoritative (being reliable and showing authority)	85	3.92	.775
B33 Hard-working (working with energy and care)	85	3.88	.837
B19 Dedicated (devoted to a task or purpose)	85	3.76	.826
B12 Competitive (displaying a strong desire to be more successful)	85	3.75	.858
B23 Driven (motivated by a specific factor/feeling)	85	3.75	.815
B32 Focused (directing a great deal of attention or activity towards a particular aim)	85	3.75	.722
B44 Passionate (having, showing, or caused by strong feelings or beliefs)	85	3.74	.789
B43 Outspoken (saying openly exactly what one thinks)	85	3.73	.918

B48 Persistent (refusing to give up)	85	3.71	.769
B27 Enduring (the ability to see something through)	85	3.68	.848
B21 Disciplined (showing a controlled form of behaviour or working)	85	3.67	.905
B2 Active (moving, working and doing things in a lively manner and quickly)	85	3.65	.869
B34 Helpful (ready to give help)	85	3.65	.948
B11 Coherent (able to communicate clearly, consistently and logically)	85	3.65	.869
B17 Control (power to influence people's behaviour or events)	85	3.65	.855
B14 Concentrated (detail-oriented)	85	3.64	.857
B1 Able to organise people (coordinate and arrange activities efficiently)	85	3.64	.843
B54 Prepared (able to deal with something expected)	85	3.62	.886
B55 Productive (able to produce goods/results in large quantities)	85	3.61	.901
B63 Willing (being prepared to do something)	85	3.61	.888
B57 Realistic (having a sensible and practical idea of what can be achieved)	85	3.59	.806
B49 Personable (having a pleasant appearance or manner)	85	3.59	.890
B9 Calm and poised speech (having a composed and self-assured manner)	85	3.58	.905
B51 Powerful/strong (having great power-basis, having a strong effect on people)	85	3.58	.807
B42 Organised (works systematically)	85	3.56	.919
B4 Analytical (using or involving analyses or logical reasoning)	85	3.54	.853
B56 Rational (able to think and make decisions based on reason)	85	3.54	.795
B62 Well-spoken (speaking correctly or in an elegant way)	85	3.53	.894
B31 Fast-thinking (able to decide on an action quickly)	85	3.52	.921
B28 Energetic (involving great activity or vitality characterised by energy)	85	3.51	.796
B41 Opportunistic (taking advantage of opportunities)	85	3.51	.781
B7 Bold (confident and brave, fearless and adventurous)	85	3.51	.971
Air Traffic Service Officers			
	N	Mean	Std. Deviation
B5 Assertive (showing a strong and confident personality)	46	3.87	.980
B59 Strong (able to perform a specified action well, relentlessly and powerfully)	46	3.78	.941
B43 Outspoken (saying openly exactly what one thinks)	46	3.78	1.073
B19 Dedicated (devoted to a task or purpose)	46	3.76	.848
B17 Control (power to influence people's behaviour or events)	46	3.70	1.008
B6 Authoritative (being reliable and showing authority)	46	3.70	.785
B34 Helpful (ready to give help)	46	3.65	1.178
B23 Driven (motivated by a specific factor/feeling)	46	3.65	1.059
B7 Bold (confident and brave, fearless and adventurous)	46	3.63	1.103

B21 Disciplined (showing a controlled form of behaviour or working)	46	3.61	1.000
B12 Competitive (displaying a strong desire to be more successful)	46	3.61	1.000
B27 Enduring (the ability to see something through)	46	3.59	.777
B33 Hard-working (working with energy and care)	46	3.59	.933
B11 Coherent (able to communicate clearly, consistently and logically)	46	3.57	1.047
B47 Perceptive (having or showing understanding or insight)	46	3.57	.910
B51 Powerful/strong (having great power-basis, having a strong effect on people)	46	3.54	.982
B62 Well-spoken (speaking correctly or in an elegant way)	46	3.54	1.026
B32 Focused (directing a great deal of attention or activity towards a particular aim)	46	3.52	1.027
B4 Analytical (using or involving analyses or logical reasoning)	46	3.52	1.027
B31 Fast-thinking (able to decide on an action quickly)	46	3.52	1.070
B63 Willing (being prepared to do something)	46	3.50	1.049
B44 Passionate (having, showing, or caused by strong feelings or beliefs)	46	3.50	.937
B39 Non-abrasive tone (not abrasive or harsh in speech)	46	3.50	1.027
B26 Eloquent (persuasive in speaking and writing or indicating something)	46	3.50	.888
B22 Down-to-earth (with no illusions or pretensions; practical and realistic)	46	3.50	1.027
B48 Persistent (refusing to give up)	46	3.50	.837
Aeronautical Information Management Officer			
	N	Mean	Std. Deviation
B33 Hard-working (working with energy and care)	14	3.93	.829
B61 Teach by doing (show someone how to do something)	14	3.86	1.167
B62 Well-spoken (speaking correctly or in an elegant way)	14	3.79	.802
B60 Tactful (skill and sensitivity in dealing with others or with difficult issues)	14	3.79	.802
B17 Control (power to influence people's behaviour or events)	14	3.79	.802
B19 Dedicated (devoted to a task or purpose)	14	3.79	.893
B59 Strong (able to perform a specified action well, relentlessly and powerfully)	14	3.71	.914
B51 Powerful/strong (having great power-basis, having a strong effect on people)	14	3.71	.726
B49 Personable (having a pleasant appearance or manner)	14	3.71	.825
B44 Passionate (having, showing, or caused by strong feelings or beliefs)	14	3.71	1.069
B11 Coherent (able to communicate clearly, consistently and logically)	14	3.71	.726
B45 Patient (able to accept or tolerate delays, problems)	14	3.64	1.008
B43 Outspoken (saying openly exactly what one thinks)	14	3.64	1.277
B6 Authoritative (being reliable and showing authority)	14	3.64	1.008
B5 Assertive (showing a strong and confident personality)	14	3.64	.633
B58 Sociable (spending time and interacting with other people)	14	3.57	1.016

B55 Productive (able to produce goods/results in large quantities)	14	3.57	.646
B46 Patient demeanour (characterised by patience)	14	3.57	1.089
B31 Fast-thinking (able to decide on an action quickly)	14	3.57	1.016
B27 Enduring (the ability to see something through)	14	3.57	.938
B26 Eloquent (persuasive in speaking and writing or indicating something)	14	3.57	.852
B21 Disciplined (showing a controlled form of behaviour or working)	14	3.57	.938
B14 Concentrated (detail-oriented)	14	3.57	.852
B9 Calm and poised speech (having a composed and self-assured manner)	14	3.57	.756
B8 Broad skills (extensive, widespread and numerous abilities)	14	3.50	1.019
B57 Realistic (having a sensible and practical idea of what can be achieved)	14	3.50	.855
B54 Prepared (able to deal with something expected)	14	3.50	.941
B50 Poise (graceful and elegant bearing in a person)	14	3.50	.855
B30 Faithful (showing allegiance and attachment to a course of action)	14	3.50	.941
B28 Energetic (involving great activity or vitality characterised by energy)	14	3.50	.941
B23 Driven (motivated by a specific factor/feeling)	14	3.50	.760
B4 Analytical (using or involving analyses or logical reasoning)	14	3.50	.760
B2 Active (moving, working and doing things in a lively manner and quickly)	14	3.50	.650
B32 Focused (directing a great deal of attention or activity towards a particular aim)	14	3.50	.941

Compiled by the researcher

Table I.7. Leader trait factors that were rated noteworthy (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined)

ATCO, AIMO and ATSO combined			
Factor: Dedicated	N	Mean	Std. Deviation
B33 Hard-working (working with energy and care)	145	3.79	.873
B19 Dedicated (devoted to a task or purpose)	145	3.77	.833
B32 Focused (directing a great deal of attention or activity towards a particular aim)	145	3.66	.853
B21 Disciplined (showing a controlled form of behaviour or working)	145	3.64	.933
B11 Coherent (able to communicate clearly, consistently and logically)	145	3.63	.912
B34 Helpful (ready to give help)	145	3.62	1.014
B48 Persistent (refusing to give up)	145	3.61	.810
B63 Willing (being prepared to do something)	145	3.61	.960

B54 Prepared (able to deal with something expected)	145	3.57	.919
B1 Able to organise people (coordinate and arrange activities efficiently)	145	3.52	.921
B42 Organised (works systematically)	145	3.50	.966
B55 Productive (able to produce goods/results in large quantities)	145	3.50	.891
Factor: Practical	N	Mean	Std. Deviation
B27 Enduring (the ability to see something through)	145	3.64	.831
B2 Active (moving, working and doing things in a lively manner and quickly)	145	3.57	.873
B62 Well-spoken (speaking correctly or in an elegant way)	145	3.56	.927
B57 Realistic (having a sensible and practical idea of what can be achieved)	145	3.53	.906
B47 Perceptive (having or showing understanding or insight)	145	3.50	.859
Factor: Cooperative	N	Mean	Std. Deviation
B9 Calm and poised speech (having a composed and self-assured manner)	145	3.52	.958
Factor: Assertive	N	Mean	Std. Deviation
B5 Assertive (showing a strong and confident personality)	145	3.90	.848
B6 Authoritative (being reliable and showing authority)	145	3.82	.805
B43 Outspoken (saying openly exactly what one thinks)	145	3.74	1.000
B23 Driven (motivated by a specific factor/feeling)	145	3.70	.892
B17 Control (power to influence people's behaviour or events)	145	3.68	.897
B12 Competitive (displaying a strong desire to be more successful)	145	3.66	.930
B59 Strong (able to perform a specified action well, relentlessly and powerfully)	145	3.61	.876
B51 Powerful/strong (having great power-basis, having a strong effect on people)	145	3.58	.855
B31 Fast-thinking (able to decide on an action quickly)	145	3.52	.972
B7 Bold (confident and brave, fearless and adventurous)	145	3.51	1.015
Factor: Personable	N	Mean	Std. Deviation
B44 Passionate (having, showing, or caused by strong feelings or beliefs)	145	3.66	.868
B49 Personable (having a pleasant appearance or manner)	145	3.56	.889
B26 Eloquent (persuasive in speaking and writing or indicating something)	145	3.50	.859
Factor: Analytical	N	Mean	Std. Deviation
B14 Concentrated (detail-oriented)	145	3.54	.866
B4 Analytical (using or involving analyses or logical reasoning)	145	3.53	.898

Compiled by the researcher

Table I.8. Negligible leader trait items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined)

ATCO, AIMO and ATSO combined			
	N	Mean	Std. Deviation
B56 Rational (able to think and make decisions based on reason)	145	3.49	.914
B30 Faithful (showing allegiance and attachment to a course of action)	145	3.49	1.028
B28 Energetic (involving great activity or vitality characterised by energy)	145	3.48	.921
B52 Practical (concerned with the actual doing of something rather than with theory)	145	3.45	.905
B8 Broad skills (extensive, widespread and numerous abilities)	145	3.45	.905
B41 Opportunistic (taking advantage of opportunities)	145	3.43	.856
B35 Honest (free of deceit, truthful and sincere)	145	3.43	1.019
B22 Down-to-earth (with no illusions or pretensions; practical and realistic)	145	3.42	.998
B16 Contemporary thinking (thinking about current, present and pressing matters)	145	3.41	.909
B58 Sociable (spending time and interacting with other people)	145	3.40	1.003
B50 Poise (graceful and elegant bearing in a person)	145	3.39	.851
B20 Dependable (trustworthy and reliable)	145	3.38	1.014
B3 Agreeable (pleasant and enjoyable, prepared to consent)	145	3.38	.882
B38 Loyal (showing firm and constant support to a person)	145	3.37	1.047
B24 Efficient (able to work well without wasting time and resources, producing a satisfactory result)	145	3.37	1.019
B25 Efficient and effective (producing the intended result, making strong impression)	145	3.37	.978
B53 Pragmatic (treating things in a sensible and realistic way to produce results)	145	3.35	.932
B61 Teach by doing (show someone how to do something)	145	3.34	1.151
B18 Cooperative (mutual assistance in working towards a common goal)	145	3.34	.944
B45 Patient (able to accept or tolerate delays, problems)	145	3.33	.965
B37 Just (characterised by right and fair behaviour)	145	3.30	1.036
B36 Interesting (holding the attention, causing curiosity)	145	3.29	.873
B46 Patient demeanour (characterised by patience)	145	3.28	.970
B60 Tactful (skill and sensitivity in dealing with others or with difficult issues)	145	3.26	1.041
B39 Non-abrasive tone (not abrasive or harsh in speech)	145	3.26	1.000
B40 A micro-manager (controls every part, however small)	145	3.26	1.014
B15 Consistent (unchanging in nature)	145	3.26	1.039
B29 Engaging personality (charming and attractive or capturing attention)	145	3.26	1.039
B10 Charismatic (exercising a compelling charm which inspires devotion)	145	3.17	1.067

B13 Complex-thinker (complicated and not easy to understand)	144	3.01	.942
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Compiled by the researcher

Table I.9. Negligible leader trait items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups separately)

Air Traffic Control Officers			
	N	Mean	Std. Deviation
B59 Strong (able to perform a specified action well, relentlessly and powerfully)	85	3.49	.826
B30 Faithful (showing allegiance and attachment to a course of action)	85	3.49	.959
B26 Eloquent (persuasive in speaking and writing or indicating something)	85	3.48	.854
B35 Honest (free of deceit, truthful and sincere)	85	3.48	.971
B47 Perceptive (having or showing understanding or insight)	85	3.47	.853
B3 Agreeable (pleasant and enjoyable, prepared to consent)	85	3.46	.825
B52 Practical (concerned with the actual doing of something rather than with theory)	85	3.45	.824
B38 Loyal (showing firm and constant support to a person)	85	3.44	.993
B8 Broad skills (extensive, widespread and numerous abilities)	85	3.42	.891
B20 Dependable (trustworthy and reliable)	85	3.42	1.051
B24 Efficient (able to work well without wasting time and resources, producing a satisfactory result)	85	3.41	.992
B16 Contemporary thinking (thinking about current, present and pressing matters)	85	3.41	.877
B50 Poise (graceful and elegant bearing in a person)	85	3.40	.834
B25 Efficient and effective (producing the intended result, making strong impression)	85	3.39	.965
B22 Down-to-earth (with no illusions or pretensions; practical and realistic)	85	3.39	1.025
B53 Pragmatic (treating things in a sensible and realistic way to produce results)	85	3.36	.924
B58 Sociable (spending time and interacting with other people)	85	3.36	.937
B18 Cooperative (mutual assistance in working towards a common goal)	85	3.35	.972
B37 Just (characterised by right and fair behaviour)	85	3.34	.946
B45 Patient (able to accept or tolerate delays, problems)	85	3.34	.907
B40 A micro-manager (controls every part, however small)	85	3.32	.966
B61 Teach by doing (show someone how to do something)	85	3.31	1.091
B36 Interesting (holding the attention, causing curiosity)	85	3.31	.787
B15 Consistent (unchanging in nature)	85	3.31	1.102
B46 Patient demeanour (characterised by patience)	85	3.29	.911

B29 Engaging personality (charming and attractive or capturing attention)	85	3.29	.949
B39 Non-abrasive tone (not abrasive or harsh in speech)	85	3.15	1.006
B60 Tactful (skill and sensitivity in dealing with others or with difficult issues)	85	3.15	1.029
B10 Charismatic (exercising a compelling charm which inspires devotion)	85	3.05	1.022
B13 Complex-thinker (complicated and not easy to understand)	85	2.96	.919
Air Traffic Service Officers			
	N	Mean	Std. Deviation
B8 Broad skills (extensive, widespread and numerous abilities)	46	3.48	.913
B54 Prepared (able to deal with something expected)	46	3.48	.983
B30 Faithful (showing allegiance and attachment to a course of action)	46	3.48	1.188
B52 Practical (concerned with the actual doing of something rather than with theory)	46	3.46	1.069
B49 Personable (having a pleasant appearance or manner)	46	3.46	.912
B2 Active (moving, working and doing things in a lively manner and quickly)	46	3.43	.935
B57 Realistic (having a sensible and practical idea of what can be achieved)	46	3.43	1.088
B42 Organised (works systematically)	46	3.43	.958
B56 Rational (able to think and make decisions based on reason)	46	3.41	1.147
B28 Energetic (involving great activity or vitality characterised by energy)	46	3.41	1.127
B58 Sociable (spending time and interacting with other people)	46	3.41	1.127
B41 Opportunistic (taking advantage of opportunities)	46	3.41	.956
B10 Charismatic (exercising a compelling charm which inspires devotion)	46	3.39	1.201
B9 Calm and poised speech (having a composed and self-assured manner)	46	3.39	1.105
B16 Contemporary thinking (thinking about current, present and pressing matters)	46	3.39	.977
B18 Cooperative (mutual assistance in working towards a common goal)	46	3.37	.928
B35 Honest (free of deceit, truthful and sincere)	46	3.37	1.162
B25 Efficient and effective (producing the intended result, making strong impression)	46	3.35	1.100
B1 Able to organise people (coordinate and arrange activities efficiently)	46	3.35	1.100
B14 Concentrated (detail-oriented)	46	3.35	.875
B50 Poise (graceful and elegant bearing in a person)	46	3.33	.896
B60 Tactful (skill and sensitivity in dealing with others or with difficult issues)	46	3.30	1.093
B53 Pragmatic (treating things in a sensible and realistic way to produce results)	46	3.30	1.008
B3 Agreeable (pleasant and enjoyable, prepared to consent)	46	3.30	1.051
B20 Dependable (trustworthy and reliable)	46	3.30	1.030
B55 Productive (able to produce goods/results in large quantities)	46	3.28	.911
B36 Interesting (holding the attention, causing curiosity)	46	3.28	1.068
B24 Efficient (able to work well without wasting time and resources, producing a satisfactory result)	46	3.28	1.148

B38 Loyal (showing firm and constant support to a person)	46	3.28	1.186
B61 Teach by doing (show someone how to do something)	46	3.26	1.237
B37 Just (characterised by right and fair behaviour)	46	3.24	1.177
B45 Patient (able to accept or tolerate delays, problems)	46	3.22	1.052
B15 Consistent (unchanging in nature)	46	3.17	.973
B46 Patient demeanour (characterised by patience)	46	3.17	1.039
B40 A micro-manager (controls every part, however small)	46	3.17	1.018
B29 Engaging personality (charming and attractive or capturing attention)	46	3.15	1.282
B13 Complex-thinker (complicated and not easy to understand)	45	3.02	1.033
Aeronautical Information Management Officer			
	N	Mean	Std. Deviation
B56 Rational (able to think and make decisions based on reason)	14	3.43	.756
B53 Pragmatic (treating things in a sensible and realistic way to produce results)	14	3.43	.756
B52 Practical (concerned with the actual doing of something rather than with theory)	14	3.43	.852
B48 Persistent (refusing to give up)	14	3.43	.938
B47 Perceptive (having or showing understanding or insight)	14	3.43	.756
B16 Contemporary thinking (thinking about current, present and pressing matters)	14	3.43	.938
B1 Able to organise people (coordinate and arrange activities efficiently)	14	3.43	.646
B29 Engaging personality (charming and attractive or capturing attention)	14	3.36	.633
B24 Efficient (able to work well without wasting time and resources, producing a satisfactory result)	14	3.36	.745
B22 Down-to-earth (with no illusions or pretensions; practical and realistic)	14	3.36	.745
B34 Helpful (ready to give help)	14	3.36	.842
B20 Dependable (trustworthy and reliable)	14	3.36	.745
B42 Organised (works systematically)	14	3.36	1.277
B38 Loyal (showing firm and constant support to a person)	14	3.29	.914
B37 Just (characterised by right and fair behaviour)	14	3.29	1.139
B35 Honest (free of deceit, truthful and sincere)	14	3.29	.825
B12 Competitive (displaying a strong desire to be more successful)	14	3.29	1.069
B25 Efficient and effective (producing the intended result, making strong impression)	14	3.29	.611
B36 Interesting (holding the attention, causing curiosity)	14	3.21	.699
B40 A micro-manager (controls every part, however small)	14	3.21	1.311
B15 Consistent (unchanging in nature)	14	3.21	.893
B13 Complex-thinker (complicated and not easy to understand)	14	3.21	.802
B39 Non-abrasive tone (not abrasive or harsh in speech)	14	3.14	.770
B10 Charismatic (exercising a compelling charm which inspires devotion)	14	3.14	.770

B7 Bold (confident and brave, fearless and adventurous)	14	3.14	.949
B18 Cooperative (mutual assistance in working towards a common goal)	14	3.14	.864
B3 Agreeable (pleasant and enjoyable, prepared to consent)	14	3.14	.535
B41 Opportunistic (taking advantage of opportunities)	14	3.00	.877

Compiled by the researcher

Table I.10. Leader trait factors that were rated negligible (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined)

ATCO, AIMO and ATSO combined			
Factor: Dedicated	N	Mean	Std. Deviation
B20 Dependable (trustworthy and reliable)	145	3.38	1.014
B24 Efficient (able to work well without wasting time and resources, producing a satisfactory result)	145	3.37	1.019
B25 Efficient and effective (producing the intended result, making strong impression)	145	3.37	.978
B61 Teach by doing (show someone how to do something)	145	3.34	1.151
B15 Consistent (unchanging in nature)	145	3.26	1.039
B20 Dependable (trustworthy and reliable)	145	3.38	1.014
Factor: Practical	N	Mean	Std. Deviation
B56 Rational (able to think and make decisions based on reason)	145	3.49	.914
B52 Practical (concerned with the actual doing of something rather than with theory)	145	3.45	.905
B22 Down-to-earth (with no illusions or pretensions; practical and realistic)	145	3.42	.998
B53 Pragmatic (treating things in a sensible and realistic way to produce results)	145	3.35	.932
B60 Tactful (skill and sensitivity in dealing with others or with difficult issues)	145	3.26	1.041
B39 Non-abrasive tone (not abrasive or harsh in speech)	145	3.26	1.000
B40 A micro-manager (controls every part, however small)	145	3.26	1.014
Factor: Cooperative	N	Mean	Std. Deviation
B30 Faithful (showing allegiance and attachment to a course of action)	145	3.49	1.028
B35 Honest (free of deceit, truthful and sincere)	145	3.43	1.019
B16 Contemporary thinking (thinking about current, present and pressing matters)	145	3.41	.909
B3 Agreeable (pleasant and enjoyable, prepared to consent)	145	3.38	.882
B38 Loyal (showing firm and constant support to a person)	145	3.37	1.047
B18 Cooperative (mutual assistance in working towards a common goal)	145	3.34	.944
B45 Patient (able to accept or tolerate delays, problems)	145	3.33	.965

B37 Just (characterised by right and fair behaviour)	145	3.30	1.036
B46 Patient demeanour (characterised by patience)	145	3.28	.970
Factor: Assertive	N	Mean	Std. Deviation
B41 Opportunistic (taking advantage of opportunities)	145	3.43	.856
B50 Poise (graceful and elegant bearing in a person)	145	3.39	.851
Factor: Personable	N	Mean	Std. Deviation
B28 Energetic (involving great activity or vitality characterised by energy)	145	3.48	.921
B58 Sociable (spending time and interacting with other people)	145	3.40	1.003
B36 Interesting (holding the attention, causing curiosity)	145	3.29	.873
B29 Engaging personality (charming and attractive or capturing attention)	145	3.26	1.039
B10 Charismatic (exercising a compelling charm which inspires devotion)	145	3.17	1.067
Factor: Analytical	N	Mean	Std. Deviation
B8 Broad skills (extensive, widespread and numerous abilities)	145	3.45	.905
B13 Complex-thinker (complicated and not easy to understand)	144	3.01	.942

Compiled by the researcher

Table I.11. Noteworthy leader behaviour items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined)

ATCO, AIMO and ATSO combined			
	N	Mean	Std. Deviation
C9 Appears confident	145	3.98	.803
C10 Appears in charge	145	3.90	.856
C45 Is hard-working	145	3.85	.938
C15 Is aware of the company's values and leads in that direction	145	3.84	.910
C13 Acts assertively	145	3.81	.773
C83 Speaks out	145	3.81	.793
C87 Strives for success	145	3.78	.820
C2 Acts professionally	145	3.78	.854
C26 Acts decisively	145	3.67	.782
C39 Remains focused	145	3.67	.800
C14 Assumes responsibility	145	3.66	.953
C46 Has an open-door policy	145	3.65	1.077

C85 Is straightforward	145	3.64	1.005
C61 Is passionate	145	3.63	.949
C31 Directs/orders followers	145	3.62	.842
C21 Is convincing	145	3.56	.920
C77 Sets clear goals	145	3.55	.897
C3 Is adaptive to changing environments	145	3.55	.889
C43 Gets involved	145	3.55	.935
C47 Helps to resolve conflicts	145	3.54	.935
C60 Is organised	144	3.53	.931
C90 Acts in a thorough manner	145	3.53	.906
C11 Is approachable	145	3.52	1.074
C84 Stays positive	145	3.52	.859
C27 Delegates authorities	145	3.52	.898
C88 Is team-oriented	145	3.52	.906
C40 Follows through	145	3.51	.891
C8 Always willing to help others	145	3.50	.994
C81 Shows a sense of urgency	145	3.50	.929
C78 Sets the vision	145	3.50	.929
C25 Generates solutions	145	3.50	.914

Compiled by the researcher

Table I.12. Noteworthy leader behaviour items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups separately)

Air Traffic Control Officers			
	N	Mean	Std. Deviation
C45 Is hard-working	85	3.94	.850
C9 Appears confident	85	3.93	.737
C10 Appears in charge	85	3.87	.737
C15 Is aware of the company's values and leads in that direction	85	3.85	.919
C87 Strives for success	85	3.84	.754
C2 Acts professionally	85	3.81	.809
C83 Speaks out	85	3.81	.779

C13 Acts assertively	85	3.80	.720
C46 Has an open-door policy	85	3.79	.940
C61 Is passionate	85	3.72	.825
C14 Assumes responsibility	85	3.71	.911
C39 Remains focused	85	3.69	.756
C43 Gets involved	85	3.67	.851
C26 Acts decisively	85	3.66	.810
C77 Sets clear goals	85	3.65	.812
C31 Directs/orders followers	85	3.65	.735
C47 Helps to resolve conflicts	85	3.64	.857
C60 Is organised	84	3.62	.917
C85 Is straightforward	85	3.61	1.001
C90 Acts in a thorough manner	85	3.60	.834
C11 Is approachable	85	3.60	1.002
C21 Is convincing	85	3.60	.848
C71 Acts respectfully	85	3.59	.849
C78 Sets the vision	85	3.59	.877
C81 Shows a sense of urgency	85	3.55	.779
C88 Is team-oriented	85	3.55	.852
C3 Is adaptive to changing environments	85	3.54	.907
C84 Stays positive	85	3.54	.894
C63 Predicts needs to complete a task	85	3.54	.853
C35 Establishes goals	85	3.54	.853
C27 Delegates authorities	85	3.53	.894
C74 Seeks knowledge	85	3.52	.840
C69 Reflects on work outcomes	85	3.52	.796
C32 Is efficient	85	3.52	.868
C86 Acts in a strategic manner	85	3.52	.908
C65 Promotes cooperation	85	3.51	.908
C82 Solves problems	85	3.51	.895
Air Traffic Service Officers			
	N	Mean	Std. Deviation
C9 Appears confident	46	4.04	.918
C10 Appears in charge	46	3.89	.971
C13 Acts assertively	46	3.80	.778

C83 Speaks out	46	3.78	.841
C15 Is aware of the company's values and leads in that direction	46	3.76	.899
C85 Is straightforward	46	3.74	1.021
C87 Strives for success	46	3.70	.940
C2 Acts professionally	46	3.67	.967
C26 Acts decisively	46	3.65	.766
C39 Remains focused	46	3.63	.853
C45 Is hard-working	46	3.61	1.043
C50 Informs employees	46	3.59	.933
C14 Assumes responsibility	46	3.59	.956
C31 Directs/orders followers	46	3.57	1.003
C61 Is passionate	46	3.57	1.109
C40 Follows through	46	3.54	.912
C84 Stays positive	46	3.52	.809
C27 Delegates authorities	46	3.52	.888
C58 Is not afraid of failure	46	3.50	.913
C3 Is adaptive to changing environments	46	3.50	.863
Aeronautical Information Management Officer			
	N	Mean	Std. Deviation
C15 Is aware of the company's values and leads in that direction	14	4.07	.917
C10 Appears in charge	14	4.07	1.141
C9 Appears confident	14	4.07	.829
C45 Is hard-working	14	4.07	.997
C2 Acts professionally	14	3.93	.730
C13 Acts assertively	14	3.93	1.072
C83 Speaks out	14	3.86	.770
C26 Acts decisively	14	3.79	.699
C8 Always willing to help others	14	3.79	1.188
C3 Is adaptive to changing environments	14	3.79	.893
C87 Strives for success	14	3.71	.825
C23 Is courteous	14	3.71	.825
C21 Is convincing	14	3.71	1.139
C11 Is approachable	14	3.71	1.139
C88 Is team-oriented	14	3.71	1.069
C31 Directs/orders followers	14	3.64	.929

C25 Generates solutions	14	3.64	.929
C39 Remains focused	14	3.64	.929
C71 Acts respectfully	14	3.57	.938
C69 Reflects on work outcomes	14	3.57	.756
C12 Asks for feedback	14	3.57	1.284
C89 Thinks outside the box	14	3.57	1.016
C14 Assumes responsibility	14	3.57	1.222
C17 Cares about other's welfare	14	3.50	1.019
C86 Acts in a strategic manner	14	3.50	.760
C85 Is straightforward	14	3.50	1.019
C47 Helps to resolve conflicts	14	3.50	.941
C40 Follows through	14	3.50	.941
C38 Facilitates work/tasks	14	3.50	.760
C30 Develops strategies/actions	14	3.50	.760
C27 Delegates authorities	14	3.50	1.019
C6 Advocates the "we" and not the "I" in team	14	3.50	.941

Compiled by the researcher

Table I.13. Leader behaviour factors that were rated noteworthy (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined)

ATCO, AIMO and ATSO combined			
Factor: Focused	N	Mean	Std. Deviation
C45 Is hard-working	144	3.85	.938
C87 Strives for success	144	3.78	.821
C39 Remains focused	144	3.67	.801
C85 Is straightforward	144	3.65	1.007
C77 Sets clear goals	144	3.56	.899
C60 Is organised	144	3.53	.931
C90 Acts in a thorough manner	144	3.53	.908
C40 Follows through	144	3.51	.893

Factor: Supportive	N	Mean	Std. Deviation
C2 Acts professionally	145	3.78	.854
C46 Has an open-door policy	145	3.65	1.077
C47 Helps to resolve conflicts	145	3.54	.935
C11 Is approachable	145	3.52	1.074
C84 Stays positive	145	3.52	.859
C8 Always willing to help others	145	3.50	.994
Factor: Developer	N	Mean	Std. Deviation
C88 Is team-oriented	145	3.52	.906
Factor: Advisor	N	Mean	Std. Deviation
C43 Gets involved	145	3.55	.935
Factor: Competitive	N	Mean	Std. Deviation
C83 Speaks out	145	3.81	.793
C61 Is passionate	145	3.63	.949
C81 Shows a sense of urgency	145	3.50	.929
Factor: Delegator	N	Mean	Std. Deviation
C9 Appears confident	145	3.98	.803
C10 Appears in charge	145	3.90	.856
C15 Is aware of the company's values and leads in that direction	145	3.84	.910
C26 Acts decisively	145	3.67	.782
C31 Directs/orders followers	145	3.62	.842
C3 Is adaptive to changing environments	145	3.55	.889
C27 Delegates authorities	145	3.52	.898
C25 Generates solutions	145	3.50	.914
Factor: Charismatic	N	Mean	Std. Deviation
C13 Acts assertively	145	3.81	.773
C14 Assumes responsibility	145	3.66	.953
C21 Is convincing	145	3.56	.920

Compiled by the researcher

Table I.14. Negligible leader behaviour items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined)

ATCO, AIMO and ATSO combined			
	N	Mean	Std. Deviation
C71 Acts respectfully	145	3.49	.936
C86 Acts in a strategic manner	145	3.48	.898
C35 Establishes goals	145	3.46	.882
C65 Promotes cooperation	145	3.46	.935
C93 Uses resources effectively	145	3.45	.912
C7 Allocates resources	145	3.45	.889
C74 Seeks knowledge	145	3.44	.832
C32 Is efficient	145	3.44	.889
C23 Is courteous	145	3.43	.896
C50 Informs employees	145	3.43	.992
C63 Predicts needs to complete a task	145	3.43	.927
C76 Sees opportunities	145	3.43	.780
C38 Facilitates work/tasks	145	3.43	.806
C69 Reflects on work outcomes	145	3.43	.888
C1 Acknowledges achievement/effort	145	3.42	.977
C30 Develops strategies/actions	145	3.41	.855
C82 Solves problems	145	3.41	.946
C42 Gathers all information	145	3.40	.989
C64 Acts proactively	145	3.39	.930
C91 Acts in a timely manner	145	3.39	.952
C66 Provides the necessary resources for the team to succeed	145	3.39	.876
C22 Is cooperative	145	3.39	.868
C94 Willingly supports employees	145	3.38	1.068
C12 Asks for feedback	145	3.38	1.041
C89 Thinks outside the box	145	3.38	.972
C79 Shares the vision	145	3.36	1.018
C6 Advocates the "we" and not the "I" in team	145	3.36	1.059
C17 Cares about other's welfare	145	3.35	1.024
C4 Addresses team members' issues/problems	145	3.34	.989

C67 Provides advice to employees	145	3.34	.944
C36 Evaluates all options	145	3.34	.891
C75 Seeks to understand	145	3.33	.928
C48 Is humble/modest	145	3.32	.971
C54 Keeps a competitive edge	145	3.32	.926
C92 Is trusting	145	3.30	1.050
C24 Creates a comfortable working atmosphere	145	3.28	1.072
C56 Lends a helping hand/voice	145	3.28	.961
C44 Gives/solicits feedback	145	3.27	1.069
C19 Acts in a charismatic/charming manner	145	3.27	.988
C18 Challenges others in a constructive manner	145	3.26	.934
C62 Positions individuals for success	145	3.24	.981
C41 Fosters/promotes people growth	145	3.24	.952
C58 Is not afraid of failure	145	3.24	.930
C59 Remains open-minded	145	3.23	.941
C20 Communicates openly	145	3.23	1.026
C80 Shows genuine concern	145	3.22	1.044
C29 Develops others	145	3.21	1.013
C37 Evaluates talent	145	3.20	.940
C68 Recognises talent	145	3.17	.974
C34 Energises others	145	3.16	.977
C53 Is creative/innovative	145	3.15	.945
C55 Learns about others	145	3.15	.981
C70 Removes barriers	145	3.13	.966
C33 Empowers others	145	3.12	.954
C51 Inspires others	145	3.11	1.001
C57 Motivates others	145	3.11	1.008
C73 Serves as a role model	145	3.10	1.065
C16 Builds leaders	145	3.10	.981
C49 Improves the morale of employees	145	3.07	1.084
C28 Determines people's needs	145	3.07	.969
C72 Is a risk-taker	145	3.06	.907
C5 Admits mistakes	145	2.88	1.140
C52 Is involved in community initiatives	145	2.83	1.106

Compiled by the researcher

Table I.15. Negligible leader behaviour items from all factors (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups separately)

Air Traffic Control Officers			
	N	Mean	Std. Deviation
C40 Follows through	85	3.49	.881
C25 Generates solutions	85	3.49	.895
C93 Uses resources effectively	85	3.49	.826
C94 Willingly supports employees	85	3.48	.959
C76 Sees opportunities	85	3.48	.766
C91 Acts in a timely manner	85	3.48	.921
C8 Always willing to help others	85	3.47	.867
C7 Allocates resources	85	3.47	.810
C67 Provides advice to employees	85	3.46	.880
C30 Develops strategies/actions	85	3.46	.825
C66 Provides the necessary resources for the team to succeed	85	3.46	.810
C17 Cares about other's welfare	85	3.46	.946
C1 Acknowledges achievement/effort	85	3.46	.907
C23 Is courteous	85	3.45	.852
C22 Is cooperative	85	3.44	.837
C42 Gathers all information	85	3.44	.957
C6 Advocates the "we" and not the "I" in team	85	3.44	.932
C79 Shares the vision	85	3.42	.918
C64 Acts proactively	85	3.42	.918
C4 Addresses team members' issues/problems	85	3.42	.878
C54 Keeps a competitive edge	85	3.42	.891
C38 Facilitates work/tasks	85	3.40	.790
C89 Thinks outside the box	85	3.39	.927
C75 Seeks to understand	85	3.39	.874
C50 Informs employees	85	3.39	.989
C92 Is trusting	85	3.36	1.022
C18 Challenges others in a constructive manner	85	3.36	.911
C56 Lends a helping hand/voice	85	3.35	.896
C24 Creates a comfortable working atmosphere	85	3.34	1.108

C80 Shows genuine concern	85	3.34	.983
C44 Gives/solicits feedback	85	3.33	1.016
C12 Asks for feedback	85	3.33	.968
C48 Is humble/modest	85	3.32	.991
C41 Fosters/promotes people growth	85	3.32	.876
C62 Positions individuals for success	85	3.29	.843
C36 Evaluates all options	85	3.29	.843
C19 Acts in a charismatic/charming manner	85	3.28	.971
C29 Develops others	85	3.27	.905
C59 Remains open-minded	85	3.26	.888
C68 Recognises talent	85	3.25	.898
C53 Is creative/innovative	85	3.24	.895
C20 Communicates openly	85	3.22	.918
C57 Motivates others	85	3.21	.927
C37 Evaluates talent	85	3.21	.874
C28 Determines people's needs	85	3.20	.884
C55 Learns about others	85	3.20	.949
C51 Inspires others	85	3.18	.966
C34 Energises others	85	3.18	.915
C58 Is not afraid of failure	85	3.15	.945
C73 Serves as a role model	85	3.14	1.093
C70 Removes barriers	85	3.13	.897
C16 Builds leaders	85	3.13	.949
C49 Improves the morale of employees	85	3.11	1.113
C33 Empowers others	85	3.07	.897
C72 Is a risk-taker	85	2.98	.926
C5 Admits mistakes	85	2.87	1.078
C52 Is involved in community initiatives	85	2.84	1.078
Air Traffic Service Officers			
	N	Mean	Std. Deviation
C7 Allocates resources	46	3.48	1.049
C46 Has an open-door policy	46	3.46	1.242
C81 Shows a sense of urgency	46	3.46	1.149
C77 Sets clear goals	46	3.46	.982
C60 Is organised	46	3.46	.912

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C38 Facilitates work/tasks	46	3.46	.862
C25 Generates solutions	46	3.46	.959
C21 Is convincing	46	3.43	.981
C90 Acts in a thorough manner	46	3.43	1.047
C12 Asks for feedback	46	3.41	1.107
C86 Acts in a strategic manner	46	3.41	.933
C36 Evaluates all options	46	3.41	.979
C88 Is team-oriented	46	3.39	.954
C76 Sees opportunities	46	3.39	.802
C35 Establishes goals	46	3.39	.977
C47 Helps to resolve conflicts	46	3.39	1.064
C65 Promotes cooperation	46	3.37	.951
C1 Acknowledges achievement/effort	46	3.37	1.082
C48 Is humble/modest	46	3.37	.878
C93 Uses resources effectively	46	3.37	1.062
C78 Sets the vision	46	3.37	.951
C43 Gets involved	46	3.37	1.082
C74 Seeks knowledge	46	3.35	.849
C66 Provides the necessary resources for the team to succeed	46	3.35	1.059
C64 Acts proactively	46	3.35	.971
C42 Gathers all information	46	3.35	1.059
C63 Predicts needs to complete a task	46	3.35	1.037
C92 Is trusting	46	3.33	1.097
C4 Addresses team members' issues/problems	46	3.33	1.175
C94 Willingly supports employees	46	3.33	1.266
C23 Is courteous	46	3.33	.990
C11 Is approachable	46	3.33	1.175
C32 Is efficient	46	3.30	.916
C91 Acts in a timely manner	46	3.30	.986
C89 Thinks outside the box	46	3.30	1.051
C62 Positions individuals for success	46	3.30	1.171
C37 Evaluates talent	46	3.30	1.030
C30 Develops strategies/actions	46	3.30	.940
C75 Seeks to understand	46	3.28	.981
C71 Acts respectfully	46	3.28	1.068

C22 Is cooperative	46	3.28	.935
C33 Empowers others	46	3.28	1.068
C79 Shares the vision	46	3.26	1.124
C44 Gives/solicits feedback	46	3.26	1.084
C41 Fosters/promotes people growth	46	3.26	1.063
C19 Acts in a charismatic/charming manner	46	3.24	.993
C29 Develops others	46	3.24	1.158
C82 Solves problems	46	3.24	1.037
C69 Reflects on work outcomes	46	3.22	1.052
C56 Lends a helping hand/voice	46	3.22	1.052
C59 Remains open-minded	46	3.20	1.067
C24 Creates a comfortable working atmosphere	46	3.20	1.067
C55 Learns about others	46	3.17	1.018
C54 Keeps a competitive edge	46	3.17	.926
C6 Advocates the "we" and not the "I" in team	46	3.17	1.288
C34 Energises others	46	3.17	1.141
C20 Communicates openly	46	3.17	1.122
C72 Is a risk-taker	46	3.15	.868
C18 Challenges others in a constructive manner	46	3.15	.965
C67 Provides advice to employees	46	3.15	.988
C49 Improves the morale of employees	46	3.11	1.080
C68 Recognises talent	46	3.11	1.120
C17 Cares about other's welfare	46	3.11	1.140
C70 Removes barriers	46	3.09	1.112
C16 Builds leaders	46	3.09	1.092
C57 Motivates others	46	3.09	1.170
C73 Serves as a role model	46	3.07	1.041
C53 Is creative/innovative	46	3.07	.975
C51 Inspires others	46	3.04	1.134
C80 Shows genuine concern	46	3.00	1.054
C28 Determines people's needs	46	2.93	1.041
C52 Is involved in community initiatives	46	2.91	1.112
C5 Admits mistakes	46	2.85	1.264

Aeronautical Information Management Officer			
	N	Mean	Std. Deviation
C78 Sets the vision	14	3.43	1.158
C65 Promotes cooperation	14	3.43	1.089
C46 Has an open-door policy	14	3.43	1.222
C43 Gets involved	14	3.43	.852
C22 Is cooperative	14	3.43	.852
C20 Communicates openly	14	3.43	1.342
C93 Uses resources effectively	14	3.43	.938
C90 Acts in a thorough manner	14	3.43	.852
C84 Stays positive	14	3.43	.852
C32 Is efficient	14	3.43	.938
C42 Gathers all information	14	3.36	1.008
C81 Shows a sense of urgency	14	3.36	1.008
C36 Evaluates all options	14	3.36	.929
C1 Acknowledges achievement/effort	14	3.36	1.082
C82 Solves problems	14	3.36	.929
C64 Acts proactively	14	3.36	.929
C61 Is passionate	14	3.36	1.082
C79 Shares the vision	14	3.29	1.267
C77 Sets clear goals	14	3.29	1.069
C74 Seeks knowledge	14	3.29	.726
C60 Is organised	14	3.29	1.069
C19 Acts in a charismatic/charming manner	14	3.29	1.139
C76 Sees opportunities	14	3.29	.825
C72 Is a risk-taker	14	3.29	.914
C70 Removes barriers	14	3.29	.914
C35 Establishes goals	14	3.21	.699
C80 Shows genuine concern	14	3.21	1.311
C67 Provides advice to employees	14	3.21	1.122
C50 Informs employees	14	3.21	1.188
C48 Is humble/modest	14	3.21	1.188
C24 Creates a comfortable working atmosphere	14	3.21	.893
C7 Allocates resources	14	3.21	.802
C91 Acts in a timely manner	14	3.14	1.027

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C66 Provides the necessary resources for the team to succeed	14	3.14	.535
C54 Keeps a competitive edge	14	3.14	1.099
C75 Seeks to understand	14	3.14	1.099
C59 Remains open-minded	14	3.14	.864
C63 Predicts needs to complete a task	14	3.07	.917
C5 Admits mistakes	14	3.07	1.141
C73 Serves as a role model	14	3.00	1.038
C56 Lends a helping hand/voice	14	3.00	1.038
C34 Energises others	14	3.00	.784
C94 Willingly supports employees	14	2.93	.917
C44 Gives/solicits feedback	14	2.93	1.328
C4 Addresses team members' issues/problems	14	2.93	.917
C53 Is creative/innovative	14	2.93	1.141
C51 Inspires others	14	2.93	.730
C18 Challenges others in a constructive manner	14	2.93	.917
C16 Builds leaders	14	2.93	.829
C68 Recognises talent	14	2.93	.917
C58 Is not afraid of failure	14	2.93	.730
C92 Is trusting	14	2.86	1.027
C33 Empowers others	14	2.86	.864
C55 Learns about others	14	2.79	1.051
C37 Evaluates talent	14	2.79	.975
C41 Fosters/promotes people growth	14	2.71	.914
C29 Develops others	14	2.71	1.069
C28 Determines people's needs	14	2.71	1.139
C62 Positions individuals for success	14	2.71	.994
C49 Improves the morale of employees	14	2.71	.914
C57 Motivates others	14	2.57	.756
C52 Is involved in community initiatives	14	2.57	1.284

Compiled by the researcher

Table I.16. Leader behaviour factors that were rated negligible (Air Traffic Control Officer, Air Traffic Service Officer and Aeronautical Information Management Officer groups combined)

ATCO, AIMO and ATSO combined			
Factor: Focused	N	Mean	Std. Deviation
C86 Acts in a strategic manner	144	3.49	.901
C65 Promotes cooperation	144	3.46	.938
C74 Seeks knowledge	144	3.44	.834
C76 Sees opportunities	144	3.44	.782
C91 Acts in a timely manner	144	3.39	.954
C89 Thinks outside the box	144	3.38	.975
C79 Shares the vision	144	3.36	1.022
C75 Seeks to understand	144	3.33	.931
Factor: Supportive	N	Mean	Std. Deviation
C71 Acts respectfully	145	3.49	.936
C23 Is courteous	145	3.43	.896
C50 Informs employees	145	3.43	.992
C22 Is cooperative	145	3.39	.868
C12 Asks for feedback	145	3.38	1.041
C94 Willingly supports employees	145	3.38	1.068
C17 Cares about other's welfare	145	3.35	1.024
C48 Is humble/modest	145	3.32	.971
C92 Is trusting	145	3.30	1.050
C24 Creates a comfortable working atmosphere	145	3.28	1.072
C56 Lends a helping hand/voice	145	3.28	.961
C44 Gives/solicits feedback	145	3.27	1.069
C20 Communicates openly	145	3.23	1.026
C59 Remains open-minded	145	3.23	.941
C80 Shows genuine concern	145	3.22	1.044
C55 Learns about others	145	3.15	.981
C5 Admits mistakes	145	2.88	1.140
Factor: Developer	N	Mean	Std. Deviation
C1 Acknowledges achievement/effort	145	3.42	.977
C6 Advocates the "we" and not the "I" in team	145	3.36	1.059

C41 Fosters/promotes people growth	145	3.24	.952
C62 Positions individuals for success	145	3.24	.981
C29 Develops others	145	3.21	1.013
C34 Energises others	145	3.16	.977
C33 Empowers others	145	3.12	.954
C51 Inspires others	145	3.11	1.001
C57 Motivates others	145	3.11	1.008
C16 Builds leaders	145	3.10	.981
C49 Improves the morale of employees	145	3.07	1.084
Factor: Advisor	N	Mean	Std. Deviation
C63 Predicts needs to complete a task	145	3.43	.927
C38 Facilitates work/tasks	145	3.43	.806
C82 Solves problems	145	3.41	.946
C42 Gathers all information	145	3.40	.989
C64 Acts proactively	145	3.39	.930
C66 Provides the necessary resources for the team to succeed	145	3.39	.876
C36 Evaluates all options	145	3.34	.891
C67 Provides advice to employees	145	3.34	.944
C37 Evaluates talent	145	3.20	.940
C68 Recognises talent	145	3.17	.974
C70 Removes barriers	145	3.13	.966
Factor: Competitive	N	Mean	Std. Deviation
C69 Reflects on work outcomes	145	3.43	.888
C54 Keeps a competitive edge	145	3.32	.926
C58 Is not afraid of failure	145	3.24	.930
C53 Is creative/innovative	145	3.15	.945
C72 Is a risk-taker	145	3.06	.907
C52 Is involved in community initiatives	145	2.83	1.106
Factor: Delegator	N	Mean	Std. Deviation
C35 Establishes goals	145	3.46	.882
C7 Allocates resources	145	3.45	.889
C93 Uses resources effectively	145	3.45	.912
C32 Is efficient	145	3.44	.889
C4 Addresses team members' issues/problems	145	3.34	.989
C30 Develops strategies/actions	145	3.41	.855

C28 Determines people's needs	145	3.07	.969
Factor: Charismatic	N	Mean	Std. Deviation
C19 Acts in a charismatic/charming manner	145	3.27	.988
C18 Challenges others in a constructive manner	145	3.26	.934
C73 Serves as a role model	145	3.10	1.065

Compiled by the researcher

Leader Trait and Behaviour Questionnaire Source: Wilson, M.S. 2004. Effective developmental leadership: A study of the traits and behaviours of a leader who develops both people and the organization. Ph.D. thesis. Louisiana State University, Louisiana.

FACTOR ANALYSIS RESULTS FOR THE LEADER TRAIT AND BEHAVIOUR QUESTIONNAIRE (FINAL RESULTS)

Table J.1. Leader trait: Dedicated

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.954
Bartlett's Test of Sphericity	Approx. Chi-Square	1781.844
	df	120
	Sig.	.000

Communalities		
	Initial	Extraction
B2	.487	.461
B22	.571	.560
B27	.480	.418
B39	.348	.272
B40	.194	.079
B47	.618	.635
B52	.637	.568
B53	.676	.629
B56	.772	.746
B57	.652	.587
B60	.601	.594
B62	.548	.533

Factor Matrix ^a	
	Factor
	1
B56	.864
B47	.797
B53	.793
B60	.770
B57	.766
B52	.753
B22	.748
B62	.730
B2	.679
B27	.646
B39	.521
B40	*

Extraction Method: Principal Axis Factoring.

* Loadings less than 0.3 excluded.
 Extraction Method: Principal Axis Factoring.
 a. 1 factor extracted. 4 iterations required.

Total Variance Explained						
Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.516	54.304	54.304	6.079	50.662	50.662
2	1.025	8.540	62.844			
3	.905	7.541	70.386			
4	.645	5.377	75.762			
5	.575	4.792	80.554			
6	.462	3.846	84.401			
7	.439	3.662	88.063			
8	.405	3.372	91.435			
9	.368	3.067	94.502			
10	.265	2.210	96.712			
11	.234	1.951	98.663			
12	.160	1.337	100.000			

Extraction Method: Principal Axis Factoring.

Table J.2. Leader trait: Practical

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.922
Bartlett's Test of Sphericity	Approx. Chi-Square	988.366
	df	55
	Sig.	.000

Communalities		
	Initial	Extraction
B2	.483	.458
B22	.567	.565
B27	.466	.409
B39	.345	.273
B47	.604	.628
B52	.623	.580
B53	.673	.634
B56	.770	.744
B57	.652	.586
B60	.599	.590
B62	.547	.533

Factor Matrix ^a	
	Factor 1
B56	.862
B53	.796
B47	.792
B60	.768
B57	.765
B52	.762
B22	.752
B62	.730
B2	.677
B27	.639
B39	.523

Extraction Method: Principal Axis Factoring.

Extraction Method: Principal Axis Factoring.
a. 1 factor extracted. 4 iterations required.

Total Variance Explained							
Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	
1	6.430	58.457	58.457	6.000	54.550	54.550	
2	.907	8.248	66.705				
3	.664	6.040	72.745				
4	.588	5.348	78.093				
5	.486	4.421	82.515				
6	.440	4.000	86.514				
7	.416	3.783	90.297				
8	.400	3.636	93.933				
9	.270	2.452	96.384				
10	.235	2.135	98.519				
11	.163	1.481	100.000				

Extraction Method: Principal Axis Factoring.

Table J.3. Leader trait: Cooperative

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.897
Bartlett's Test of Sphericity	Approx. Chi-Square	1095.330
	df	45
	Sig.	.000

Communalities

	Initial	Extraction
B3	.498	.454
B9	.401	.322
B16	.431	.335
B18	.625	.632
B30	.699	.706
B35	.710	.694
B37	.743	.705
B38	.777	.772
B45	.809	.470
B46	.816	.511

Extraction Method: Principal Axis Factoring.

Factor Matrix^a

	Factor
	1
B38	.879
B30	.840
B37	.840
B35	.833
B18	.795
B46	.715
B45	.686
B3	.674
B16	.579
B9	.568

Extraction Method: Principal Axis Factoring.

a. 1 factor extracted. 5 iterations required.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.003	60.029	60.029	5.602	56.018	56.018
2	1.179	11.792	71.821			
3	.802	8.022	79.843			
4	.517	5.175	85.018			
5	.407	4.066	89.084			
6	.337	3.367	92.451			
7	.260	2.601	95.053			
8	.226	2.265	97.317			
9	.170	1.698	99.015			
10	.099	.985	100.000			

Extraction Method: Principal Axis Factoring.

Table J.4. Leader trait: Assertive

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.916
Bartlett's Test of Sphericity	Approx. Chi-Square	843.294
	df	66
	Sig.	.000

Communalities

	Initial	Extraction
B5	.529	.499
B6	.497	.422
B7	.573	.559
B12	.331	.241
B17	.495	.426
B23	.493	.448
B31	.560	.533
B41	.311	.240
B43	.569	.578
B50	.354	.264
B51	.613	.623
B59	.653	.653

Extraction Method: Principal Axis Factoring.

Factor Matrix^a

	Factor
	1
B59	.808
B51	.789
B43	.760
B7	.748
B31	.730
B5	.706
B23	.669
B17	.653
B6	.650
B50	.514
B12	.491
B41	.490

Extraction Method: Principal Axis Factoring.

a. 1 factor extracted. 4 iterations required.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.990	49.919	49.919	5.487	45.723	45.723
2	1.109	9.244	59.163			
3	.939	7.822	66.985			
4	.753	6.273	73.258			
5	.593	4.940	78.198			
6	.522	4.350	82.548			
7	.446	3.714	86.262			
8	.404	3.370	89.632			
9	.368	3.070	92.702			
10	.344	2.869	95.571			
11	.283	2.361	97.932			
12	.248	2.068	100.000			

Extraction Method: Principal Axis Factoring.

Table J.5. Leader trait: Personable

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.901
Bartlett's Test of Sphericity	Approx. Chi-Square	564.515
	df	28
	Sig.	.000

Communalities		
	Initial	Extraction
B10	.527	.569
B26	.441	.451
B28	.511	.511
B29	.642	.685
B36	.594	.625
B44	.447	.431
B49	.486	.490
B58	.419	.392

Factor Matrix ^a	
	Factor
	1
B29	.827
B36	.790
B10	.754
B28	.715
B49	.700
B26	.672
B44	.657
B58	.626

Extraction Method: Principal Axis Factoring.

Extraction Method: Principal Axis Factoring.
 a. 1 factor extracted. 4 iterations required.

Total Variance Explained						
Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.620	57.751	57.751	4.154	51.924	51.924
2	.825	10.318	68.069			
3	.608	7.605	75.675			
4	.538	6.725	82.400			
5	.410	5.121	87.520			
6	.389	4.867	92.388			
7	.353	4.414	96.802			
8	.256	3.198	100.000			

Extraction Method: Principal Axis Factoring.

Table J.6. Leader trait: Analytical

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.688
Bartlett's Test of Sphericity	Approx. Chi-Square	114.739
	df	3
	Sig.	.000

Communalities

	Initial	Extraction
B4	.427	.660
B8	.378	.519
B14	.321	.428

Extraction Method: Principal Axis Factoring.

Factor Matrix^a

	Factor
	1
B4	.812
B8	.720
B14	.654

Extraction Method: Principal Axis Factoring.

a. 1 factor extracted. 12 iterations required.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.060	68.654	68.654	1.606	53.541	53.541
2	.537	17.899	86.552			
3	.403	13.448	100.000			

Extraction Method: Principal Axis Factoring.

Table J.7. Leader behaviour: Focused

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.956
Bartlett's Test of Sphericity	Approx. Chi-Square	2187.393
	df	136
	Sig.	0.000

Communalities		
	Initial	Extraction
C39	.738	.651
C40	.679	.600
C45	.598	.560
C60	.635	.530
C65	.738	.675
C74	.668	.608
C75	.755	.705
C76	.663	.599
C77	.771	.637
C78	.855	.684
C79	.796	.651
C85	.541	.506
C86	.698	.663
C87	.635	.593
C89	.658	.615
C90	.695	.671
C91	.721	.710

Extraction Method: Principal Axis Factoring.

Factor Matrix ^a	
	Factor
	1
C91	.843
C75	.840
C78	.827
C65	.822
C90	.819
C86	.814
C79	.807
C39	.807
C77	.798
C89	.784
C74	.780
C40	.775
C76	.774
C87	.770
C45	.748
C60	.728
C85	.712

Extraction Method: Principal Axis Factoring.

a. 1 factor extracted. 4 iterations required.

Total Variance Explained							
Factor	Initial Eigenvalues				Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	
1	11.027	64.863	64.863	10.659	62.698	62.698	
2	.909	5.347	70.210				
3	.758	4.458	74.668				
4	.566	3.331	77.999				
5	.548	3.221	81.220				
6	.452	2.661	83.881				
7	.391	2.301	86.182				
8	.373	2.196	88.378				
9	.333	1.958	90.336				
10	.283	1.663	92.000				
11	.264	1.553	93.552				
12	.251	1.475	95.027				
13	.219	1.286	96.313				
14	.195	1.144	97.457				
15	.176	1.037	98.494				
16	.164	.963	99.457				
17	.092	.543	100.000				

Extraction Method: Principal Axis Factoring.

Table J.8. Leader behaviour: Supportive

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.965
Bartlett's Test of Sphericity	Approx. Chi-Square	3067.304
	df	253
	Sig.	0.000

Communalities		
	Initial	Extraction
C2	.556	.447
C5	.703	.651
C8	.781	.736
C11	.741	.650
C12	.553	.457
C17	.742	.680
C20	.712	.658
C22	.726	.677
C23	.677	.584
C24	.657	.625
C44	.729	.563
C46	.716	.575
C47	.742	.609
C48	.647	.553
C50	.719	.649
C55	.735	.680
C56	.773	.731
C59	.774	.730
C71	.631	.523
C80	.753	.639
C84	.595	.511
C92	.790	.743
C94	.779	.730

Factor Matrix ^a	
	Factor
	1
C92	.862
C8	.858
C56	.855
C59	.855
C94	.854
C17	.825
C55	.824
C22	.823
C20	.811
C5	.807
C11	.806
C50	.805
C80	.799
C24	.791
C47	.780
C23	.764
C46	.758
C44	.750
C48	.744
C71	.723
C84	.715
C12	.676
C2	.669

Extraction Method: Principal Axis Factoring.

Extraction Method: Principal Axis Factoring.

a. 1 factor extracted. 3 iterations required.

Total Variance Explained						
Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	14.764	64.193	64.193	14.402	62.617	62.617
2	.982	4.268	68.461			
3	.787	3.423	71.884			
4	.687	2.987	74.871			
5	.576	2.504	77.376			
6	.543	2.359	79.735			
7	.501	2.178	81.912			
8	.444	1.931	83.844			
9	.428	1.860	85.703			
10	.400	1.740	87.444			
11	.348	1.515	88.958			
12	.323	1.404	90.362			
13	.295	1.281	91.643			
14	.275	1.196	92.839			
15	.268	1.166	94.004			
16	.230	.999	95.004			
17	.217	.944	95.948			
18	.188	.819	96.767			
19	.172	.747	97.513			
20	.165	.719	98.232			
21	.158	.685	98.918			
22	.135	.588	99.506			
23	.114	.494	100.000			

Extraction Method: Principal Axis Factoring.

Table J.9. Leader behaviour: Developer

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.943
Bartlett's Test of Sphericity	Approx. Chi-Square	1504.515
	df	66
	Sig.	.000

Communalities

	Initial	Extraction
C1	.515	.481
C6	.573	.501
C16	.699	.704
C29	.748	.691
C33	.747	.726
C34	.754	.752
C41	.739	.656
C49	.645	.591
C51	.725	.700
C57	.757	.728
C62	.733	.684
C88	.612	.577

Factor Matrix^a

	Factor
	1
C34	.867
C57	.853
C33	.852
C16	.839
C51	.837
C29	.832
C62	.827
C41	.810
C49	.769
C88	.759
C6	.708
C1	.694

Extraction Method: Principal Axis Factoring.

Extraction Method: Principal Axis Factoring.

a. 1 factor extracted. 4 iterations required.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.132	67.766	67.766	7.792	64.933	64.933
2	.756	6.299	74.065			
3	.568	4.732	78.797			
4	.503	4.192	82.989			
5	.394	3.283	86.272			
6	.333	2.775	89.047			
7	.291	2.427	91.474			
8	.275	2.293	93.767			
9	.250	2.087	95.854			
10	.193	1.608	97.462			
11	.176	1.467	98.929			
12	.128	1.071	100.000			

Extraction Method: Principal Axis Factoring.

Table J.10. Leader behaviour: Advisor

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.941
Bartlett's Test of Sphericity	Approx. Chi-Square	1432.291
	df	66
	Sig.	.000

Communalities

	Initial	Extraction
C36	.677	.655
C37	.674	.569
C38	.575	.543
C42	.791	.806
C43	.662	.582
C63	.637	.624
C64	.712	.703
C66	.689	.690
C67	.635	.568
C68	.669	.587
C70	.699	.679
C82	.675	.664

Factor Matrix^a

	Factor
	1
C42	.898
C64	.838
C66	.831
C70	.824
C82	.815
C36	.809
C63	.790
C68	.766
C43	.763
C37	.754
C67	.754
C38	.737

Extraction Method: Principal Axis Factoring.

Extraction Method: Principal Axis Factoring.

a. 1 factor extracted. 4 iterations required.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.023	66.862	66.862	7.670	63.917	63.917
2	.702	5.849	72.711			
3	.587	4.891	77.602			
4	.495	4.125	81.727			
5	.402	3.351	85.077			
6	.373	3.105	88.182			
7	.343	2.858	91.040			
8	.294	2.446	93.486			
9	.237	1.974	95.460			
10	.216	1.796	97.256			
11	.178	1.485	98.741			
12	.151	1.259	100.000			

Extraction Method: Principal Axis Factoring

Table J.11. Leader behaviour: Competitive

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.886
Bartlett's Test of Sphericity	Approx. Chi-Square	542.433
	df	21
	Sig.	.000

Communalities

	Initial	Extraction
C52	.373	.324
C53	.726	.762
C54	.676	.717
C61	.588	.632
C69	.539	.584
C81	.470	.460
C83	.368	.352

Extraction Method: Principal Axis Factoring.

Factor Matrix^a

	Factor
	1
C53	.873
C54	.847
C61	.795
C69	.764
C81	.678
C83	.593
C52	.569

Extraction Method: Principal Axis Factoring.

a. 1 factor extracted. 4 iterations required.

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.243	60.619	60.619	3.831	54.731	54.731
2	.856	12.222	72.841			
3	.546	7.798	80.640			
4	.457	6.522	87.162			
5	.408	5.827	92.989			
6	.297	4.241	97.230			
7	.194	2.770	100.000			

Extraction Method: Principal Axis Factoring.

Table J.12. Leader behaviour: Delegator

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.941
Bartlett's Test of Sphericity	Approx. Chi-Square	1484.717
	df	105
	Sig.	.000

Communalities		
	Initial	Extraction
C3	.563	.494
C4	.620	.529
C7	.574	.535
C9	.645	.459
C10	.672	.438
C15	.524	.495
C25	.730	.714
C27	.427	.359
C28	.638	.578
C30	.690	.663
C31	.487	.324
C32	.702	.699
C35	.640	.611
C93	.685	.665
C26	.560	.518

Factor Matrix ^a	
	Factor
	1
C25	.845
C32	.836
C93	.815
C30	.814
C35	.782
C28	.760
C7	.732
C4	.727
C26	.720
C15	.704
C3	.703
C9	.678
C10	.662
C27	.599
C31	.569

Extraction Method: Principal Axis Factoring.

Extraction Method: Principal Axis Factoring.

a. 1 factor extracted. 4 iterations required.

Total Variance Explained						
Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.520	56.798	56.798	8.081	53.873	53.873
2	1.253	8.354	65.152			
3	.771	5.137	70.289			
4	.621	4.137	74.426			
5	.605	4.037	78.462			
6	.527	3.510	81.972			
7	.457	3.047	85.019			
8	.406	2.709	87.728			
9	.373	2.487	90.216			
10	.311	2.073	92.289			
11	.296	1.973	94.262			
12	.258	1.719	95.980			
13	.219	1.457	97.437			
14	.202	1.350	98.787			
15	.182	1.213	100.000			

Extraction Method: Principal Axis Factoring.

Table J.13. Leader behaviour: Charismatic

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.871
Bartlett's Test of Sphericity	Approx. Chi-Square	400.611
	df	15
	Sig.	.000

Communalities		
	Initial	Extraction
C13	.400	.399
C14	.489	.550
C18	.596	.658
C19	.474	.450
C21	.501	.542
C73	.561	.647

Extraction Method: Principal Axis Factoring.

Factor Matrix ^a	
	Factor
	1
C18	.811
C73	.805
C14	.742
C21	.736
C19	.671
C13	.632

Extraction Method: Principal Axis Factoring.

a. 1 factor extracted. 5 iterations required.

Total Variance Explained						
Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.691	61.523	61.523	3.246	54.104	54.104
2	.775	12.922	74.445			
3	.465	7.746	82.192			
4	.416	6.933	89.125			
5	.351	5.856	94.981			
6	.301	5.019	100.000			

Extraction Method: Principal Axis Factoring.

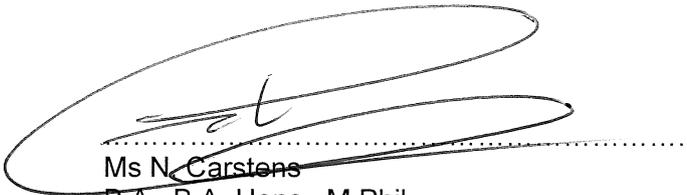
Leader Trait and Behaviour Questionnaire Source: Wilson, M.S. 2004. Effective developmental leadership: A study of the traits and behaviours of a leader who develops both people and the organization. Ph.D. thesis. Louisiana State University, Louisiana.

DECLARATION

I, Natasha Carstens, hereby declare that I acted in the capacity of external codifier for Christiaan Gerhardus Joubert in the data analysis phase of his thesis (titled: Followers' experiences and expectations of leadership behaviours in a safety-critical commercial environment: The case of the Air Traffic and Navigation Services Company).

In making the analysis possible categories and subcategories were identified and based on scientific principles. Furthermore tendencies in the data were presented as accurately as possible and based on qualitative analysis principles.

Thus signed at Centurion on this ..12TH..... day ofFEBRUARY..... 2014.



Ms N. Carstens
B.A., B.A. Hons., M.Phil.

DECLARATION: INITIAL LANGUAGE EDITING

I, Natasha Carstens, the undersigned hereby declare that the DBL Thesis written by Christiaan Gerhardus Joubert for the UNISA Graduate School of Business Leadership on the topic "Follower experiences and expectations of leadership behaviours in a safety-critical commercial environment: The case of the Air Traffic and Navigation Services Company" has been edited by me.

Pretoria



.....

N. Carstens
B.A., B.A. Hons., M.Phil.

12/2/2014

.....
Date

DECLARATION: FINAL LANGUAGE EDITING

I, Arlen Keith Welman, the undersigned hereby certify that I have revised the language of the DBL Thesis (Follower experiences and expectations of leadership behaviours in a safety critical commercial environment: The case of the Air Traffic and Navigation Services Company), written by Christiaan Gerhardus Joubert, and have found the standard of the language acceptable.

Pretoria

A.K. Welman

14 June 2014

A.K. Welman
B.Ed. (U.P.), M.A. (English) (U.P.)

Date

Introduction

Allow me to introduce myself: My name is C.G. (Ian) Joubert. I am conducting a post-graduate research project as a student of the University of South Africa. This research has been approved by the Air Traffic and Navigation Services Company. Your assistance is requested in this regard.

I intend to determine current views held by followers with regard to leadership behaviour qualities within the Air Traffic and Navigation Services Company in terms of focus, inspirational value and discouraging conduct. The title of this study is: Follower experiences and expectations of leadership behaviours in a safety-critical commercial environment: The case of the Air Traffic and Navigation Services Company. Research findings will be drawn on to support/enhance/guide future management training and development initiatives within the Air Traffic and Navigation Services Company.

The research project will examine the nature, characteristics and impact of leadership behaviour qualities in the Air Traffic and Navigation Services Company. The research aims to identify current views held by followers with regard to leadership behaviour qualities within the Air Traffic and Navigation Services Company in terms of focus, inspirational value and discouraging conduct? General focus research questions are:

1. How do followers within the Air Traffic and Navigation Services Company delineate leadership behaviour qualities in terms of significance of these behaviour qualities?
2. How do observed current leadership behaviour qualities inspire follower demeanour within the Air Traffic and Navigation Services Company?
3. How do observed current leadership behaviour qualities discourage follower demeanour within the Air Traffic and Navigation Services Company?
4. How can follower experiences and expectations of leadership behaviours within the Air Traffic and Navigation Services Company inform leadership training and development needs analyses?

I will ensure confidentiality by not disclosing your identity and the identity of other participants, and research sites will receive random numbers in order to protect sites and individuals.

I undertake to provide all participants with an opportunity to learn from their participation. Therefore the outcome of my study will be communicated by means of internal organisational means.

You are welcome to contact me should you wish to obtain further information regarding this research project and/or this questionnaire. Contact details:

Tel: 011 570 0400

Email: ianj@atns.co.za

THANK YOU FOR YOUR WILLINGNESS TO COMPLETE THIS QUESTIONNAIRE.

Instructions

By voluntarily completing this questionnaire you are providing greater insight into Air Traffic Management leadership and development. Your participation is valued.

The purpose of this questionnaire is to provide you with an opportunity to reflect upon your own recent observations regarding **leader** traits and behaviours displayed by Air Traffic Management (ATM) Managers, with reference to all levels of Air Traffic Management operations management within your organisation. Your responses will thus not necessarily be limited to a single manager. You may wish to consider and rate Officers-in-charge, Operational Pool Managers, Operational Line Managers, Operational Centre Managers, Senior Operational Managers, and Executive Managers jointly with whom you have recently interacted. You will be required to rate the frequency of these observed traits and behaviours.

Note: A Trait is a distinguishing quality or characteristic.

A Behaviour is the way a person behaves or acts.

It is important that you rate all traits and behaviours as honestly as possible. Completion should take no more than 40 minutes of your time. Your identity and your answers to this questionnaire will be treated as confidential. Your honest responses are invited.

Use the scale provided below to rate these leadership traits and behaviours. Mark your responses by means of a **cross (X)** in the appropriate **shaded** number in the box. For example:

Example

Please use the following code to rate leader traits:

- 1 – Never**
- 2 – Rarely**
- 3 – Sometimes**
- 4 – Often**
- 5 – Always**

Question: How often have you observed the following leader traits as displayed by your Air Traffic Management (ATM) Managers?

Moodiness	1	2	3	X	5
Happiness	X	2	3	4	5

If you make a **mistake**, simply **blacken** in the box in which the error is and then cross the appropriate shaded number in the alternate box. For example:

Moodiness	1	X	3		5
Happiness		2	X	4	5

The Leader Trait and Behaviour Questionnaire is a reworked version of the EDLTI (effective developmental leader trait instrument) and the EDLBI (effective developmental leader behavior instrument). Source: Wilson, M.S. 2004. Effective developmental leadership: A study of the traits and behaviours of a leader who develops both people and the organization. Ph.D. thesis. Louisiana State University, Louisiana.

SECTION A: PERSONAL DETAILS

This section of the questionnaire refers to background or biographical information. Once again I assure you that your response will remain anonymous. Your co-operation is appreciated.

1. What is your gender?

Male	1
Female	2

2. What is your race/ethnicity?

Black African	1
White	2
Coloured	3
Indian or Asian	4

3. What is your age? (select a range)

20 years or less	1
21 - 30 years	2
31 - 40 years	3
41 – 50 years	4
Older than 50 years	5

4. What is your nationality?

South African	1
Non-South African	2

5. What is your occupation?

Air Traffic Services Officers (ATSO)	1
Aeronautical Information Management Officer (AIMO)	2
Air Traffic Control Officers (ATCO)	3

6. How many years of work experience do you have with ATNS?

5 or less	1
6 – 10	2
11 – 20	3
21 – 30	4
More than 30	5

7. At which airport are you presently stationed?

Bhisho	1
Bloemfontein	2
Cape Town	3
East London	4
George	5
Grand Central	6
Kimberley	7
King Shaka	8
Kruger Mpumalanga	9
Lanseria	10
Mafikeng	11
Mthatha	12
O.R. Tambo	13
Pietermaritzburg	14
Pilanesberg	15
Polokwane	16
Port Elizabeth	17
Rand	18
Richards Bay	19
Virginia	20
Upington	21
Wonderboom	22

SECTION B: TRAITS

Please use the following code regarding the occurrence of leader traits:

- 1 – Never
- 2 – Rarely
- 3 – Sometimes
- 4 – Often
- 5 – Always

Question: How often have you observed the following leader traits as displayed by your Air Traffic Management (ATM) Managers?

A Trait is a distinguishing quality or characteristic.

		N E V E R	R A R E L Y	S O M E T I M E S	O F T E N	A L W A Y S
1	Able to organise people (coordinate and arrange activities efficiently)	1	2	3	4	5
2	Active (moving, working and doing things in a lively manner and quickly)	1	2	3	4	5
3	Agreeable (pleasant and enjoyable, prepared to consent)	1	2	3	4	5
4	Analytical (using or involving analyses or logical reasoning)	1	2	3	4	5
5	Assertive (showing a strong and confident personality)	1	2	3	4	5
6	Authoritative (being reliable and showing authority)	1	2	3	4	5
7	Bold (confident and brave, fearless and adventurous)	1	2	3	4	5
8	Broad skills (extensive, widespread and numerous abilities)	1	2	3	4	5
9	Calm and poised speech (having a composed and self-assured manner)	1	2	3	4	5
10	Charismatic (exercising a compelling charm which inspires devotion)	1	2	3	4	5
11	Coherent (able to communicate clearly, consistently and logically)	1	2	3	4	5
12	Competitive (displaying a strong desire to be more successful)	1	2	3	4	5
13	Complex-thinker (complicated and not easy to understand)	1	2	3	4	5
14	Concentrated (detail-oriented)	1	2	3	4	5
15	Consistent (unchanging in nature)	1	2	3	4	5
16	Contemporary thinking (thinking about current, present and pressing matters)	1	2	3	4	5
17	Control (power to influence people's behaviour or events)	1	2	3	4	5
18	Cooperative (mutual assistance in working towards a common goal)	1	2	3	4	5
19	Dedicated (devoted to a task or purpose)	1	2	3	4	5
20	Dependable (trustworthy and reliable)	1	2	3	4	5
21	Disciplined (showing a controlled form of behaviour or working)	1	2	3	4	5
22	Down-to-earth (with no illusions or pretensions; practical and realistic)	1	2	3	4	5
23	Driven (motivated by a specific factor/feeling)	1	2	3	4	5
24	Efficient (able to work well without wasting time and resources, producing a satisfactory result)	1	2	3	4	5
25	Efficient and effective (producing the intended result, making strong impression)	1	2	3	4	5
26	Eloquent (persuasive in speaking and writing or indicating something)	1	2	3	4	5
27	Enduring (the ability to see something through)	1	2	3	4	5
28	Energetic (involving great activity or vitality characterised by energy)	1	2	3	4	5
29	Engaging personality (charming and attractive or capturing attention)	1	2	3	4	5
30	Faithful (showing allegiance and attachment to a course of action)	1	2	3	4	5
31	Fast-thinking (able to decide on an action quickly)	1	2	3	4	5
32	Focused (directing a great deal of attention or activity towards a particular aim)	1	2	3	4	5

		N E V E R	R A R E L Y	S O M E T I M E S	O F T E N	A L W A Y S
33	Hard-working (working with energy and care)	1	2	3	4	5
34	Helpful (ready to give help)	1	2	3	4	5
35	Honest (free of deceit, truthful and sincere)	1	2	3	4	5
36	Interesting (holding the attention, causing curiosity)	1	2	3	4	5
37	Just (characterised by right and fair behaviour)	1	2	3	4	5
38	Loyal (showing firm and constant support to a person)	1	2	3	4	5
39	Non-abrasive tone (not abrasive or harsh in speech)	1	2	3	4	5
40	A micro-manager (controls every part, however small)	1	2	3	4	5
41	Opportunistic (taking advantage of opportunities)	1	2	3	4	5
42	Organised (works systematically)	1	2	3	4	5
43	Outspoken (saying openly exactly what one thinks)	1	2	3	4	5
44	Passionate (having, showing, or caused by strong feelings or beliefs)	1	2	3	4	5
45	Patient (able to accept or tolerate delays, problems)	1	2	3	4	5
46	Patient demeanour (characterised by patience)	1	2	3	4	5
47	Perceptive (having or showing understanding or insight)	1	2	3	4	5
48	Persistent (refusing to give up)	1	2	3	4	5
49	Personable (having a pleasant appearance or manner)	1	2	3	4	5
50	Poise (graceful and elegant bearing in a person)	1	2	3	4	5
51	Powerful/strong (having great power-basis, having a strong effect on people)	1	2	3	4	5
52	Practical (concerned with the actual doing of something rather than with theory)	1	2	3	4	5
53	Pragmatic (treating things in a sensible and realistic way to produce results)	1	2	3	4	5
54	Prepared (able to deal with something expected)	1	2	3	4	5
55	Productive (able to produce goods/results in large quantities)	1	2	3	4	5
56	Rational (able to think and make decisions based on reason)	1	2	3	4	5
57	Realistic (having a sensible and practical idea of what can be achieved)	1	2	3	4	5
58	Sociable (spending time and interacting with other people)	1	2	3	4	5
59	Strong (able to perform a specified action well, relentlessly and powerfully)	1	2	3	4	5
60	Tactful (skill and sensitivity in dealing with others or with difficult issues)	1	2	3	4	5
61	Teach by doing (show someone how to do something)	1	2	3	4	5
62	Well-spoken (speaking correctly or in an elegant way)	1	2	3	4	5
63	Willing (being prepared to do something)	1	2	3	4	5

SECTION C: BEHAVIOURS

Please use the following code regarding the occurrence of leader behaviours:

- 1 – Never
- 2 – Rarely
- 3 – Sometimes
- 4 – Often
- 5 – Always

Question: How often have you observed the following leader behaviours as displayed by your Air Traffic Management (ATM) Managers?

A Behaviour is the way a person behaves or acts.

		N E V E R	R A R E L Y	S O M E T I M E S	O F T E N	A L W A Y S
1	Acknowledges achievement/effort	1	2	3	4	5
2	Acts professionally	1	2	3	4	5
3	Is adaptive to changing environments	1	2	3	4	5
4	Addresses team members' issues/problems	1	2	3	4	5
5	Admits mistakes	1	2	3	4	5
6	Advocates the "we" and not the "I" in team	1	2	3	4	5
7	Allocates resources	1	2	3	4	5
8	Always willing to help others	1	2	3	4	5
9	Appears confident	1	2	3	4	5
10	Appears in charge	1	2	3	4	5
11	Is approachable	1	2	3	4	5
12	Asks for feedback	1	2	3	4	5
13	Acts assertively	1	2	3	4	5
14	Assumes responsibility	1	2	3	4	5
15	Is aware of the company's values and leads in that direction	1	2	3	4	5
16	Builds leaders	1	2	3	4	5
17	Cares about others' welfare	1	2	3	4	5
18	Challenges others in a constructive manner	1	2	3	4	5
19	Acts in a charismatic/charming manner	1	2	3	4	5
20	Communicates openly	1	2	3	4	5
21	Is convincing	1	2	3	4	5
22	Is cooperative	1	2	3	4	5
23	Is courteous	1	2	3	4	5
24	Creates a comfortable working atmosphere	1	2	3	4	5
25	Generates solutions	1	2	3	4	5
26	Acts decisively	1	2	3	4	5
27	Delegates authorities	1	2	3	4	5
28	Determines people's needs	1	2	3	4	5
29	Develops others	1	2	3	4	5
30	Develops strategies/actions	1	2	3	4	5
31	Directs/orders followers	1	2	3	4	5
32	Is efficient	1	2	3	4	5

		N E V E R	R A R E L Y	S O M E T I M E S	O F T E N	A L W A Y S
33	Empowers others	1	2	3	4	5
34	Energises others	1	2	3	4	5
35	Establishes goals	1	2	3	4	5
36	Evaluates all options	1	2	3	4	5
37	Evaluates talent	1	2	3	4	5
38	Facilitates work/tasks	1	2	3	4	5
39	Remains focused	1	2	3	4	5
40	Follows through	1	2	3	4	5
41	Fosters/promotes people growth	1	2	3	4	5
42	Gathers all information	1	2	3	4	5
43	Gets involved	1	2	3	4	5
44	Gives/solicits feedback	1	2	3	4	5
45	Is hard-working	1	2	3	4	5
46	Has an open-door policy	1	2	3	4	5
47	Helps to resolve conflicts	1	2	3	4	5
48	Is humble/modest	1	2	3	4	5
49	Improves the morale of employees	1	2	3	4	5
50	Informs employees	1	2	3	4	5
51	Inspires others	1	2	3	4	5
52	Is involved in community initiatives	1	2	3	4	5
53	Is creative/innovative	1	2	3	4	5
54	Keeps a competitive edge	1	2	3	4	5
55	Learns about others	1	2	3	4	5
56	Lends a helping hand/voice	1	2	3	4	5
57	Motivates others	1	2	3	4	5
58	Is not afraid of failure	1	2	3	4	5
59	Remains open-minded	1	2	3	4	5
60	Is organised	1	2	3	4	5
61	Is passionate	1	2	3	4	5
62	Positions individuals for success	1	2	3	4	5
63	Predicts needs to complete a task	1	2	3	4	5
64	Acts proactively	1	2	3	4	5
65	Promotes cooperation	1	2	3	4	5
66	Provides the necessary resources for the team to succeed	1	2	3	4	5
67	Provides advice to employees	1	2	3	4	5
68	Recognises talent	1	2	3	4	5
69	Reflects on work outcomes	1	2	3	4	5
70	Removes barriers	1	2	3	4	5
71	Acts respectfully	1	2	3	4	5
72	Is a risk-taker	1	2	3	4	5
73	Serves as a role model	1	2	3	4	5
74	Seeks knowledge	1	2	3	4	5
75	Seeks to understand	1	2	3	4	5
76	Sees opportunities	1	2	3	4	5

		N E V E R	R A R E L Y	S O M E T I M E S	O F T E N	A L W A Y S
77	Sets clear goals	1	2	3	4	5
78	Sets the vision	1	2	3	4	5
79	Shares the vision	1	2	3	4	5
80	Shows genuine concern	1	2	3	4	5
81	Shows a sense of urgency	1	2	3	4	5
82	Solves problems	1	2	3	4	5
83	Speaks out	1	2	3	4	5
84	Stays positive	1	2	3	4	5
85	Is straightforward	1	2	3	4	5
86	Acts in a strategic manner	1	2	3	4	5
87	Strives for success	1	2	3	4	5
88	Is team-oriented	1	2	3	4	5
89	Thinks outside the box	1	2	3	4	5
90	Acts in a thorough manner	1	2	3	4	5
91	Acts in a timely manner	1	2	3	4	5
92	Is trusting	1	2	3	4	5
93	Uses resources effectively	1	2	3	4	5
94	Willingly supports employees	1	2	3	4	5

THANK YOU VERY MUCH FOR COMPLETING THIS QUESTIONNAIRE.