EXPLORING THE RELATIONSHIPS BETWEEN LEADER CHARACTERISTICS, TEAM CULTURE AND THE INNER DYNAMICS OF TRANSFORMATIONAL LEADERSHIP

by

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Declaration

I, Marc Johann Rogatschnig, student number 613 036 31, declare that this thesis entitled: 'Exploring the Relationships between Leader Characteristics, Team Culture and the Inner Dynamics of Transformational Leadership' 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. This thesis has not, in part or in whole, been previously submitted for any other degree or examination at this or any other university.

I also declare that the study has been carried out in strict accordance with the Policy for Research Ethics of the University of South Africa (Unisa). I also took great care that the research was conducted with the highest integrity, considering Unisa's Policy for Infringement and Plagiarism.

I further declare that ethical clearance to conduct the research was obtained from the Department of Industrial and Organisational Psychology (with reference to Consulting Psychology) at the University of South Africa. Permission to conduct the research and specifically to gather and analyse data was also obtained from the participating senior management team leaders and their senior management teams (which included direct permission from each member of the senior management team).

15 November 2023

Marc Johann Rogatschnig   Date

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Abstract

Exploring the Relationships between Leader Characteristics, Team Culture and the

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DEGREE: PhD (Consulting Psychology)

Global expenditure on leadership development interventions is estimated to exceed three hundred billion US dollars per annum, yet despite these significant budgets, leadership development interventions have achieved inconsistent results. Leadership research therefore remains critical to understanding and influencing leadership development. Transformational leadership theory dominates contemporary leadership research and this study therefore focused on explaining the inner dynamics of transformational leadership as demonstrated by the interrelationships between, and amongst, the concepts of a leader's character, integrity, stage of adult development and team culture.

Data were gathered from 31 senior management team leaders, 180 members of these senior management teams, and 1080 additional raters through a combination of online, self-report and multi-rater feedback assessments. The empirical analysis revealed that the null model of no interrelationships between the concepts of a leader's character, integrity, stage of adult development, and team culture failed in several aspects. An alternative model was therefore formulated, and meaning was assigned to the interrelationships between these concepts in a

manner that revealed the inner dynamics of transformational leadership as it is described in the domain of leader and team interactions.

The findings of the study were based on the consequences of seven assumptions formulated from the alternative model. These assumptions stated that the interactions between a leader, the people they lead and the social systems they encounter constitutes an interaction space that contains the inner dynamics of transformational leadership; that the inner dynamics of transformational leadership, as explained by leader character, leader integrity and team culture, are not deterministic; that leader integrity is an important factor in both leader character and team culture; that leader maturity is not a factor in the inner dynamics of transformational leadership; that team culture behaviour is more prominent than leader character behaviour in the inner dynamics of transformational leadership; that other-focused behaviour is more prominent in transformational leadership than self-focused behaviour, and that a relational inner dynamic of transformational leadership manifests in the network of leader and team self-focused and other-focused behaviour relationships. The consequences of these assumptions provided deeper understanding and insight into the inner dynamics of transformational leadership.

Key terms

Leader, team culture, leader character, stages of adult development, leader integrity, perceived levels of integrity, self-focused behaviour, other-focused behaviour, transformational leadership, inner dynamics of transformational leadership

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CHAPTER 1: SCIENTIFIC OVERVIEW OF THE RESEARCH

In this study the interrelationships between a leader's character, a leader's integrity, a leader's stage of adult development, and their team culture were explored to understand the inner dynamics of transformational leadership.

This chapter provides the background and motivation for the study, the formulation of the problem statement, the research aim and objectives and the research questions. To provide structure to the study, the research paradigm, research method and research design are also formulated.

Background and Motivation for the Research

The primary context for this study is the field of leadership research, which has attracted attention from numerous scholars across a broad range of disciplines for many decades. This interest has been nurtured primarily due to an enduring curiosity to understand and diagnose the successes and failures of leaders and their leadership impact over time (Khan et al., 2016). Historically, leadership research has, focused primarily on a leader's unique characteristics, including traits, behaviours, attitudes, mental models, and styles (Khan et al., 2016).

The study of the characteristics of leadership continues to progress and has evolved substantially over the past century. Contemporary leadership researchers approach the study of leadership in a flexible and developmental process, where the field and theory continually build on prior research, seldom disregarding the conceptualisations and theory that have preceded the most recent studies (Khan et al., 2016). Leadership research seems to evolve closely with the progression of society and the corresponding shifts that are mirrored in organisational leadership practices. There is also a significant multidisciplinary influence on leadership

research that draws primarily, but not exclusively, from sociology, psychology, management studies, education, political science and organisational studies (Asrar-ul-Haq & Anwar, 2018).

The focus of research in the organisational leadership field has been organised around the concepts of leadership, management, leadership traits, leadership skills, leadership rank and power, leadership impact and influence, situational determinants of leadership behaviour, organisational effectiveness as an outcome of leadership behaviour, and the influence of gender and culture on leadership styles and approaches (Yukl, 2010). The organisational leadership field remains the most pertinent area of theoretical value to the current study, and to contextualise this study's focus, it will be useful to provide historical context to the progression of leadership theory over time.

The earliest leadership conceptualisations emanated from the great man theory that originated from writings and oral histories across many early civilisations. The great man theory confidently claimed that leaders were undoubtedly born with the natural inclination to lead men and to display heroic acts. This perspective on leadership endured for centuries but was eventually challenged by the frequent observation that, in reality, numerous so called 'great man leaders' throughout history may indeed have led men but also regularly demonstrated poor moral judgement and self-serving inclinations that negatively impacted many of their very own followers (Khan et al., 2016).

As the influence of the great man theory waned, the emerging conceptualisations of leadership turned to the perspective that leaders possess a collection of common traits, and distinguishing, unique qualities. Leadership traits were then studied for most of the early decades of the 20th century but researchers were unable to definitively identify common traits of leadership that were solely deterministic of leadership success or failure, and therefore these leadership trait theories received limited further attention (Northouse, 2006).

The notion that leaders are born with inherent prowess, capabilities or traits, was eventually conclusively discredited by emerging evidence that, in fact, context significantly influences leaders and their behaviours. What made this progression in leadership theory even more compelling was studies that reported how context was often equally influential in determining a leader's behaviours as the internal characteristics of each leader (Northouse, 2006). This initiated the rise to prominence of the contingency theories of leadership during the 1960's. These emphasised a leader's context or situation as a primary determinant of that leader's behaviours (Asrar-ul-Haq & Anwar, 2018). These contingency or situational leadership theories suggested that effective leaders deliberately choose different leadership styles, and corresponding behaviours, to match the unique situation and needs of their followers within a specific, and at times, evolving context (Goldsmith, 2003). Fiedler's (2006) contingency model emerged from the collection of contingency leadership theories, hypothesising that a situation often extracts the best from a leader but only when the leader has (a) job and role clarity; (b) appropriate authority, and (c) a constructive and healthy relationship with their followers (Fiedler, 2006).

The path-goal theory, which emerged in the 1970's, then suggested that leaders are primarily expected to help their followers to achieve their goals by generating motivation to persist, focus, and ultimately achieve the predefined goals set for them, including tasks, objectives, targets, and outcomes. The path-goal theory introduced the perspective that there are a variety of sources of motivation for each follower, which, in turn, requires that a leader has an intimate awareness and understanding of each follower and their motivational drivers (House, 1971). The interactions between a leader and their followers, and the extent to which they situationally influence a leader's style of leadership, were hypothesised to be a psychological exchange between a leader and follower, known as the leader-member exchange theory (Asrar-ul-Haq & Anwar, 2018). Leadership research, thus, began to shift away from focusing primarily on

intrinsic leadership characteristics and turned to exploring the interplay of individual characteristics that influence the relationship between a leader and their followers (Gill, 2006). Importantly, the relationship between a leader and their followers was found to be fundamentally influenced by the congruence between a leader's self-perception and the perceptions that their followers have of them (Asrar-ul-Haq & Anwar, 2018). In other words, the relationship that a leader has with themselves, and how they perceive themselves, influences the relationships they have with their followers.

These evolutions of leadership theory and models have progressed the field of leadership research towards the contemporary emergence – and dominance – of transformational leadership theory. Transformational leadership theory and research has, thus, been chosen as a significant contributor to the theoretical and conceptual foundations of this study.

Transformational leadership developed from a consolidation of prior theory and is summarily defined by a leader who focuses much of their attention and energy on motivating their followers through alignment with their followers' values. This values alignment is then coupled with a prioritisation of performance towards a clear, future vision of the team and organisation (Burns, 1978). Transformational leadership theory is conceptualised through four dimensions, namely, idealised influence, inspirational motivation, intellectual stimulation, and individual consideration (Bass, 1985). The dimension of idealised influence describes a leader who aims to maintain high levels of moral and ethical conduct so that they can more readily engender respect and loyalty from their followers. Inspirational motivation is the next dimension which refers to a leader who communicates persuasively and thereby stimulates and delivers a compelling, values-aligned vision. The dimension of intellectual stimulation describes a leader who actively challenges norms and encourages innovative thinking in their followers to ensure that they are continuously oriented towards maintaining current and future relevance in all that

they are doing. The final dimension of transformational leadership is individual consideration, which describes a leader who is cognisant and values the internal desires of their followers, and therefore deliberately supports their development towards these goals as a means to actively unlock their followers potential (Turner et al., 2002).

Transactional leadership theory, in contrast, suggests that leadership effectiveness is founded upon a social exchange that encourages followers to perform towards clearly defined goals by focusing solely on followers' self-interest and motivating them with either rewards or penalties (Burns, 1978). Thus, the dominant dimensions of transactional leadership are primarily focused on managing and controlling the outputs of followers through structured rewards and punishments often delivered through financial means (Bass, 1985).

Transactional leadership is also conceptualised through four dimensions, namely, contingent reward, management by exception (active), management by exception (passive), and laissez-faire leadership. The dimension of contingent reward refers to a leader who gives rewards only when an employee engages in the desired behaviours of accomplishing goals on time, and by maintaining a good pace at different times throughout the goal completion. Management by exception (active) refers to a leader who continually monitors each subordinate's performance and takes immediate corrective action when something goes wrong. Management by exception (passive), refers to a leader who does not monitor employee performance, rather waiting for serious issues, challenges, and mistakes to arise before taking any corrective actions. Finally, the dimension of laissez-faire leadership refers to a leader who prefers a completely hands-off approach and, in most cases neglects most, if not all, leadership responsibilities (Parry & Proctor-Thomson, 2002).

Most leaders possess the characteristics of both transformational and transactional leadership, and likely choose the appropriate style based on the task requirements and the unique needs of

their followers (Asrar-ul-Haq & Anwar, 2018). In further comparisons, it has been shown that the transactional leadership approach and behaviours may be more effective in achieving short term goals, whereas the transformational leadership approach encourages a leader to enhance and extend the motivation levels of their followers to achieve longer term goals and outcomes (Asrar-ul-Haq & Anwar, 2018). The achievement of these medium- and longer-term goals, and specifically successful organisational outcomes, has resulted in numerous studies attempting to understand how a transformational leadership approach influences these results.

Several studies have shown that organisational outcomes are positively correlated with transformational leadership, specifically across four types of outcome, including effectiveness outcomes, attitudinal outcomes, behavioural outcomes and cognition outcomes (Hiller et al., 2011). Effectiveness outcomes are defined as tangible organisational outcomes, such as commercial performance, goal attainment and profitability. Attitude outcomes are the extent to which a leader influences a follower's experiences of well-being, motivation, satisfaction, self-esteem, and commitment. Behavioural outcomes are defined as the observable behaviours, including constructive communication and the demonstration of a positive intention. Finally, cognition outcomes are the non-attitudinal and non-emotional effects of leadership that relate to the deliberate optimisation of organisational structure, resources and support (Hiller et al., 2011). In addition to these outcomes types, transformational leadership has proven correlations with higher levels of job satisfaction, increased motivation levels (due to the encouragement of intrinsic sources of motivation), enhanced levels of organisational commitment (and the desire to achieve medium to long term organisational goals), psychological health and wellbeing, and lower levels of staff turnover (Asrar-ul-Haq & Anwar, 2018). Thus, it is unsurprising that when these aforementioned outcomes are not achieved or employees experience repeated undesirable outcomes, there is a heightened risk of lower engagement and higher employee turnover (Asrar-ul-Haq & Anwar, 2018).

To successfully influence their followers towards achieving these numerous desirable outcomes, transformational leaders are expected to demonstrate high levels of conviction to their moral orientation; be consistent in their communication; be congruent role models of the behaviours they expect of others; constantly encourage their followers; and, maintain a clear and compelling focus on the overarching organisational goals and vision (House & Shamir, 1993). Unsurprisingly, successful transformational leaders demonstrate and maintain high levels of self-esteem, emotional stability, and control over their inner conflicts. They also acknowledge and own their capacity and capability to be masters of their own future progress and growth (Khan et al., 2016).

Transformational leadership provides a salient and contemporary understanding of leadership that positively correlates with numerous desirable outcomes and outputs of individuals, teams, and organisations, and emphasises the interplay between a leader and their followers, and the self-awareness, attitude, and mindset of a leader.

Transformational Leadership and Moral Development

Contemporary leadership research includes, amongst others, the influential theories of servant leadership (Greenleaf, 1977) principal-centred leadership (Covey, 1992) and charismatic leadership (Conger, 1989). These conceptualisations of leadership have developed concurrently to transformational and transactional leadership theory (Khan et al., 2016) and have been collectively designated as versions of the process leadership theories. The process leadership theories promote a foundational tenet that a leader's primary work is not only to focus on the overall well-being of their followers and achievement of organisational and team goals, but to also sufficiently contribute to a greater and positive social responsibility and impact (House & Shamir, 1993). Process leadership theory, thus, influenced transformational leadership theory development to include both an overt focus on doing good in society, doing things right, and on

the salience of a leader's moral orientation and ethics. Transformational leadership literature has consequently delineated some important differences between so-called pseudo-transformational leadership and authentic transformational leadership, where the former refers to a leader who demonstrates a minimal range of transformational leadership behaviours and primarily focuses on preserving and promoting their self-interest. Thus, the difference between pseudo and authentic transformational leadership is informed primarily by the moral and ethical orientation of the leader (Bass & Steidlmeier, 1999).

Transformational leaders are expected to raise the motivation of their followers. However, the evolution of the theory also indicates a specific focus on raising the moral orientation and ethical practices of their followers (House & Shamir, 1993). Research shows that leaders who score high on moral reasoning assessments (as an indicator of moral development), demonstrate a greater range of transformational leadership behaviours than leaders with low scores on moral reasoning assessments (Turner et al., 2002). The ethics and moral orientation of a leader is, thus, seen as an essential contributor to a transformational leader's effectiveness (Morgan, 1993). These findings support the view that transformational leaders and their followers may consistently maintain and defend the balance between self-interest and the interests of the greater, moral, and ethical good, as demonstrated through their actions, judgements and behaviours (McGregor, 2003). To achieve these levels of collective awareness and action, transformational leaders tend to treat their followers as unique individuals, deliberately pursuing the development of their followers' consciousness, moral orientation and moral development, and general capability. Through this focus on moral orientation and development, the transformational leader further enhances the followers' feelings of meaning, significance and motivation as they pursue organisational goals (McGregor, 2003).

In conclusion, the moral orientation – and consequent behavioural alignment with a moral compass positioned towards the greater good – is considered an essential, theoretical foundation of a transformational leadership style. This alignment between moral development and transformational leadership also introduces a theoretical relationship between adult development, which is considered a contributor to moral development, and transformational development. The antecedent nature of adult development to the shaping of moral orientation is considered an important departure point for consideration in the current study.

Transformational Leadership and Teams

Research has demonstrated that a leader's perceived capability and leadership style influences the success of organisational outcomes (Asrar-ul-Haq & Anwar, 2018) and that teams, as important subgroups within an organisation, most directly influence the achievement of organisational outcomes (Lok et al., 2005). Teams are also prominently impacted by the leadership style of their leader (Pearce & Herbik, 2004). This leadership style influence is evident through the alignment of the team members individual and collective behaviours with that of their team leader (Lok et al., 2005). These findings suggest that a team's functioning and culture, as an outcome of individual and collective behaviours of a leader, are influenced by the quality of the relationship between a leader and their followers (Hiller et al., 2011).

Research has indicated significant differences in functioning between teams that are led by transactional leaders – who engender a rules-based culture that encourages strict alignment with rules and tends to create a narrow space of interpretation – and those led by transformational leaders who encourage a more principle-based team culture, applicable across a broad range of contexts and situations (Egan, 2008). A characteristic of a team that exemplifies the differences between these two leadership approaches is the extent of team potency in a team. Team potency is defined as team members' belief in their collective ability to achieve group goals, and

research suggests that this is significantly and positively correlated with transformational leadership (Schaubroeck et al., 2007) and not to transactional leadership. It is expected that different leadership styles, usually unique to each individual leader, impact a team's effectiveness in a wide range of constructive and destructive ways (Gully et al., 2002). However, transformational leaders primarily focus on developing their followers and creating a common and shared sense of purpose amongst all their followers (Sivasubramaniam et al., 2002). These leaders also demonstrate and role model the team's values, increasing the importance and stature of the team to all its members. They also build greater levels of team member commitment to positively and constructively influence a greater collective, such as the organisation and society (Burns, 1978), and deliberately build perceptions of leader integrity as a means to encourage loyal followership (Kaiser & Hogan, 2010).

Transactional leaders, in contrast, focus primarily on correcting people's mistakes. As a result, transactional leadership has been correlated with lower levels of team member motivation, satisfaction and performance (Kaiser & Hogan, 2010). The more passive, transactional leadership style also often avoids facing problems or delays making important decisions, and is, thus, correlated with lower levels of performance and execution (Avolio & Bass, 1995). Individual leaders, and how they present themselves within their team context, can thus profoundly impact the self-belief and efficacy of a team.

In conclusion, transformational leadership has been positively correlated with effective and desirable organisational and team outcomes, and also influences the functioning and collective behaviours and culture of a team.

Transformational Leadership and Integrity

Integrity has been succinctly defined as "commitment in action to a morally justifiable set of principles" (Becker, 1998, p.157–158), and has also been shown to positively correlate with all the dimensions of transformational leadership (Van Aswegen & Engelbrecht, 2009). Trustworthiness, which is often an outcome of integrity, is also theoretically linked to transformational leadership (Palanski & Yammarino, 2007). Integrity is also defined as wholeness, consistency between action and words, being true to oneself, and as the demonstration of moral and ethical behaviour especially during adverse times. However, it is important to note that integrity is not simply about avoiding unethical behaviour, but in fact more about actively demonstrating ethical behaviour consistently across numerous contexts and situations (Parry & Proctor-Thomson, 2002).

At an interpersonal level, integrity commonly refers to how a person treats those around them and behaves over time with honesty, candour and moral awareness (Mayer et al., 1995). Kouzes and Posner (2004) found that followers admire and more willingly follow leaders who exhibit high levels of integrity. Unsurprisingly, these same followers have higher levels of job satisfaction when they are led by a leader with high levels of perceived integrity (Hogan & Kaiser, 2005). In addition, a leader's perceived integrity is positively correlated with perceptions of the leader's effectiveness (Parry & Proctor-Thomson, 2002), and high levels of integrity may result in enhanced business performance and the ability to attract and keep the best talent (Fulmer, 2004 cited in Baker & Craig, 2006).

Thus, effective transformational leaders tend to consistently demonstrate and role model the values of the group, team and organisation. They also increase the importance and stature of their followers, encouraging commitment towards the greater good and the best interests of the collective (Burns, 1978). Hannah and Avolio (2010) show that the alignment between integrity

and effective transformational leaders is based on the extent to which the leaders consistently seeks to understand each follower's unique needs and aspirations, and then support their development and achievements in constant alignment with the organisation's requirements. Transformational leaders, therefore, overtly invite their followers to demonstrate their potential and ethics by taking greater levels of moral ownership to protect the organisation's moral status whilst they pursue their collective goals (Hannah & Avolio, 2010).

Within an organisational context, it has been shown that leaders with higher levels of perceived integrity make decisions with a longer-term perspective, appreciation, and consideration. They therefore garner higher levels of trust and reputation amongst their colleagues and followers. In short, the higher the levels of perceived integrity, the more likely that a follower will emulate their leader's thinking, judgement, and behaviour whilst also demonstrating a healthy moral disposition (Leonard, 1997).

Despite a potential conceptual overlap, research consistently confirms that integrity and transformational leadership are distinct but correlated concepts with both shared and unique characteristics (Palanski & Yammarino, 2007).

Transformational Leadership and Character

Transformational leadership and the concept of character share many common attributes based around a shared emphasis and salience of moral orientation (Bass & Steidlmeier, 1999). Both transformational leadership theory and the concept of character suggest that a leader will more readily sacrifice their self-interest to promote the interests of the greater organisation and collective (Effelsberg et al., 2014). Thus, it is not surprising that studies confirm high levels of correlation between transformational leadership and character with a particular shared, positive influence on key outcomes including organisational commitment, job satisfaction, work group

performance and organisational citizenship behaviour (Hendrix et al., 2015). Importantly, character has been shown to increase the predictive variance of the organisational outcomes in comparison with transformational leadership, supporting the hypothesis that character is in fact a unique concept and not an additional dimension of transformational leadership (Hendrix et al., 2015).

This exploratory review of transformational leadership research has confirmed significant correlations between transformational leadership and a broad range of key organisational outcomes. Furthermore, transformational leadership theory has demonstrated strong, positive correlations with the concepts of character, integrity, moral orientation, and team culture. The literature, however, does not provide extensive insight and understanding of the interrelationships and inner dynamics between these concepts of character, integrity, moral orientation, and team culture, and the extent to which the interrelationships may help to expand the understanding of transformational leadership theory.

Relevance of the Current Study to Leadership Theory and Practice

There is a clear conceptual and theoretical rationale for conducting this study. The research will also have relevance for the evolution of leadership theory and practice. The field of leadership research has been consistently evolving and providing increasing credibility and evidence to support the value and impact of transformational leaders on the successful outcomes of their organisations. This corresponds with a significant increase in money invested in the professional development of senior leaders across the globe and across sectors. An estimated $160 billion was spent in 2016 on leadership development, and that amount has increased significantly to the estimated figure of $366 billion dollars in 2019 (Beer, 2016; Westfall, 2019).

Despite the large amount of research focused on effective leadership styles and behaviours, and the significant amounts of money spent on leadership development, McKinsey & Company's survey of 52,000 employees revealed that 86% of leaders believed they were effective at role modelling and inspiring action in others through their leadership style and people management skills, while only 18% of these leaders' followers agreed with the leaders' self-perceptions (Hougaard, 2019). Therefore, although multi-billion dollar investments have been made in developing leadership capability, there seems to be a persistent misalignment in perceptions between leaders and their followers, and a growing number of examples of ineffective leadership evident in poor decisions, inappropriate behaviour and irresponsible judgements and choices (Beer et al., 2016). To compound this seemingly ineffective transfer of learning further, it is estimated that poor leadership judgement, actions and decisions costs corporations approximately $550 billion per annum in the US alone (Hougaard, 2019), almost double the spend on development of leadership capability.

An example of the deleterious impact of poor leadership was the 2008/2009 global financial crisis, which was triggered by the collapse of large financial institutions. These corporate implosions have been ascribed mainly to poor decision-making and a lack of appropriate governance and leadership oversight (Yeoh, 2010). In the wake of this financial crisis, numerous reviews of corporate leadership and culture indicated that despite the growing levels of regulation and investment in leadership development, levels of trust in the judgement and moral disposition of leaders across society, and specifically the financial sector, remained low (Davidson, 2018).

The challenges of poor leadership extends to all spheres and regions, and South Africa is significantly impacted by gaps in leadership competence and judgement. The most obvious outcomes of poor leadership, and its practically deleterious impact on the broader population,

is through the ineffective delivery of services to the previously disadvantaged communities across the country. In fact, studies show that poor public service delivery in South Africa is caused by poor leadership ethics in government leaders (Mbandlwa et al., 2020). Therefore, poor service delivery and the non-existence of ethical behaviour in government leadership and a proper mechanism to address unethical conduct in government institutions are seen as the critical issues affecting public service delivery in the South African government (Krasikova et al., 2013 in Mbandlwa et al., 2020).

Thus, it remains important to explore and understand how a leader's judgement is influenced by their emotional, psychological and moral disposition, and to identify how a leader reacts and makes decisions within emerging and evolving contexts (Zaccaro et al., 2001). This study's specific focus is on understanding what influences the behaviours of senior, executive, and c-suite level team leaders and their senior, executive management teams in the context of transformational leadership, and the interrelationships between and amongst the concepts of character, integrity, stage of adult development and team culture (each of which will be further reviewed and defined in the literature review in Chapter 2). The relevance of this study to contemporary leadership theory is, thus, a deeper understanding of the inner dynamics of transformational leadership as they are explained by the interactions between character, integrity, stage of adult development and team culture.

Problem Statement

Contemporary leadership research has demonstrated that transformational leadership behaviours are correlated with enhanced organisational effectiveness, improved organisational outcomes, and increased motivation of followers to perform towards a defined set of goals. Transformational leadership theory also emphasises the ability of a transformational leader, and their followers, to balance self-interest with the interests of the

greater collective, whether it be an organisation or society at large (Effelsberg et al., 2014). Given the influence that transformational leaders have on their followers and key organisational outcomes, it is unsurprising that transformational leadership theory dominates current leadership research and discourse (Hiller et al., 2011).

Transformational leadership studies provide significant empirical validation of a moderate to strong correlation with the concepts of a leader's character, integrity, moral orientation (as an outcome of adult development), and team effectiveness (as an outcome of a team's collective behaviours and culture). Whilst these concepts are empirically correlated with transformational leadership, there is limited literature and research to explain the interrelationships between these concepts, and how these interrelationships provide insight into the inner dynamics of transformational leadership.

Thus, the primary problem that this study aimed to address is the limited exploration and understanding of the interrelationship between leader integrity, character, stage of adult development and team culture, and how these interrelationships explain the inner dynamics of transformational leadership.

Figure 1 plots the conceptual relationships presented in the study.

Figure 1

Conceptual Framework of Interrelationships
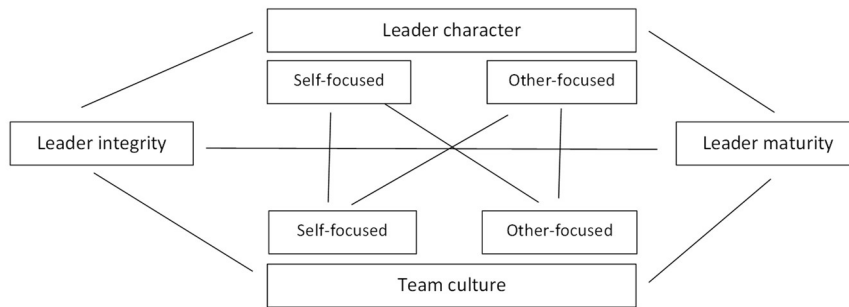
Figure 2 provides an overview of the theoretical framework that guided the research design, empirical analysis and exploration of results.

Figure 2

Theoretical Framework of the Study
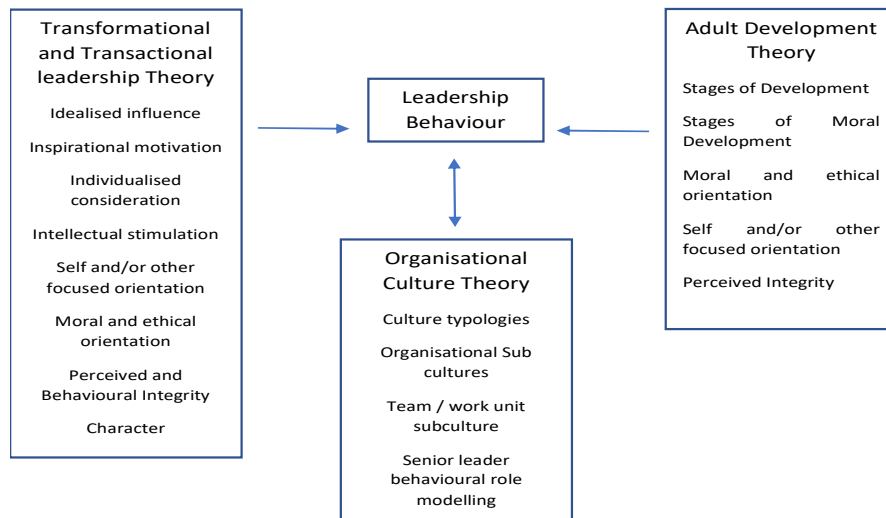
Figure 3 depicts the conceptual model that was tested in this study.

Figure 3

Conceptual Model of Interrelationships Explored in this Study
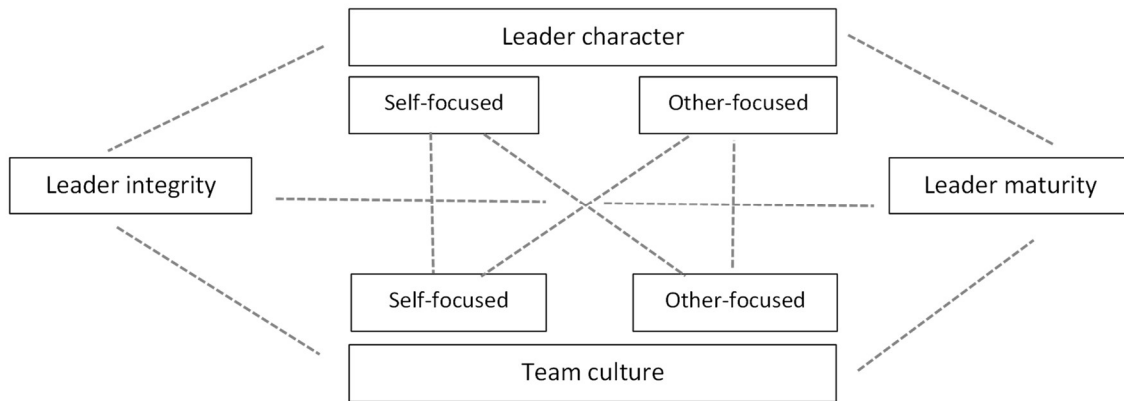
Aim and Objectives of the Study

Based on the problem statement, the following general aim and specific objectives were formulated to guide the focus of the literature review and empirical study.

General Aim of the Research

The general aim of the study was to explore the interrelationships between and amongst a senior team leader's personal characteristics of character, integrity and stage of adult development, and the senior team leader's team culture, in terms of transformational leadership theory.

Objectives of the Research

The research objectives required to realise the research aim are listed below.

- Research Objective 1: To review and define the concepts of character, integrity, stage of adult development and team culture.

- Research Objective 2: To explore whether the relationship between a leader and their team is an important contributor to team culture.

- Research Objective 3: To explore whether the concepts of character, stage of adult development, and integrity are important concepts in explaining the relationship between a leader's character and team culture.

- Research Objective 4: To explore the conceptual and theoretical interrelationships amongst and between the concepts of character, integrity, stage of adult development, and team culture, in order to formulate and test a model of the interrelationships between these concepts in the context of transformational leadership.

- Research Objective 5: To conduct an empirical analysis of the interrelationships between a leader's character, perceived level of integrity, stage of adult development, and team culture.

- Research Objective 6: To explore the implications of the empirically obtained interrelationships in terms of transformational leadership theory and practical utility of the study's findings.

Identified Research Questions of the Study

The problem statement, research aim, and research objectives translated into the following primary research question:

What are the interrelationships between a leader's character, integrity, stage of adult development, and team culture, and how do these interrelationships explain and inform the inner dynamics of transformational leadership?

The following research questions addressed each of the research objectives:

1. Research Question 1: What are the conceptual and theoretical interrelationships

between a leader's character, integrity, stage of adult development, and team culture?
(Referring to Research Objective 1)

2. Research Question 2: How is the relationship between the team leader and their team conceptualised in existing leadership theory? (Referring to Research Objective 2)

3. Research Question 3: What role do the leader's characteristics of character, integrity, and stage of adult development play in explaining the relationship between the team leader and their team? (Referring to Research Objective 3)

4. Research Question 4: What is the validity of a model of interrelationships between the concepts of a leader's character, integrity, stage of adult development, and team culture in the context of transformational leadership? (Referring to Research Objective 4)

5. Research Question 5: What are the empirical interrelationships between a leader's character, integrity, stage of adult development, and team culture? (Referring to Research Objective 5)

6. Research Question 6: Are the empirically obtained interrelationships among a leader's personal characteristics of character, integrity, stage of adult development, and team culture, meaningful in terms of transformational leadership theory, and useful in practice? (Referring to Research Objective 6)

7. Research Question 7: Do the empirically obtained interrelationships among a leader's personal characteristics of character, integrity, stage of adult development, and team

culture contribute to understanding and explaining the inner dynamics of transformational leadership? (Referring to Research Objective 6)

Research Objectives 1 to 4 were addressed through a comprehensive literature review presented in Chapter 2 (Literature Review). The analysis required to address the research questions associated with Research Objective 5 followed a stepwise approach, including the formulation of research hypotheses in the analysis presented in Chapter 4 (Analysis and Results). Research Objective 6 is addressed in Chapter 5 (Exploration of Results) and Chapter 6 (Conclusion).

Statement of Significance

The primary problem that this study aimed to address is the limited exploration and understanding of the interrelationship between leader character, integrity, stage of adult development, and team culture, and how these interrelationships may explain the inner dynamics of transformational leadership. The following potential contributions of the current study are considered at theoretical, empirical, and practical levels.

Contribution at a Theoretical Level

The proposed model of interrelationships between and amongst character, integrity, stages of adult development, and team culture, may offer a broader theoretical perspective that explains transformational leadership and its inner dynamics. The conclusions of this study may therefore enhance understanding of how character, integrity, stages of adult development, and team culture influence, or are influenced by, transformational leadership. The proposed conceptual framework of interrelationships will evolve the contemporary understanding of transformational leadership theory.

Contribution at an Empirical Level

Empirical evidence of the direction and magnitude of the correlations between the following variables was provided:

1. Perceived leader integrity and leader character.

2. Perceived leader integrity and leader stage of adult development.

3. Perceived leader integrity and team culture.

4. Leader character and leader stage of adult development.

5. Leader character and team culture.

6. Leader stage of adult development and team culture.

The study also provides empirical evidence of the interrelationships between the concepts of character, integrity, stage of adult development, and team culture by analysing the moderating influences and predictive inferences that the study variables have on each other. The study specifically analysed the following:

1. The moderating effect of a leader's stage of adult development on the relationship between the leader character and team culture.

2. The moderating effect of a leader's integrity on the relationship between leader character and team culture.

3. The extent to which leader character, leader integrity, leader stage of adult development, and team culture explain each other.

Contribution at a Practical Level

On a practical level this study has the potential to influence the work of consulting psychologists who provide their services within the organisational context, and in particular,

to senior leaders and senior management teams.

This study may provide insights that enhance practical interventions within the leadership development field by offering additional conceptual and theoretical depth to transformational leadership theory, and the leadership field in general. This may enhance the specific content of leadership development interventions based on the study's revelations about the interrelationships between and amongst leader character, integrity, stage of adult development, and team culture. Thus, the findings of the study may provide insights that support the work of consulting psychologists who engage with senior team leaders and their senior management teams. The extent to which the findings suggest an influence of a senior team leader's character, integrity, and stage of adult development on a senior team's culture will be instructive of individual leader characteristics that enable and derail the effectiveness of a team culture.

This study may lead to the development of a model of interrelationships that explains the inner dynamics of transformational leadership and, thus, provide further insights and practical development focuses for leaders who wish to develop their transformational leadership approach and capabilities. In other words, the study may reveal that the development or consideration of character, integrity, stage of adult development and team culture are salient and useful in determining a transformational leadership approach, or vice versa.

Paradigm Perspective of the Research

The current study was conducted in the field of psychology and the subfield of consulting psychology. This subfield informs the relevant intellectual climate within which the research method and set of resources are accessed to test the hypotheses of the study (Mouton & Marais, 1996). The psychological paradigm guides the thinking and determination of the literature

review, selection of measurement instruments and the presentation of the results, exploration of results, conclusions, and recommendations of the study.

Intellectual Climate

The literature review is presented from the perspective of humanistic paradigm and the empirical study from a positivist research paradigm.

Humanistic Paradigm

The literature review draws from the humanistic paradigm to inform the definition of the research aim, research objectives, research questions and research hypotheses. The humanistic paradigm underlines the freedom, dignity, and potential of humans to grow and develop (Brocket, 1997). The basic assumptions of the humanistic paradigm are outlined as follows (Leonard, 2002):

- A person is inherently good.

- The growth of an individual is unlimited.

- Individuals are free to make personal choices.

- Self-concept development is critical to the maturation of the individual.

- Individuals are inherently driven toward self-actualisation.

- Reality is influenced greatly by the individual's perception of reality.

- Individuals have responsibilities to self and society.

Each of these concepts of character, integrity and stage of adult development fulfil most of the assumptions of the humanistic paradigm. The constructs associated with each of these concepts are observable and measurable behaviours as measured through the experiences and perceptions of others. Whilst the leader's stage of adult development was assessed through a self-report

instrument, the focus of the assessment was self-reflection by the individual on their behaviours and attitudes in response to external and internal stimuli.

The empirical study drew from the positivist research paradigm to inform the design of the research method, empirical analysis, and presentation of results that address the research questions.

Conceptual Models

The study was informed by the humanistic paradigm, which suggests that there is a lifelong desire in people to grow and self-actualise. This perspective supports the continued development of research to enhance understanding within the field of leadership and the impact that senior leaders have on the people and senior teams they lead.

This study sought to understand the interrelationships between the concepts of a leader's character, integrity, stage of adult development, and team culture:

1. The senior team leader's character: The conceptualisation of character refers to a leader's demonstration of a balance between self-focused and other-focused attitudes, decisions, and behaviours. These choices of self- and other-focused behaviours are more likely when a leader has developed the ability to manage the extent to which their impulses, drives, needs and wants influence them. To manage these effectively, a leader is expected to understand how their life experiences have created ways of coping. Character was, thus, examined through the construct of a leader's demonstration of self- and other-focused behaviours.

2. The senior team leader's integrity: Studies have consistently found that the assessment of a leader's integrity will be most valid if it is based on the perceptions and experiences of a leader's followers, rather than on a self-report assessment of integrity (Kaiser & Hogan,

2010). Therefore, the conceptualisation of a leader's integrity was measured through the construct of the perceptions of a leader's integrity.

3. The senior team leader's stage of adult development: Moral orientation and associated ethical orientation have been strongly correlated with transformational leadership. However, moral orientation is theoretically considered an outcome of moral development (Kohlberg, 1981), which in turn emanates from adult development theory. Stages of adult development were, therefore, considered the appropriate focus of exploration in this study.

4. The senior team leader's team culture: Similar to the conceptualisation of character, the influence of transformational leadership on a team's collective behaviours is to raise their moral and ethical orientation and instil a self- and other-focused balance with respect to collective decisions and actions (Effelsberg et al., 2014). The collective behaviours of a group are primary determinants of a group or team culture. Therefore, to examine the culture of a team, the construct of self- and other-focused behaviours was assessed in the context of team culture.

Research Design

The research design of this study described the processes and schedule of steps that were completed to address the research objectives and answer the defined research questions.

Exploratory Research

The primary focus of exploratory research in this study was to understand the interrelationships between relatively under-examined areas of research (Washington et al., 2010). The theoretical and conceptual comparisons and interrelationships between the concepts of leader character, leader integrity, leader stage of adult development, and team culture were explored.

Explanatory Research

This study sought to examine the correlation (positive or negative, and its magnitude) between leader character, integrity, stage of adult development, and team culture. The study also examined the moderating effect that the concepts of character, integrity, stage of adult development, and team culture may have on the relationships between and amongst the concepts.

The study used both the exploratory and explanatory approaches to further understand how the interrelationships between the concepts explain the inner dynamics of transformational leadership.

Validity

This study aimed to secure internal validity by ensuring that the concepts of character, integrity, stage of adult development, and team culture were based within a sound theoretical framework that accurately informed the identification of constructs that determine the appropriate choice of measuring instruments to assess the concepts. The desire to strengthen external validity of this study, and the extent to which the findings of the research can be generalised from the study sample to the general population (Mouton & Marais, 1996), also guided the research design.

Validity of the Literature Review

To ensure validity within the literature review, care was taken to review the most recent available literature and to pursue relevant lines of enquiry. The literature review was conducted with a primary aim to deepen and broaden the theoretical understanding and knowledge of leadership theory, with a specific focus on transformational leadership and the concepts of character, integrity, stage of adult development and team culture. A selection of theoretical

frameworks and concepts were included in the review to provide historical context and were, thus, less recently published.

Validity of the Empirical Research

The selection of measuring instruments for this study required critical attention. The instrument selection was guided by the criteria as defined by Howell (2013) of criterion-related validity (that the scores accurately measure the relevant criteria), face-validity (the extent to which the instrument appears effective in achieving its stated aims), content validity (the extent to which the instrument represents all facets of the defined construct) and construct-validity (the extent to which the instrument measures the theoretical construct).

External validity was achieved by focusing the relevance of the results on leaders at a senior management level, within the context of the teams they personally led, and which operated as intact teams in the geographical region of South Africa. Internal validity of the empirical research was achieved by ensuring that all instructions and processes requested of participants were standardised, mapped, and uniformly communicated with a clear set of steps, expectations and timelines.

In addition, the instruments that were selected were qualified as valid and reliable instruments of measurement. The data were accurately gathered, scored, coded, anonymised (where necessary), recorded and then analysed through benchmark statistical software SPSS (v.27, IBM Corp) that was overseen by a qualified statistician.

Reliability

The reliability of this study (the extent to which a repeated completion of the study produces repeated results aligned with the research objectives and questions) was achieved by ensuring

that the literature review focused on a comprehensive theoretical framework that informed relevant conceptualisations of the primary study concepts and accurately determined the choice of measuring instruments. Each measurement instrument was also reviewed for statistically proven reliability.

Units of Analysis

This study focused on the following units of analysis: the senior team leader and the senior team that the leader is mandated to lead.

The assessment of the senior team leader's character, integrity and stage of adult development was measured through self-report and multi-rater assessment focused on the individual senior team leader. The assessment of the collective behaviours of the senior team leader's team culture was measured through the collated, collective behaviours of all the defined members of a single, intact team.

Research Variables

The research objectives focused on measuring and understanding the interrelationships between the following research variables: leader character, perceived leader integrity, leader stage of adult development, and the culture of that leader's team.

Research Methodology

The research was completed in two phases: a literature review (Phase 1) and the empirical method (Phase 2). Each of these phases had steps that followed an order of execution.

Literature Review – Phase 1

The following steps are covered in detail in Chapter 2.

Step 1: Review all relevant leadership literature, research and studies in the context of leadership theory and, in particular, transformational leadership.

Step 2: Review all relevant literature that assists in the description, definition, and conceptualisation of the concepts of character, integrity, stages of adult development and team culture.

Step 3: Review all the relevant literature that assists in the description, definition and conceptualisation of transformational leadership and its empirical relationships to character, integrity, stages of adult development, and team culture.

Step 4: Review the relevant literature that assists in understanding the potential moderating influence that the leader's integrity has on the relationship between the leader's character and culture of the leader's team.

Step 5: Review the relevant literature that assists in understanding the moderating influence that the leader's stage of adult development has on the relationship between the leader's character and culture of the leader's team.

Empirical Method – Phase 2

The steps to complete this phase of the research are covered in detail in Chapter 3.

Chapter Layout of this Research Study

The chapters in the study are as follows:

Chapter 1: Scientific Overview of the Research

Chapter 2: Literature Review

Chapter 3: Empirical Method

Chapter 4: Analysis and Results

Chapter 5: Exploration of Results

Chapter 6: Conclusions

CHAPTER 2: LITERATURE REVIEW

Transformational leadership theory suggests that an effective leader is focused primarily on motivating followers by aligning with their values, and thereby encouraging performance towards a clear, future vision of a team and/or an organisation (Burns, 1978). The increased probability of achieving organisational outcomes as a result of transformational leadership has been well documented (Hiller et al., 2011). Transformational leadership has been specifically correlated with improved outcomes in commercial performance and profitability; followers' sense of well-being, motivation, satisfaction, self-esteem and commitment; higher levels of job satisfaction; increased motivation through the encouragement of intrinsic sources of motivation; enhanced levels of organisational commitment (demonstrated through a desire to achieve medium to long-term organisational goals); healthy psychological wellbeing and lower levels of staff turnover (Asrar-ul-Haq & Anwar, 2018).

To influence their followers towards these constructive outcomes, transformational leaders are expected to demonstrate high levels of conviction toward their moral orientation; consistent communication; congruent role-modelling of the behaviours they expect of others; and, constant encouragement towards clear and compelling, overarching organisational goals and vision (House & Shamir, 1993). Transformational leaders not only raise the motivation levels of their followers but the moral orientation and ethical practices of their followers too (House & Shamir, 1993). To support this, research has found that leaders who scored high on moral reasoning assessments (as an indicator of moral development) demonstrated more transformational leadership behaviours than leaders with low scores on moral reasoning assessments (Turner et al., 2002). Thus, the ethics and moral orientation of a leader are seen as essential contributors to a transformational leader's success (Morgan, 1993). These findings suggest that transformational leaders and their followers will consistently maintain and defend the balance between self-interest and the interests of the greater, moral and ethical good as

demonstrated through their actions, judgements and behaviours (McGregor, 2003). To achieve these levels of collective awareness and action, transformational leaders practically treat their followers as unique individuals and deliberately pursue the development of their followers' consciousness, moral orientation, and capability. Through this focus, the leader also enhances the followers' feelings of meaning, significance and motivation while they focus on and pursue the team and/or organisational goals (McGregor, 2003).

Transformational leadership theory is conceptualised as four dimensions, namely, idealised influence, inspirational motivation, intellectual stimulation, and individual consideration (Bass, 1985). The dimension of idealised influence refers to a leader's desire to maintain high levels of moral and ethical conduct to ensure they are respected as leaders and can, thus, build loyalty in their followers. The dimension of inspirational motivation describes a leader who consistently delivers a compelling, values-aligned vision through stimulating and persuasive messaging and communication. The dimension of intellectual stimulation refers to a leader who encourages innovative thinking in their followers by regularly challenging norms, and continuously orients their followers towards maintaining current and future relevance. The final dimension of individual consideration describes a leader who is aware of the internal desires of their followers to learn, develop, grow and build their capability in order to achieve and fulfil their fullest professional potential (Turner et al., 2002). These four dimensions align with numerous additional leadership theories, including servant leadership (Greenleaf, 1977) principal-centred leadership (Covey, 1992) and charismatic leadership (Conger, 1989). These leadership conceptualisations have developed concurrently with transformational leadership theory (Khan et al., 2016) but are not considered in this current study.

Transformational Leadership and Organisational Outcomes

A review of leadership research over the past twenty years confirms significant correlations between transformational leadership and a broad range of key organisational outcomes and concepts. Transformational leadership studies have identified strong correlations between transformational leadership and the concepts of a leader's character (Hendrix et al., 2015), the leader's integrity (Palanski & Yammarino, 2007), the leader's moral orientation (as an outcome of adult development) (McGregor, 2003), and the leader's team culture and effectiveness (Schaubroeck et al., 2011). The literature, however, does not provide conclusive empirical evidence for the interrelationships between the concepts of character, integrity, moral orientation, and team culture and effectiveness. A brief summary of the reported correlations between these aforementioned concepts and transformational leadership are articulated next.

Studies have shown that a leader's capability and style, such as a transformational leadership approach, directly influences the success or failure of organisational outcomes (Asrar-ul-Haq & Anwar, 2018) and that teams, as subsets of organisational structures, most directly influence these organisational outcomes (Lok et al., 2005). Teams and work units are, thus, most directly impacted by a leader's style of leadership, including transformational leadership, in their pursuit of attaining desired team and organisational outcomes (Pearce & Herbik, 2004). Teams, as groups of individuals, thus need to align their actions and focus to achieve collective goals, implying that a leader directly influences the collective behaviours and culture of the team members (Lok et al., 2005). The effective functioning and culture of a team are, thus, influenced significantly by the quality of the relationship between a leader and the members of their team (Hiller et al., 2011).

The literature reveals that integrity and transformational leadership remain distinct concepts but with some shared and some unique characteristics (Palanski & Yammarino, 2007). Integrity is

succinctly defined as "commitment in action to a morally justifiable set of principles" (Becker 1998, p.157–158) and has been shown to positively correlate with all four dimensions of transformational leadership, including idealised influence, inspirational motivation, intellectual stimulation, and individual consideration (Van Aswegen & Engelbrecht, 2009). Integrity is broadly defined as the combination of a state of wholeness; consistency between action and words; being true to oneself, and demonstrating moral and ethical behaviour, especially during adverse times (Palanski & Yammarino, 2007). Thus, integrity is not simply about avoiding unethical behaviour but more accurately about actively demonstrating ethical behaviour over time and across varying contexts and conditions (Parry & Proctor-Thomson, 2002).

Transformational leadership and character share many common attributes, with the most consistent being moral orientation, moral awareness and moral potency (Bass & Steidlmeier, 1999). The moral foundation of the definitions of character and transformational leadership is demonstrated by a leader who deliberately balances their self-interests with the interests of the greater organisation, team and collective (Effelsberg et al., 2014). Given this shared conceptual overlap, it is unsurprising that transformational leadership and character are significantly correlated with each other. In fact, character and transformational leadership have been shown to contribute towards the achievement of key organisational outcomes, including higher levels of organisational commitment; higher levels of job satisfaction; enhanced work group performance; desirable organisational citizenship behaviours, and strong loyalty to both team and organisation (Hendrix et al., 2015). Importantly, character has been shown to increase the predictive variance of these organisational outcomes in comparison with transformational leadership. This supports the hypothesis that character is, in fact, a unique concept and not an additional dimension of transformational leadership (Hendrix et al., 2015).

Moral orientation (and associated ethical behaviour) has been strongly correlated with transformational leadership (McGregor, 2003). Moral orientation is explained as an observable outcome of moral development, which in turn emanates from the theory of adult development (Kohlberg, 1981). Thus, in latter stages of adult development, a leader's ego-needs are carefully balanced with the needs and health of the greater good and others, which also aligns theoretically with transformational leadership theory (Cook-Greuter, 2013). Moral orientation and actions conceptually overlap with the high-level definitions of both character and integrity. Therefore, adult development theory was selected as a variable of study within this research because adult development is the antecedent process of developing moral orientation.

The evidence for these correlations between transformational leadership and character, integrity, moral orientation and team culture is worth considering against the backdrop of growing evidence to support the positive and tangible impact that transformational leaders have on the successful outcomes of their organisations (Asrar-ul-Haq & Anwar, 2018). Thus, it seems useful to consider any additional interrelationships between concepts that may aid, enhance, enable, or inhibit the understanding of the transformational leadership style and approach. The rising interest in the study of transformational leadership has corresponded with a significant increase in money invested in the professional and leadership development of senior leaders across the globe. For example, from 2016 to 2019 the global expenditure on leadership development increased from $160 billion to $366 billion dollars per year (Beer et al., 2016; Westfall, 2019).

The Failure of Leadership Development

Despite the substantial leadership research and insights available, and the money spent on the development of leadership capability, the efficacy of these development interventions and programs is low (Beer et al., 2016). Hougaard (2019) describes the mismatch between leaders'

views of themselves, and how they are perceived by the employees they lead. Leaders' ability to role model and inspire others through their leadership style and people management skills was viewed very differently by leaders and employees. Further, despite a multi-billion dollar investment in leadership capability development, there is evidence of continued corporate scandals, poor leadership decisions, inappropriate public statements and irresponsible judgements and choices (Beer et al., 2016). The global financial crisis of 2008/2009 exemplifies extreme failure of corporate leadership decision-making that triggered global economic recession (Davidson, 2018). These organisational failures were later ascribed mainly to poor decision-making and a lack of appropriate governance and leadership oversight (Yeoh, 2010). In the wake of this financial crisis, numerous reviews of corporate leadership and culture have indicated that despite the growing levels of regulation and investment in leadership development, levels of trust in the judgement and moral disposition of organisational and political leaders, and specifically those from within the financial sector, remain low (Davidson, 2018). Thus, it is important and relevant to continually explore and understand how a leader's judgement, decisions and actions may be influenced by their emotional, psychological and moral disposition, across diverse and evolving contexts, pressures and demands (Zaccaro et al., 2001). In short, leadership research, leadership theory development and leadership capability development continue to be critical to understanding and influencing the state of the world.

This impetus and energy to focus on the development of leadership capability is mirrored by the rise of deliberately developmental organisations (Kegan et al., 2014). These organisations are committed to supporting the personal growth of each of their employees, to not only be more effective employees but also happier and more effective people. Such organisations have high expectations of how all their employees, and specifically their leaders, grow and develop, and are guided by the following beliefs (Kegan et al., 2014):

1. All adults can grow and learn, and are expected to evolve over their career and life cycle.

2. Attention to the bottom line and the personal growth of employees is desirable, and the two are viewed as interdependent and not independent of each other.

3. Profitability and individual development rely on structures that are built into every aspect of how the company operates.

4. People develop through the skilful combination of challenge and support over time.

Deliberately developmental organisations, thus, expect continuous development from their leaders and firmly believe that commercial success is built on the transfer of that developmental work into the organisational context (Kegan et al., 2014). The emergence of these types of organisations supports the continued investment in all forms of leadership research and theory development.

The remainder of the literature review aims to provide conceptual clarity and theoretical explanations of the previously introduced concepts of character, integrity, team culture and stages of adult development, whilst also providing a theoretical basis for the interrelationships between and amongst these concepts.

Character and Leadership

The Ivey Business School surveyed 219 company board members representing a total of 443 companies in North America and sought to understand the respondents' observations of the impact of a senior leader's character on the functioning of corporate boards (Seijts et al., 2015). A significant majority of the respondents (94%) believed that the character of a senior executive has a significant impact on the health and functioning of a company's board. Furthermore, 70% of the respondents judged company boards to have spent insufficient time and effort assessing the character of potential nominees before they are hired to join a company's senior management team and/or company boards (Seijts et al., 2015). The lack of appropriate rigour

to assess leadership character in the hiring process is thought to contribute towards many boards gravitating into group think, ineffective conflict management, and poor debating practices and behaviours (Seijts et al., 2015). Given these findings, it is unsurprising that 92% of company boards in North America believe that a leader's character is not adequately developed through business schools and/or formal education structures (Seijts et al., 2015). The estimated consequences of this lack of structured character development are inferior quality judgement, poor decision-making, insufficient oversight, and a lack of appropriate impartial guidance and support to optimise the functioning of senior management teams and company boards (Seijts et al., 2015).

These findings support the ongoing relevance of the concept and study of character within leadership research (Barlow et al., 2003). There has, however, been a period of limited research into how the character of a leader predicts leadership behaviours (Sosik & Cameron, 2010), primarily due to the numerous and often divergent definitions of character across the field of leadership theory (Thompson & Riggio, 2010). The wide range of definitions and conceptualisations is mainly associated with the variety and divergence of leadership theories (Conger & Hollenbeck, 2010). The limited consensus on a universal definition of character, means there is also variance in the corresponding measurements, surveys and scales available to assess and measure the character of a leader (Thompson & Riggio, 2010). For the purposes of this study, it was thus useful to review the various perspectives on character. This enabled the researcher to clarify a theoretical foundation to inform the conceptualisation of character and the selection of appropriate measures for use within the study.

The definitions of character seem to be mapped on a continuum of perspectives. The one end is dominated by overly-generic and simplistic articulations that rely on binary labelling of a leader's character as being either 'good' or 'bad' (Sperry, 1999). On the other end of the

continuum, there are definitions of character that are overly detailed, complicated, and complex. This diversity of approaches to defining character has compromised efforts to align on a consolidated conceptualisation of relevance and value to the discourse of character in the field of leadership research (Grahek et al., 2010).

Character Versus Personality

As a starting point, it is worth differentiating between character and personality as it pertains to individuals. The concept of character has a longer history than the concept of personality, and was the primary method of assessing individual differences from the time of the ancient Greeks to the beginning of the 20th century (Banicki, 2017). Through the centuries, character was applied as a normative aspect of desirable human behaviour and the higher, or stronger, the character of a person was judged to be, the higher their implied moral and ethical qualities as a person (Gill, 1983). However, since the turn of the 20th century there has been a shift away from primarily focusing on character and towards a dominant focus on personality (Nicholson, 1998). This change has been attributed to Gordon Allport's significant influence on creating conceptual independence between personality and character (Allport, 1927) – he specifically claimed that personality preceded the moral traits associated with character (Banicki, 2017).

Despite this shift of attention, both the concepts of character and personality are still considered legitimate and contemporary methods of describing individual differences (Banicki, 2017). What is common to both personality and character is that they can both be used to describe and predict behaviour, and can mostly be assessed and explained (Banicki, 2017). The differences between character and personality, therefore, include dimensions of depth and morality, where character traits are considered deeper than personality traits because personality traits are often perceived as superficial in appearance. The study of character generally explores beyond the surface of a person and mostly differentiates itself from the study of personality by focusing on

a person's moral and ethical orientation (Goldie, 2004). According to Cashman (1999), leadership comes from one of two places: persona or character. When leadership comes from the persona, it is an expression of the coping part of our personality, and when it comes from character, it is an expression of the essence of who a person is. It is thus possible that character, as the essence of a person, is an indelible part of who that person is and is thus assumed to be the result of the unique life story that shaped it (Cashman, 1999).

To further justify the relative depth of character over personality, Goldie (2004) asserts that a person's personality traits may only be assessed as good, when their character traits are also perceived to be good. Of significance is that the converse is not considered to be the case, which suggests that character theoretically offers a broader and deeper evaluation of a person beyond their personality preferences. This, however, does not mean that personality cannot be measured without a measure of character; it simply means that such an evaluation will be made in terms of non-moral criteria and will be primarily focused on preferences (Banicki, 2017).

The concept of character is, thus, a perspective on individual psychology that is distinct from personality as it is demonstrated through a set of observable and deliberate actions (Gill, 1983). In contrast, the personality viewpoint presents the person to be passive and expressing their personality as they really are – without will and choice to express their personality. As a result, there is no evaluation of personality. Rather the assessment of personality serves the purpose of building awareness, understanding and empathy for a person's behaviours, which may be demonstrated beyond their conscious choice and intentions. Character is, however, primarily demonstrated through the conscious choices of actions and decisions that a person makes (Gill, 1983). Despite these conceptual differentiators, character and personality are persistently used interchangeably because they both ostensibly serve to determine types of people. Yet character

is primarily a set of learned behaviour traits, whereas personality consists of inborn traits (Banicki, 2017).

Defining Character

The conceptualisation of character as a learned set of behaviour traits was first formalised by Reich (1949) who theorised that character structures were based on chronic, muscular contractions that were the result of trauma associated with a child's unfulfilled needs during their early stages of development. He postulated five character structures, which he named the schizoid, oral, psychopath, masochist, and rigid character structures. This early conceptualisation has a developmental basis suggesting a theoretical relationship between human development and character. In the early development of psychology, character was also often defined mostly in the context of character disorders. Importantly, psychoanalysts differentiated character disorders from neurotic disorders by the degree of anxiety present when an individual exhibited an incongruence or mismatch between their intentions, expectations and values, and their behaviours (Leonard, 1997). Thus, when a person demonstrated high levels of incongruence between their values and behaviours, and showed low levels of anxiety at the same time, they were typically diagnosed with character disorders. This conceptualisation of character implies a significant influence of moral orientation and integrity, as defined by consistency between words and action, values and behaviours. This is aligned with the earliest musings of Plato and Aristotle, who conceptualised character as the demonstration of virtues through behaviours that display a high moral standard (Peterson & Seligman, 2004).

Freud defined character disorders as persistent, maladaptive ways of living (Leonard, 1997). He defined these character disorders as either the anal character who is stubborn, stingy, and extremely neat; the erotic character who is loving and dependent; or the narcissistic character who is the natural leader, aggressive and independent. Erich Fromm introduced almost identical

character types to Freud's perspective, and believed that character developed through the individual's ability to assimilate and successfully engage with society (Van der Hoop, 2007).

The ancient Greeks had originally noted the developmental perspective associated with character, which is why the Greek root of the word character means 'engraving'. The ancient Greeks believed that character was shaped and developed by the metaphorical scars that people gather throughout their lives (Barlow et al., 2003). These scars, or emotional and psychological wounds, are inflicted through life experiences that can have positive or negative impacts on people, and also clearly differentiate each unique individual from another (Barlow et al., 2003). The character of each person is thus uniquely determined by the content and direction of their life experiences, and the outcomes of that person's learning and coping through these defining experiences.

Leonard (1997) defined character as the behavioural outcomes of a person's internal battle with their impulses, drives, psychological defences, and coping mechanisms, that have become habituated behaviours and are largely unconscious. These behaviours are often, but not exclusively, observable to others, and typically reveal themselves more regularly when a person thinks that no one is looking (Leonard, 1997). This shows how entrenched and habituated these learned behaviours become as they are pushed into the unconscious (Leonard, 1997).

Hogan and Sinclair (1997) similarly believed that character is a combination of numerous overlapping, psychological dimensions, such as interpersonal traits, intrapsychic processes, interests, preferences, attitudes, morals, and values. Character definitions, therefore, do not exclusively focus on behaviours and habituated responses to prior life experiences, but also on the extent to which a moral orientation can influence these traits and responses. Sperry (1999) described character as the holding of good principles (honesty, integrity and duty), conscience (sense of right and wrong) and courage (the will and power to act on one's principles in an

integrated and congruent manner). Grahek et al. (2010) distinguish the 'character to lead' from the 'capacity to lead' (measured through dimensions such as intelligence, skill, experience and capability) and the commitment to lead (focused on what a leader cares most about). The character to lead is defined as the combination of integrity and ethics; organisational integrity and courage; humility, gratitude, and personal courage. These definitions of character challenge the unconscious and habitual nature of prior definitions of character and introduce choice where integrity and the courage to act elevates the definitions of character towards a compliance with morals and ethics, honesty, trustworthiness and taking responsibility for one's own behaviours (Grahek et al., 2010). The extent or level of integrity and courage to act is, thus, observed through the consistency in words and actions that possess a strong moral and ethical compass, and are demonstrated with enduring congruence between those words and consequent actions across time and contexts (Grahek et al., 2010). This conceptualisation of character clearly illustrates a theoretical interrelationship between character, integrity and moral orientation.

Lickona (1991) similarly conceptualised character as knowing, desiring, and doing good; as values in action; and a set of habits of the heart and mind. This definition further supports the prior conceptualisations within which character integrates an individual's moral and ethical awareness, and the ability of a person to assess varying situations and contexts and to apply effective and consistent behaviours, judgement, and decision-making consistently over time. It is hypothesised that this moral awareness, thus, assists leaders to steer their judgement towards doing the right thing, and converts their desire to do good into observable actions (Lickona, 1991). Clearly this moral compass influences the quality of judgements and decision making, and as such, it is believed that character has the potential to offer achievement and performance a moral purpose within a greater community of people, including teams and organisations (Lickona, 2014).

The definitions of character reviewed thus far encompass a consistent interdependence between a leader's behaviours, moral orientation, integrity, and judgement. Thus, the consistency of a person's actions displays their moral disposition, and the more congruent these actions are over time, the more the leader is perceived to have integrity. In other words, the leader's judgement and consequent behaviours are both predictable and morally desirable. This is an important extension of the definition of integrity beyond simply being reliable and consistent because reliability and consistency may not necessarily entail high ethical and moral standing. The concept of integrity will be explored in more detail later in this literature review.

As previously noted, the lack of a universal definition of character reflects the expansive and diverse conceptualisations and definitions of leadership (Conger & Hollenbeck, 2010) rather than a divergence of views on character. There are a plethora of philosophical positions and historical perspectives on character. However, they all share an underlying foundation, which rests on the constructs of integrity (Thompson & Riggio, 2010), ethics and morality, and how these are demonstrated through the behaviour of a person (Conger & Hollenbeck, 2010).

A leader's character is not considered static and, therefore, the character of a leader will be displayed through the choices they make in response to their contexts, providing evidence of their unique moral and mental models of the changing contexts within which they operate (Barlow et al., 2003). Sperry (1999) defined character as "how individuals conduct themselves in interpersonal and organizational situations and is shaped through the simultaneous development of self-identity and self-regulation" (p. 213). As in Sperry's (1999) definition, these behaviours will highlight the leader's ability to self-regulate across different contexts and levels of pressure and stress. When a leader's learning or socialisation process is reasonably adequate and without significant developmental arrests then adaptive, creative, and socially responsible or virtuous behaviour called 'good character' can be expected across varying

contexts and demands (Sperry, 1999). That 'good character' and prior definitions of character all suggest that character has a direct impact on the relationships in a leader's life, and further supports the utility of understanding character in leadership.

In support of the relational impact of character, studies have revealed that whilst managers mainly value the competence levels of their direct reports to deliver results, employees are most influenced by and dependent on the character of their leaders (Hogan & Kaiser, 2005). The reference to dependence on the character of a leader illustrates first the power differential between a leader and their followers. Second, it raises the responsibility that a leader has in how they demonstrate their character. Thus, 'bad character' – the opposite to 'good character' – may be expressed as socially irresponsible, ineffective, dysfunctional and with little regard for the impact those behaviours have on others (Sperry, 1999). An individual with a mature character would present a consistent pattern of behaviour because they would possess integrity and present themselves authentically and consistently over time and across a diverse range of contexts and even audiences (Sperry, 1999). In other words, leaders who display integrity, and a strong moral and ethical compass, may not consider it necessary to adapt the impression they choose to make with other people, and would rather be aligned with their true essence. The application of the conceptualisation of character to leadership primarily explores how a person's character impacts the experiences and relationships with others, whilst also providing deep insight into these actions and reactions towards others (Barlow et al., 2003). This further illustrates a theoretical interrelationship between a leader's character and other people (either individuals, or groups such as teams).

Leonard (1997) further distilled the characteristics of leadership character through an extensive review of character literature and consolidated his findings into the following summation of characteristics:

1. Character is enduring over time.

2. Character is measured as behavioural consistency over time.

3. Character takes a long time to develop and is not easily changed.

4. Character becomes a sense of self viewed as normal and fundamental to who a person is. As a result, it is often viewed as a set of characteristics that cannot be changed.

5. Character is dynamic and transactional.

6. Character is not always transparent and public as some elements of character may only emerge under pressure.

7. Character is often not truthfully demonstrated when people wish to hide aspects of their behaviour to protect their reputations.

8. Character refers to aspects of our behaviour that are learned through socialisation, training, and experience.

Sarros et al. (2007) offered an additional summation of characteristics of character by grouping these into the following:

1. Universalism of character – refers to the outward expression of leadership character as observed through the leader's levels of respectfulness for others, fairness, cooperativeness, compassion, spiritual respect, and humility.

2. Transformational character – refers to how leaders achieve universal and benevolent outcomes. Transformational leaders demonstrate their character through courage, passion, wisdom, competency, and self-discipline.

3. Benevolent character – associated with consistent and enduring loyalty, selflessness, integrity, and honesty.

In addition, the concepts of character strengths offer another lens with which to identify and observe character in leadership. Character strengths are defined as positive psychological traits

that are reflected in thoughts, feelings, and behaviours and are often synonymous with virtues (which are defined primarily as the demonstration of behaviour that displays a high moral standing) (Peterson & Seligman, 2004). These character strengths help people, and leaders as a target group, to pursue what is in their own interests, whilst also preserving the best interests of others and broader society (Noronha & Campos, 2018). Character strengths seek to achieve satisfaction through individual and collective happiness, whilst encouraging people towards a moral orientation. The actions chosen to pursue individual and collective happiness are conducted without obvious rewards; are stable over time; and are considered conceptually and empirically distinct from other strengths. These strengths are summarised as follows (Peterson & Seligman, 2004):

1. Wisdom is a cognitive strength demonstrated by the seeking and applying of knowledge.

2. Courage is an emotional strength demonstrated through the perseverance to achieve goals in the face of resistance that can be both internal and external to an individual.

3. Humanity is an interpersonal strength that is demonstrated best through connecting and relating to others.

4. Justice is a civic strength that is demonstrated by investing in the community and the greater good of others and the collective.

5. Temperance is a strength that guards against excess.

6. Transcendence is a strength that appreciates the bigger picture and perspective beyond the self and into the spiritual realm.

It is pertinent to note that leaders demonstrate a broad range of character strengths in their daily behaviour and interactions. However, they tend to demonstrate a stable expression of certain character strengths over time (Bleidorn & Denissen, 2015). In addition, the character strengths displayed are often significantly prompted by role demands, pressure, stress and context

(Bleidorn & Denissen, 2015). There is even evidence that leaders are more positive and optimistic when they are expressing higher levels of wisdom, courage, humanity, temperance, justice or transcendence in their daily lives (Bleidorn & Denissen, 2015). These character strengths have a significant influence on a leader's judgement and the ability to be situationally aware, cognitively complex, analytical, decisive, critically thoughtful, intuitive, insightful, pragmatic and adaptable (Seijts et al., 2015). The corollary is that without these character strengths a leader's judgement may be poor, primarily because pressure and stress limit their capability to effectively manage their own drives, impulses, needs and feelings (Leonard, 1997). In other words, they struggle to assess the demands within a moment while at the same time being able to skilfully navigate a burst of emotions, drives and impulses that may have been triggered by the events in play (Leonard, 1997).

The summary of character characteristics (Leonard, 1997; Sarros et al., 2007) and character strengths (Peterson & Seligman, 2004) provides consistent conceptualisations of character across a wide range of dimensions, with a clearer description of high, low, strong or weak character. These summaries also confirm both the intrapersonal and inter-personal dimensions of character.

Awareness of the influence of a leader's character on their behaviour prompts the need to investigate how character can be measured and then developed from a 'bad character' towards a 'good character'. Barlow et al. (2003) discovered a trend amongst military officers in which the more senior the officers became, the higher their character scores rose. It is important to note that the use of the term 'senior' did not necessarily denote 'older.' However, these findings support a developmental perspective to character that may change over a lifetime. The challenging reality is that there are limited practice-based assessments that assist in the identification or measurement of character (Crossan et al., 2013). Thus, most of the judgements

of a leader's character are determined by interpreting subjective data gathered through reference checks and interviews. The analysis of this data is then interpreted without a specific guide with which to identify the effective and ineffective elements of a leader's character (Seijts et al., 2015). Without sufficient standardised character metrics based on a universal definition of leadership character, it is likely that other factors such as a leader's reputation will influence the judgement of a leader's character and reduce objectivity in the assessment process (Crossan et al., 2013). It is, thus, unsurprising that researchers believe that the study of character in leadership is most compelling when character can be synthesised into observable and measurable metrics that can help assess and predict success in leadership roles and organisational effectiveness (Grahek et al., 2010).

There are case studies that illustrate the negative impact of ineffective character assessment in the hiring of senior leaders. When organisations rely primarily on reputation and subjective assessments of a leader's character the challenges of traditional recruitment are exacerbated. In fact, studies have shown that up to 50% of senior executives in North America leave their roles within 11 months of their appointment (Crossan et al., 2013). Analysis reveals that these leaders have mostly struggled to maintain the desired impression they had created in the minds of those who had originally hired them (Seijts et al., 2015). This is explained by the impact of rising performance pressure, which then exposes a leader's more inherent behaviours and judgement. In short, many leaders fail to maintain their impression management as curated during their selection phase for a senior role (Crossan et al., 2013), which further confirms that the assessment of a leader's capability to lead should include a character assessment during the selection phase (Seijts et al., 2015).

Measuring and Developing Character

While the measurement of character is considered an important area of continued focus, it is also important to consider how character may be developed should there be a desire from an individual or organisation to pursue that. Research suggests people, and by extension leaders, have the potential to develop their character (Barlow et al., 2003). This development of character is possible due to it being shaped or learned through the combination of self-identity and self-regulation that is most constructively evolved through psychological self-awareness (Leonard, 1997).

Crossan et al. (2013) defined three primary elements of developing character. First, leaders need to learn what character is, how it is defined and demonstrated. Second, leaders should be subjected to a character assessment or diagnostic process that provides feedback on their strengths and weakness, or effective and ineffective character characteristics. Finally, leaders must understand that character development is lifelong and requires constant attention and reflection, and is substantially supported when the leader is surrounded by strong and virtuous communities of peers and stakeholders who are invited to support the leader's development over time (Crossan et al., 2013).

These character education and/or development programs have historically been offered in loose and unstructured formats. Clement and Bollinger (2017) surmised the following after a comprehensive review of these programs:

1. There is no common and universal understanding and definition of character.
2. There is a wide range of definitional difference between various programs that all espouse to develop character.
3. There are no clear and shared expectations of the specific outcomes of character development across programs.

4. There is an over-emphasis on the teacher-student dyad and its primacy in cultivating character, despite the evidence that the development of character is significantly hinged on the quality of the relationship between a wide range of people, and not just the teaching modality (Brooks, 2015).

5. There is no specific indication of the time required to develop character through an educational program.

6. There is limited understanding and appreciation of how societal influences shape character through its members.

There seems to be an opportunity to further investigate both the developmental aspects and influences of character on others (Barlow et al., 2003).

In summary, character is described as the thinking and action applied through choices and behaviours that become habits. These habits are based on the manifestations of past experience and life events, which consequently influence the forming of moral and integrous behaviours (Crossan et al., 2013). A concise reflection on the conceptualisation of character suggests that people demonstrate their morals and integrity along a continuum from the 'bright side' to the 'dark side' (Hogan & Hogan, 2001). The 'bright side' is defined as the successful ability of a person to manage and regulate their behaviour to make a positive impression on those around them. In contrast, the 'dark side' represents the person's behaviour when they are less concerned about the impression they are making, either because they are too tired or stressed or because they simply no longer care to make a specific impression on others (Hogan & Hogan, 2001). A person's unique behavioural spectrum is, thus, expected to be influenced by their character and may reliably predict how they act in the future. Character is, therefore, the collective repertoire of the most effective and ineffective behaviours that a person demonstrates.

This section of the literature review has demonstrated a theoretical interrelationship between the concept of character and the concepts of integrity, team behaviour and culture and moral orientation. It has also highlighted the salience of character within the leadership development field and theory, and provided clarity on the character characteristics that define the construct of character.

The remainder of this literature review will further unpack the concepts of integrity, moral orientation as it is grounded in adult development theory, and team behaviour as described through team culture.

Integrity and Leadership

Despite the previously mentioned plethora of philosophical positions and historical perspectives on character, the core definitions of character consistently include integrity, trustworthiness (Thompson & Riggio, 2010) and ethical morality (Conger & Hollenbeck, 2010). For the purposes of this study, the focus of this sub section of the literature review will be to understand, compare and articulate the salience of definitions of the concept of integrity within leadership research and theory. There will also be an attempt to provide a theoretical basis for the interrelationships between integrity and the concepts of character, adult development as a foundation of moral development and moral orientation, and team culture. There has been limited work focused on attempting to understand the relationship between the personal characteristics of integrous leaders, such as their personality traits, life experiences and defining moments (De Hoogh & Den Hartog, 2008) suggesting a need for this extended review of the concept of integrity and the theoretical relationships that form the subject of this research.

Northouse (2006) introduced two inter-related types of integrity where one form of integrity focuses on the conduct or actions of a person, and the other on that person's character integrity.

From the conduct integrity perspective, a leader's behaviour is judged according to the consequences of their behaviours and the magnitude of impact that those behaviours have on others. Conduct integrity is also the extent to which there is compliance, or not, with rules. Character integrity refers to the extent to which a leader's behaviour is determined by the kind of person they are in their moral disposition and character (Northouse, 2006).

Defining Integrity

A broad challenge within the study of integrity is the variance and vagueness of definitions of the concept (Becker, 1998). From a macro perspective, integrity refers to abiding by the laws, regulations and rules that are set forth in the formal legal system – often also referred to as ethics or conduct integrity (Northouse, 2006). At a more intra- and interpersonal level, integrity commonly refers to how a person treats those around them and behaves over time with honesty, candour and moral awareness (Mayer et al., 1995) or character integrity (Northouse, 2006). Thus, integrity is fundamentally informed by an inherent knowledge of right and wrong, the consequent avoidance of wrongdoing, and the willingness to stand up for what is right in the face of observed wrongs (Sarros et al., 2007). There are two common additional distinctions drawn within the conceptualisation of integrity, namely between personal integrity – the extent to which a person is committed to personal values and principles – and moral integrity – the extent to which a person adheres to moral values and principles (van Luijk, 2004). Importantly, personal integrity is considered a building block of moral integrity (McFall, 1987). There is thus a clear relationship between moral orientation character and integrity, and a deeper exploration will be useful.

The Latin root of the word 'Integrity' is 'integritas' – defined as wholeness, coherence, rightness, or purity (Sarros et al., 2007), which suggests that integrity is founded upon the ability of an individual to integrate various parts of themselves into a harmonious whole. This

integrated-self view includes a person who may at times be in conflict with their values and commitments, and thus has an opportunity to further strengthen the integrated-self view (Cox et al., 2003). In addition to wholeness and an integrated self, integrity is also conceptualised as being consistent in behaviour across different contexts and audiences. As McFall (1987) writes, there are three categories of integrity: first, that it refers to consistency of values and principles; second, that it refers to consistency of behaviour that is aligned with principles and values (and especially under pressure), and, finally, that it refers to consistency of behaviours based on real values and no other motivations. The most common categorisation of consistency as a construct underpinning the concept of integrity is the consistency under pressure of words and deeds over time (McFall, 1987).

As previously noted, personal integrity is a prerequisite to moral integrity, which suggests that the identity of an individual is an important aspect of personal integrity and its inclusion of moral integrity (McFall, 1987). Personal and moral integrity are also defined as standing for something that a person believes in – considered an important influence on a person's identity (Calhoun, 1995). A person, therefore, acts with integrity when their commitments and actions are aligned and of importance and value to their self-concept and identity (Cox et al., 2003). Honesty, and in particular the ability to be honest with oneself, is also an important characteristic of personal integrity. Wholeness, consistency, commitment and honesty as dimensions of personal integrity do not, however, infer advanced levels of morality (Cox et al., 2003). Thus, to align with the moral descriptor of integrity, a person's actions should be guided by values and principles that are considered good, right and just; satisfy a minimum moral standard and willingly act beyond that moral standard (Halfon, 1989). As has been shown, integrity is not exclusively measured by the consistency of a person's conduct but is also inclusive of a moral disposition that differentiates the consistency within the concept of integrity from predictability and reliability (Kaiser & Hogan, 2010).

To further support the aforementioned conceptualisation, Barnard et al. (2008) found that people who live in alignment with their moral principles and a universally accepted moral orientation will have higher levels of perceived integrity. This is what Lennick and Kiel (2005) described as having a 'moral compass', which is strongest when a person lives according to integrity-related values of empathy and respect for others; lives a meaningful life; possesses a clear internal locus of control, and has an optimistic outlook on life. This moral compass then initiates the defence of values and morals, and determines the behavioural foundations of integrity (Barnard et al., 2008). It is, however, important to note that these behaviours are grounded in an inner drive based on personal motives and ideals that are similar to the conceptualisation of personal integrity (Barnard et al., 2008).

Individuals who present low levels of integrity often behave exclusively for personal gain and are usually driven by the need to win, survive, or gain power, status, wealth and authority (Barnard et al., 2008). In other words, a low level of perceived integrity is associated with acting in self-interest, often without sufficient regard for the interests of the greater good.

Impact of Integrity

Integrity has been conceptualised as both intrapersonal and interpersonal, and is most accurately measured through the perceptions of people who are directly exposed to an individual through regular interactions (Baker & Craig, 2006). Research shows that 84% of the variance in global perceptions of a leader's integrity is a function of the display of discreet and dishonest behaviours by a leader. Twenty percent of all leaders are considered to be of low integrity by their followers (Baker & Craig, 2006). Thus, observed behaviours have a substantial influence on the perceptions of a leader's followers, and in particular when these behaviours indicate a departure from expected moral norms. As such, the assessment of a leader's integrity are most valid and accurate when based on the perceptions and experiences of a leader's followers

(Kaiser & Hogan, 2010). This is an important determinant for the most appropriate measures of integrity in research.

An additional dimension to integrity relates to the levels of trust between a leader and their followers. Leaders are naturally mandated to lead teams, and effective teams generally develop strong relationships between the leaders and their followers based primarily on mutual trust and respect (Dansereau et al., 1975). Thus, the leadership role in team leadership is viewed as an exchange that occurs between the leader and their followers (Van Vugt et al., 2008). In most cases, the overt benefit of being a leader is the status and prestige that come with the seniority and importance of a leadership role. However, it is unclear why people would choose to be voluntary followers of a specific leader (Van Vugt et al., 2008). What is clear is that not everyone can be a leader, mainly due to the limited numbers of such roles available. Importantly, whilst many people will be consigned to followership, the benefits of being a well led follower significantly and obviously outweigh the benefits of being a poorly led follower (Van Vugt et al., 2008). It seems that at a deeper level, followers are always wary that their leaders may abuse their power. The social contract between the leader and follower is, thus, often fragile and critically dependent on the levels of trust between them (Kaiser & Hogan, 2010). Kouzes and Posner (2004) unsurprisingly found that followers admire and willingly follow leaders who exhibit high levels of integrity and consequently demonstrate higher levels of job satisfaction (Hogan & Kaiser, 2005). In addition, a leader's perceived integrity is positively correlated with perceptions of the leader's effectiveness (Parry & Proctor-Thomson, 2002); improved business performance, and the attraction and retention of the best talent (Fulmer, 2004 cited in Baker & Craig, 2006). Effective leaders demonstrate consistent patterns of behaviour that enhance trust and perceptions of integrity, which in turn encourage constructive followership (Kaiser & Hogan, 2010).

Surprisingly, a substantial number of leaders are promoted into leadership positions with lower than desired levels of perceived integrity (Kaiser & Hogan, 2010). Morgan (1982 cited in Craig & Gustafson, 1998) took this line of investigation further and compared leadership behaviours defined as 'Dealing with Others' with behaviours defined as 'Self-Serving'. The findings showed that 62.5% of variance in the trust that a follower had of their leader was predicted by the leader's integrity in Dealing with Others. This confirms that the integrity of effective leaders is most accurately assessed in the manner that they treat and engage with others (Bass, 1986 as cited in Craig & Gustafson, 1998).

The salience of integrity as a primary characteristic of effective leadership has been clearly established. Effective leaders also consistently demonstrate and role model the group, team and organisation's values; constantly attempt to increase the importance and stature of their followers; and, encourage their followers' commitment towards the greater good or the best interests of the collective (Burns, 1978). Hannah and Avolio (2010) highlight that effective, transformational leaders seek to understand each follower's unique needs and aspirations, and then support their development and achievement in constant alignment with the organisation's requirements. These effective leaders also create conditions that invite followers to take greater levels of moral ownership and protect the organisation's moral status (Hannah & Avolio, 2010). Within an organisational context, leaders with high levels of perceived integrity, thus, make decisions with a longer-term perspective, appreciation and consideration, and garner higher levels of trust and reputation amongst their colleagues and followers as a result. In short, the higher the levels of perceived integrity, the more likely that a follower will emulate their leader's moral disposition (Leonard, 1997).

Integrity and Moral Orientation

There has been a clear articulation of the relationship between perceived integrity and leadership and followership. Embedded within the conceptualisations of integrity and character is the shared concept of moral orientation. There have been numerous references to the theoretical and conceptual relationship between integrity, character and moral orientation (Barnard et al., 2008), which requires further exploration to differentiate between these and find evidence for their distinction from each other. As the world heads into a more ambiguous, uncertain, volatile and complex future, leaders and their followers face an increasing number of complex moral dilemmas that have the potential to impact multiple stakeholders across society (Hannah & Avolio, 2010). Hannah and Avolio (2010) surmised that leaders will be challenged to demonstrate greater levels of moral potency, defined as moral ownership (the awareness in a leader that it is their choice to act in a morally congruent manner in any context); moral efficacy (the belief that an action would be successful in establishing moral congruence in their context) and moral courage (the ability to persevere in applying the action, especially in the face of resistance). Moral potency is more state-like than trait-like because it has been shown to vary across contexts and can be developed through learning and development (Hannah & Avolio, 2010).

Moral orientation is separated into the characteristics of moral awareness and moral behaviour or action. Cognitive moral development (Kohlberg, 1981) and the four-component model (Rest et al., 1999) focus primarily on how people generate morally-based judgements across contexts. However, what these models do not adequately articulate is how an intention to act morally translates into observable behaviour (Hannah & Avolio, 2010). Research suggests poorly understood links between moral and ethical judgement and moral and ethical behaviours (Hannah & Avolio, 2010). Whilst moral awareness is theorised to precede judgements and action, little research has focused on the link between judgement and action (Rest et al., 1999),

which explains why focusing attention on a leader's capability to make moral judgements does not explain the 80% variance in unethical and morally questionable behaviour (Hannah & Avolio, 2010). The translation of moral awareness to moral judgement and then moral action cannot be universally assumed.

Moral orientation and moral ownership are pertinent to the review of character and integrity because moral ownership is not only applied to a leader's own actions, but also to the action of others, including a broader organisation of people (Hannah & Avolio, 2010). This extent of moral ownership encourages leaders to be both the producers as well as products of their environment (Bandura, 2002). Thus, those leaders with less self-efficacy and agency (Bandura, 1982) may interpret themselves as mere victims of their context, and not see themselves as shapers of the moral orientation of their milieu. The more consistently moral ownership is applied across contexts, the higher the moral potency (Hannah & Avolio, 2010). Moral efficacy has been shown to enhance the prosocial behaviours of helpfulness, sharing and cooperation (Bandura, 2002), which in turn supports the higher likelihood that a moral judgement will result in a moral action. A precursor to moral courage is, thus, moral efficacy, which is determined by the levels of belief and confidence that an individual has in their ability, access to resources, support of their peers and quality of thinking to take action in a morally congruent manner (Hannah & Avolio, 2010). It seems logical, then, that the more an individual pursues action and has a positive impact on the context and people around them, the more their moral efficacy and confidence will rise.

Importantly, leaders have the potential to reduce or enhance the potential for moral potency and disengagement (Bandura, 1999), which occurs when leaders find psychological mechanisms by which to justify their behaviours that may, in fact, be considered as moral transgressions. Moral disengagement frequently occurs when a leader feels compelled to protect their self-image

(Bandura, 1999) and is unable to navigate needs, emotions, wants and impulses; in other words, their character development has been arrested (Sperry, 1999). This moral disengagement is demonstrated after a lapse in judgement, which has a consequent negative impact on others and the greater good (Leonard, 1997). It is obvious that leaders with a healthy and high functioning moral potency will possess low levels of moral disengagement (Hannah & Avolio, 2010). If leaders can avoid moral disengagement they will likely access significant moral courage to act and be brave, demonstrate moral ownership, and ultimately persist in addressing moral incongruence in the self, with others and across organisations (Hannah & Avolio, 2010).

In summary, the construct of integrity is evaluated as an integrated aspect of a person's identity as it is expressed through their behaviours and the demonstration of consistency, wholeness and positive moral disposition over time (Kaiser & Hogan, 2010). This sub section of the literature review has provided a clear alignment between the moral orientation associated with integrity and the moral orientation associated with character. Much like character, integrity is developed through the unique life course and experiences of an individual, and the specific influences of primary caregivers, religion, educational and cultural contexts (Barnard et al., 2008). That suggests that the integration of psychosocial experiences and developmental learning have a direct influence on their levels of perceived integrity (Lickona, 2014). Furthermore, when a leader balances their self-interests with the interest of the greater good, they strengthen their perceived integrity and shape the quality of relationships and trust that others have in them (Kaiser & Hogan, 2010).

The next sub section of the literature review will focus on exploring the antecedents of moral orientation and development by reviewing adult development theory. The conceptual relationship between character and integrity with moral orientation suggests a human developmental perspective that may be useful to this study.

Adult Development and Leadership

The moral orientation of a person provides a theoretical link with and between character and integrity. There are additional references to the theoretical relationship between adult development and character by Kelly (2014), who defines adult development as stages through which an individual's ego, consciousness, awareness, and character develop over a lifetime. Barlow et al. (2003) proposed that character is developed throughout life as a person solves moral dilemmas across various sequential stages of development. Fundamentally though, the development of a moral orientation (and the associated moral potency and moral engagement) is theoretically grounded in moral development (Kohlberg, 1981) and adult development theory.

Kohlberg distinguished six universal developmental stages, plotting the progression of a person's moral reasoning ability over their life course (Kohlberg, 1981; Schinkel & de Ruyter, 2017). What is universal in the adult development and moral development theory is that as an adult progresses through a sequence of stages, the latter stages transcend the earlier stages through which an individual has already passed (Cook-Greuter, 2013). While a person who is at a later stage of development still has access to the learning, awareness, and insights of the earlier stages, it is not possible for people at earlier stages of development to have access to later stages of reasoning and understanding offered by the latter stages of development (Cook-Greuter, 2013). The final stage or goal of development within moral development theory is for a person to autonomously subscribe to and act in compliance with the principle of justice (Schinkel & de Ruyter, 2017). For Kohlberg (1981), a person should aspire to develop their moral reasoning and judgement in an impartial manner that does justice to the collective. Kohlberg defined the stages according to three levels that are all common level descriptors used

across the human development literature. Each level consists of two stages, and each stage is characterised by a key moral question, as presented below.

1. The pre-conventional level

    Stage 1: Punishment and obedience. How do I avoid punishment?

    Stage 2: Instrumental relativist. How do I get the most for myself?

2. The conventional level

    Stage 3: Interpersonal concordance. How do I gain the trust of peers?

    Stage 4: Law and order. How do I uphold social order?

3. The post-conventional level

    Stage 5: Social-contract legalistic: How do I enforce/uphold justice?

    Stage 6: Universal ethical principles: What is universally correct?

These stages and questions illustrate an attempt to differentiate between right and wrong, and ensure a balance of self-interest with the interests of the greater good. These are common conceptualisations shared with the prior definitions of character and integrity.

According to Kohlberg, progression through the levels and stages of moral development should challenge an individual to continually re-organise their thinking. However, achieving the final, sixth stage of moral development is rare, and indicative of an advanced maturation (DeTienne et al., 2021). Across all the stages of moral development, an individual organises their moral orientation or moral compass (Lennick & Kiel, 2005) and applies that to their moral awareness, moral judgement and moral action or non-action (Rest et al., 1999). Kohlberg's stages of moral development share salient characteristics of other adult development theories, which are all extensions of the field of developmental psychology and study the transitions within and between adolescence into adulthood (Erikson, 1959).

The remainder of this sub section of the literature review will focus on adult development theory, and in particular, the stages of adult development as they relate theoretically to character, integrity and team culture. Most adult development theories share a common conceptualisation of development as a progression and sequence of stages that human adults move along. Despite this commonality, adult development theories do not share the same universal definitions (Kjellström & Stålne, 2017).

Adult Development Perspectives

The adult development research field has been divided into social development perspectives on one hand, and age-related development perspectives on the other hand (Kelly, 2014). The social development theories of development combine a person's roles and societal expectations with the occurrence of tasks in that person's life, while the age-related theories of development believe that people of similar ages are challenged by the same or similar tasks over the course of their adult lives (Kelly, 2014). The age-related development theories focus on internal and organismic influences, thus, defining the stages of adult development as a result of socio-psychological changes that follow an age-defined and predictable sequence over the life course. This approach defines development by criteria of universality, fixed sequencing, irreversibility, qualitative descriptors and the notion of an end-state (Baltes & Nesselroade, 1979). Interestingly, moral development is not considered genetic or age related, but rather developed through social experiences that prompt an evolution in moral awareness and thinking (DeTienne et al., 2021). No matter the varying perspectives of development, all development can be universally considered as an experience of change. However, not all change can be considered as developmental, mainly because development implies some universal and desired direction of change (Hagström & Stålne, 2015). The simple progression of a person through change is thus, not relevant to this review. However, a leader's progression through the developmental stages of adulthood is of specific interest.

The progression from one stage of development to another can occur in a variety of ways (Kjellström & Stålne, 2017). The changes that an individual experiences can be significant and occur with distinct leaps of consciousness that are often called transformations. However, some of the changes observed through development may be more iterative and fractal, and are thus referred to as transitions. Both of these shifts from one stage of development to the next are useful to understand as mechanisms with which to explore adult development (Kjellström & Stålne, 2017). In most theoretical perspectives of adult development, it is suggested that development of an individual is merely a possibility or potential that is encouraged to emerge in a person, and is thus, not considered a definite process that can be forced or predicted across all people (Cook-Greuter, 2013). Therefore, the potential characteristics of a person at each stage of adult development do not define a person but rather represent a compilation of ideals that a person can develop into (Cook-Greuter, 2013).

These internally determined perspectives on adult development have been challenged by theorists who believe that context and external factors most significantly shape the life experience and stages of adult development (Wortley & Amatea, 1982). Proponents of this perspective suggest that factors, including race, gender and social status, have an inexorable impact on an individual and can significantly alter the very course of a person's life. The way in which a person meets the world is, thus, considered as the primary influence on their journey through adulthood (Wortley & Amatea, 1982). From this perspective, the impact of social role changes and life events is more important than the intra-psychological and personality influences (Barlow et al., 2003). The focus is, thus, less on stages of life and more on the manner in which people adapt and respond to life circumstances and especially adversity (Baltes et al., 1999). These life events and the relationship with the resources to deal with them, are thus theorised to vary throughout the life course. Thus, an alternative definition of adult development from this perspective focuses on an adult's ability to optimise available resources in adapting

and responding effectively to life circumstances as they evolve over time (Baltes et al., 1999). Whilst the internally and externally deterministic views on adult development seem contradictory, they can be viewed as an integrated perspective that acknowledges the richness and fullness of a human life (Wortley & Amatea, 1982). This perspective is adopted throughout the remainder of this sub section.

As previously mentioned, moral development is an aspect of adult development. Thus, for the purposes of this study, it is useful to explore whether moral orientation, the one conceptual link between integrity and character, introduces a theoretical relationship between integrity and character, and adult development.

Wortley and Amatea (1982) highlighted the following questions most often asked in adult development research and enquiry. These questions provide a universal set of criteria by which to compare the various theoretical perspectives in this field:

1. What are the changes to be expected in adulthood?
2. How are these stages sequenced?
3. How are these stages impacted by evolving environmental, social, and psychological demands?
4. What are the ways in which healthy individuals navigate these stages of adulthood?
5. What factors seem to influence individual patterns of adaptation through the stages of development?

To address these questions, it is useful to review the most prominent researchers and theories in the field of adult development. In the early decades of the development field, most developmental psychologists limited their focus to the developmental stages of childhood and adolescence. Jung (1947) introduced the 'morning and afternoon of life' as part of his thinking

on the four stages of life. The 'morning' (or first half of life) focused a person's development on discovering and defining their ego through interactions with their context (Zullo, 1997). Jung described the 'afternoon of life' as a movement from an ego-oriented life to a self-oriented life that emphasised the development of the spirit and soul. According to Jung, what youth need to search for in the external world in the morning of life, those in the afternoon of life need to discover from within (Zullo, 1997).

A cornerstone of the influences on adult development theory emanates from Erikson's (1959) theory of identity development. This theory suggested that adults continue developing beyond adolescence and have the potential to evolve towards greater complexity and quality of life (Allen & Wergin, 2009). Prior to that, leading theorists in development, such as Freud and Piaget, had narrowed their focus to childhood development and assumed that at the conclusion of adolescence, development was complete. That assumption was fundamentally challenged by Erikson (1959), who suggested that an adult specifically needed to transcend three dilemmas to create a greater quality of life (Allen & Wergin, 2009). He named these the dilemma of Intimacy versus Isolation (which often appears in late adolescence and is defined by an individual's desire and ability to develop deep and meaningful relationships), the dilemma of Generativity versus Self-Absorption and Stagnation (which is primarily about crafting a legacy and mentoring and guiding the next generation), and the final dilemma of Ego Integrity versus Despair (which refers to the acceptance of an individual's life journey and all aspects within it, both past and present, for that person). This final dilemma, usually tackled in late adulthood, focuses on the person's ability to reflect on the life they have lived without judgement and regret (Allen & Wergin, 2009).

Review of Adult Development Theories

Since the 1980's, a broader conception of development extended Jung and Erikson's work and thrust the period of adulthood into a primary focus of research in developmental psychology (Allen & Wergin, 2009). From then, the adult development field has shown a greater flexibility and appreciation of the diverse paths that shape a meaningful life (Zullo, 1997). The adult development field has, thus, appreciated adult life as a period of active, regular and systemic development (Wortley & Amatea, 1982) and also expanded its areas of enquiry to include moral, wisdom, cognitive, spiritual, and motivational development (Hagström & Stålne, 2015).

Erikson's primary contribution to the field of adult development was the introduction of stages of development that are placed in a sequence. Levinson (1986) located the sequence of stages into what he termed the 'entire life course'. This life course refers to the sequence and flow of a person's life whilst also recognising the uniqueness of each person as demonstrated by their interests, wishes, desires, personal changes, and challenges. It is important to note that no period or era within the life course is considered better than the other. In fact, the specific sequence of the eras is thought to contribute primarily to the uniqueness of the whole life course of a person. These eras are, however, characterised by change and partially overlap (Levinson, 1986). Each era begins at a universally defined age. However, each person may enter this era at any time either two years below or above that defined age.

Levinson (1986) proposed ten stages that are each characterised by a period of structure building and then a period of structure changing or transitioning. Structure building is characterised by five to seven-year periods where a person creates a structure in their life that supports the achievement of their goals and enhances their life. The structure building period begins with what is termed a novice phase (where the focus is on exploring a new life structure), and then ends with a culminating phase (which brings to fruition the goals and aspirations of the era). In

the novice phase, people are both excited and anxious at the prospects of entering a new era, and in the culmination phase may feel either contentment and satisfaction or disappointment and discontent.

The structure changing or transitioning period is also a five-year period of reviewing the current structure an individual has in their life, and then exploring possibilities for change to that structure (Levinson, 1986). The nature of these alternating periods and common overlaps between structure building and changing, means many adults spend up to half of their adult lives in transitional stages.

According to Levinson (1986), relationships with other people represent a primary theme across the life course and are marked by both periods of stability and change. Relationships require varying investments of energy and time, and a reciprocal return of commitment and energy. They may be with individuals, groups (such as institutions and social systems), nature or specific objects such as cities, countries or tangible assets such as a home, or more imagined relationships with a religion, a belief system, myth or fantasy (Levinson, 1986). Above all though, marriage, family and career relationships have the greatest influence on the life course. This is primarily because they take the most energy and shape the characteristics of many other aspects of life. Relationships with a marriage partner, extended family and work colleagues, thus, mediate the relationship between the individual's personality structure and social structure, giving equal weight and assumptions of influence to both (Levinson, 1986).

Erikson (1959) suggested that happiness and satisfaction depend on an individual's ability to navigate the stages of their development and address the dilemmas they face at each stage successfully (Allen & Wergin, 2009). In contrast, Levinson (1986) viewed the life course, in essence, being all about relationships and the extent to which those relationships bury or expose the best or worst aspects of a person. Levinson (1986) and Erikson (1959) suggested that as

adults progress to the latter stages of development, they grow in their desire and interest to dwell, invest and nurture the key roles and relationships they have in their lives (Morris & Klunk, 2015).

Additional theorists have added to the field of adult development with the following ideas. Kegan and Lahey (1984) suggested that development is characterised primarily by the ability to make meaning (no matter what a person's chronological age), and that as a person develops through adulthood they essentially outgrow earlier meaning-making systems and integrate those as sub-systems into more evolved processes of meaning making.

Kegan (1982) defined five stages of adult development, of which three are pertinent to leadership. These three stages of adult development (Imperial, Interpersonal and Institutional) chart the progression from the socialised-mind, through the self-authoring mind towards the self-transforming mind with an ever increasing depth of relationships (Hagström & Stålne, 2015).

In the Imperial stage of development a leader is focused primarily on their own individual needs and goals. Kegan and Lahey (2001) summarised that at this stage a leader is seen as a transactional leader who is primarily task-focused and most pre-occupied with execution, compliance, and external forms of reward and/or punishment. Leaders in this stage tend to misunderstand that their view of the world is learned and, therefore, see any different perspectives from their own as a threat. They are largely dependent on the conception of their own identity as their compass for engaging with the world (Hoppe, 2007).

In the Interpersonal stage a leader can skilfully balance their own needs with the needs of others. As a result they are able to easily build authentic relationships and demonstrate consistent trust and commitment (Allen & Wergin, 2009). Leaders at this stage of development can forgo their

needs and rewards to maintain high quality relationships, and thus, hold the balance between independence and connection with greater ease. This more independent stance with the world encourages curiosity and invites exploration of new experiences and people (Hoppe, 2007).

In the Institutional stage, leaders find confidence in their self-identity, and use their values and principles to navigate life rather than narrowly focusing only on goals and relationships. As a result, a sense of autonomy in identity seems to emerge. Kuhnert and Lewis (1987) placed transformational leadership in this stage of development and suggested that transformation is evident when followers adopt the values of the leader, adjusting their attitudes and goals to align with that of the leader. At this stage of development, leaders look towards the greater good of humanity, and embrace and lead change towards that end. According to Rooke and Torbert (2005), this final stage of development is associated with most success in this ever changing, unpredictable and ambiguous world. However, only a small cohort of leaders ever show these characteristics.

Across these latter explanations of Interpersonal and Institutional stages of adult development in leaders, there is theoretical alignment with the conception of a leader's character as an influence on follower behaviour, quality of relationships, and a broader perspective of what is in service of the greater good. Kegan (1982), Levinson (1986) and Erikson (1959) concur that relational influence and impact are key drivers of the developmental sequence and pace, which are primary elements of the conceptualisations of character and integrity.

Kegan (1982) also suggested that adults face a lifelong struggle between the polarities of connection and independence. He asserted that an adult's desire for acceptance and inclusion within their culture and community, and a sense of autonomy to live life according to their own devices, are in a constant state of tension. The challenge for any adult is that these two forces cannot exist together. Thus, there is a regular, hypothesised alternating between them and an

eventual realisation that successful balancing of these forces rests on the development of a clear personal identity with both connection, and independence within a community (Kegan, 1982). In essence, this journey of development is a progression of finding balance and meaning between independence and connection (Hagström & Stålne, 2015). This constructive developmental view posited by Kegan (1982) helps to explain how a leader at an earlier stage of adult development may be fiercely independent, transactional, and unable to influence followers in productive and sustainable ways. The challenge is that followers struggle to transcend the developmental level of their leader, and thus, teams may become stuck at the developmental level of their leader too (Avolio & Bass, 1995).

The development of a leader's skills and capabilities often focuses on growing their self-awareness, expanding their world view and instilling knowledge and new perspectives on the challenges they face (Allen & Wergin, 2009). Adult development theory adds richness to this learning with the assumption that a fulfilling and meaningful life can be achieved by developing the abilities to manage and navigate the challenges of life (Allen & Wergin, 2009). Developmental psychologists, therefore, stress the importance of studying more than personality types, preferences, and leadership philosophies, and to also focus as much attention on a leader's internal interpretation of events and the consequent actions that emerge through the leader's developmental progression.

In summary, the field of adult development provides distinct and predictable stages and levels of development through the adult life cycles. This super structure is built on a series of principles that influence how people see themselves and the manner in which they engage with their environment and all the relationships they have in their lives over the life course (Hoppe, 2007). Unlike the static nature of intelligence, the field of adult development supports a perspective that acknowledges an ever-growing understanding of the self and the world within

which people live (Hoppe, 2007). The sequence of growing complexity and reasoning or meaning making is what is often referred to as development (Kjellström & Stålne, 2017) and as development occurs, the later stages transcend and include the earlier ones. The more advanced a leader is in developmental terms, the more they have access to the prior stages they have moved through (Cook-Greuter, 2013). Therefore, as people move towards greater levels of developmental complexity they tend to notice more in their environment and, as a result, are more able to describe, articulate, cultivate, influence and transform themselves (Cook-Greuter, 2013). The ascension to these stages of understanding encourages more autonomy, tolerance of diversity and ambiguity, and self-awareness. However, all development is simply a possibility and cannot be guaranteed (Cook-Greuter, 2013) and all definitions of stages are incomplete and cannot describe each unique person completely (Kjellström & Stålne, 2017).

A review of adult development theory reveals multiple theoretical perspectives, which are complementary and introduce an essential lens through which to view and understand leaders at their different stages of life and development. Particularly poignant in the understanding of adult development is that leaders gain more skills and experience over the course of their careers, and also change as people, in ways that fundamentally shift their motives and aspirations (Allen & Wergin, 2009).

The review of various theoretical perspectives places the development of a leader on a continuum of relationships, needs, ego and impact. Cook-Greuter (2013) defined the stages of adult development in a manner that eloquently synthesises the majority of the theoretical work in the field. As a summary of this sub section of the literature review, Cook-Greuter's (2013) work is presented.

1. The Pre-conventional, self-centric stage (giving and defending) focuses primarily on self-protection, personal needs, material things and immediate opportunities.

2. The Conventional, group-centric stage (conforming and belonging) focuses on observing protocol and socially expected behaviour, conforming to social norms, working to group standards, and generally needing approval and a sense of acceptance.

3. The Conventional, skill-centric stage (comparing and perfecting) focuses on being competent in their own area of interest, seeing their way as the only valid way of thinking and basing their decisions on incontrovertible 'facts'.

4. The Conventional, self-determining stage (analysing and achieving) focuses on being in charge of themselves as agents and initiators rather than as pawns of a system and focuses primarily on delivering results, effectiveness, goals, and success.

5. The Post-conventional, self-questioning stage (relativising and contextualising) focuses on seeing themselves in relationship to context and in interaction within systems, concerned with differences between reality and appearance, having an increased understanding of complexity and seeing the systemic connections and unintended consequences of actions.

6. The Post-conventional, self-actualising stage (integrating and transforming) focuses on recognising higher principles, the social construction of reality, and the interactions of complex and dynamic systems.

7. The Post-conventional, construct-aware and beyond stage focuses attention on constructs, metacognition, and ego traps to encourage all-embracing and witnessing of what is.

Across all these stages of development, Cook-Greuter (2013) supports prior adult development stage theories and confirms the shifting focus that a person undertakes from self to others as they progress towards latter stages of development. What is of specific relevance, and linked to the prior conceptualisations of character and integrity, is how a person progresses from narrow self-interest to a morally balanced perspective that elevates the interests of the greater good.

Whilst the initial focus of this literature review dwelled on the significance of moral orientation across the various conceptualisations of character and integrity, adult development theory has been chosen as a primary focus of this study.

A further justification for the choice of adult development above moral orientation is the extent to which research in the adult development field consistently reports a lack of focus in understanding the correlations between psychological developmental theory, leadership and leadership development (Kjellström & Stålne, 2017). Longitudinal leadership studies have shown that this is a useful arena of interdependence to explore because, for example, research shows that seven of ten organisational change interventions that reach an advanced stage of successful completion were led by a leader who was placed at a later stage of adult development (Rooke & Torbert, 1998). The ability to accurately assess and place a leader at a specific stage of adult development is considered a key foundation of all work that attempts to align leadership and adult development (Rooke & Torbert, 2005). There is, thus, a growing interest in understanding how adult development theory can provide insight into the thinking and actions of leaders, their demonstration of organisational power, rank and influence (Kjellström & Stålne, 2017), and the direct impact that has on an organisation and team.

The following sub section of the literature review introduces the salience of teams as a driver of organisational success, and seeks to provide both empirical and theoretical insight into the role and influence that a team leader has on the culture of a team.

Leadership and Team Culture

Numerous references have been made to the influence that a leader has on a work unit, group, or team during the previous sections of this literature review. The final sub section will, thus, provide further understanding and theoretical insight into the relationship between a leader and

their team's behaviour. This study has already determined a theoretical and conceptual relationship between a person's character, integrity, and stage of adult development. However, to add further value to the field of consulting psychology it was considered useful to explore how a leader's character, integrity, and stage of adult development influences others, most notably the members of the team they lead. The specific focus was to provide a deeper understanding of the relationship between a leader and the collective behaviours or culture of the team they lead.

To understand the culture of a team, it is important to first review organisational culture theory in general. Culture can be understood at both a national and organisational level (Hofstede, 1998). National cultures vary mainly according to values, which are often invisible, and organisational cultures (even in the same country), often vary according to perceptions or practices that are more visible and often able to shift and change (Hofstede, 1998). Hofstede (1998) thus, succinctly defines organisational culture as the collective programming of minds that distinguishes members of one organisation from another. This distinction away from national culture is an important point of departure.

It is also worth noting that not only does the literature on organisational culture differ from that of national culture, the early organisational culture research was built on the following assumptions (Martin & Siehl, 1983):

1. There is only one culture within an organisation.
2. Organisational culture can be shaped through direct and deliberate management action.
3. Organisational cultures integrate and unify all aspects of an organisation.
4. The perspectives of senior management in an organisation are an accurate interpretation of the culture.

Whilst these assumptions dominated the discourse on organisational culture for a few decades, subsequent research challenged these assumptions. Researchers hypothesised that these assumptions were too narrow and possibly even altogether incorrect because evidence emerged that organisational cultures are more complex and idiosyncratic in context, and thus, far less malleable and deterministically influenced (Hofstede, 2001). For example, the deliberate actions by a leader may not shift or modify a culture to the linear extent that Martin and Siehl (1983) suggested. However, the leader may capitalise on aspects of the culture that serve their objectives and minimise those that do not. In other words, a leader's behaviour has the potential to enhance and permit some aspects of the culture, and inhibit and deter other aspects of the culture (Hofstede, 2001).

There are numerous indexes and frameworks that define organisation-wide cultures. The most widely utilised is Wallach's organisational culture index (Wallach, 1983). This index measures and then defines an organisational culture as dominated by either a bureaucratic culture (which values power and control, hierarchy, clear lines of authority, accountability, formality, well-defined structures and processes, and high levels of central control); an Innovative culture (which values and encourages change, dynamism, excitement, and entrepreneurialism, with an attitude of acceptance focused toward challenge, risk, creativity, and experimentation); or a supportive culture (which values relationships, collaboration, trust, safety, relationship orientation, sociability, equity, and encouragement) (Egan, 2008). These organisational cultures are believed to be direct emulations of the primary leader's leadership style, which is often the most evident and empowered in the organisation (Hofstede, 2001). This perspective suggests that culture is relatively homogenous across all the divisions and aspects of an organisation.

The Salience of Subcultures

However, as research in the area of organisational culture advances, so the monoculture view

of organisations has been challenged by the discovery that numerous subcultures may coexist within a single organisation (Egan, 2008). In fact, organisations may be dominated by a primary culture that often exists side by side with a variety of subcultures (Hofstede, 1998). Subcultures are defined as a group of individuals who share a common identity and experience that is different from the larger, organisational culture. These subcultures often share rituals, practices, values and social connections that assist in their pursuit of common goals and tasks (Gelder, 2007). Subcultures are, however, not independent of the primary culture. They are much like the branches of a tree – sharing fundamental roots in the same place but an expression of their subcultural values in the behaviour of those who operate within that subculture (Gelder, 2007). Thus, a subculture may exist within an intact team where the shared perceptions of the team members are influenced by all the attitudes, beliefs, behaviours and motivations of the team members (Gully et al., 2002).

Research suggests that subcultures are most likely to develop when a group of people, usually in a team, share the same function, geographical location and leader (Lok et al., 2005). Due to these determinants, it is thus likely that some of these subcultures deviate from the primary culture, while others may be beneficial evolutions of the primary culture (Lok et al., 2005). When leaders who act as custodians of the primary culture are willing to understand the needs of each subculture, the dominant culture can avoid crushing the impetus and positive contribution of each subculture (Hofstede, 1998). This variance between primary and subcultures may be critical to the success of organisation-wide engagements and change readiness, which in the modern era is a critical characteristic of relevant and successful organisations (Lok et al., 2005). It remains important to remember that subcultures are mostly similar to the organisational culture, but with a few distinct variations.

Martin and Siehl (1983) described three subculture categories. An enhancing subculture is distinguished by a fervent and even radical adherence to the dominant culture and values. An orthogonal subculture accepts both the dominant values and a non-conflicting set of personal values. The counterculture subculture directly challenges the dominant culture's values and prioritises a different set of values. Counterculture subcultures are more likely to emerge in a decentralised organisation where an individual leader has greater opportunity to exert their own personal values and interpretations of the dominant culture. It seems that if that subculture strays beyond the limitations of authority, then the decentralised position of its existence can be isolated and separated from the primary organisation. Conversely, this counterculture may have the potential and freedom to explore new innovations and develop aspects of the primary culture (Martin & Siehl, 1983). Understanding organisation-wide culture has been useful in comparing organisational cultures between organisations. However, it has been insufficient in explaining intra-organisational behaviour, which has raised the relevance of understanding subcultures (Lok et al., 2005) mainly because, in practical terms, employees interact more directly with their subculture and their direct team than the primary organisational culture. Subcultures, thus, influence employee and team member behaviour more profoundly than the primary organisational culture.

The Relationship Between a Leader and Their Team

Of key relevance to this study is the finding that the driver of subculture and team behaviour is the leader of a team (Lok et al., 2005). To further illustrate this relationship, research shows that a team member's commitment is strongly influenced by the leader of a subculture (Lok et al., 2005), where commitment is the feature of an employee's attitude that directly reflects their level of identification, loyalty and involvement with an organisation. Research has also identified the leader and a shared set of goals, values, function and geographical location as key influences on the behaviour of the collective (Lok et al., 2005).

The smallest unit of a subculture is a team or work unit (van den Berg & Wilderom, 2004). Research shows that work behaviours at a team level are more significant in shaping the subculture, than espoused values (van den Berg & Wilderom, 2004). This is hypothesised because values are intrapersonal and are primarily shaped in the early stages of a person's childhood. Therefore, espoused values do not necessarily become primary and observable contributors to an organisational and team culture (Hofstede, 1998). Behaviours explicitly encouraged or inhibited by the team's leader – and evident amongst and between team members – are more likely to guide people's behaviour within a team (Pearce & Herbik, 2004). Subcultures are, thus, a more direct and intimate context within which practices and rituals are likely to form. They are based on values that are more readily reinforced in an environment with close proximity between people who interact on a regular basis with each other and their leader (Lok et al., 2005).

The focus on subculture has become a relevant area of investigation because of its more direct impact on the behaviours of individuals in an organisation. For example, organisational citizenship behaviour is more likely to be influenced by the subculture that a person is exposed to rather than the organisational culture (Naeem et al., 2014). Subcultures are also more likely to influence transfer of learning than the primary organisational culture (Egan, 2008). The successful transfer of learning is important because it is an essential contributor to the endurance and relevance of an organisation (Egan, 2008).

It is clear that subculture-level leadership styles and behaviours are associated with subculture content, configuration and survival, which in turn directly impact team performance (Egan, 2008). The innovative and supportive subcultures drawn from Wallach's organisational culture index and applied to subcultures were positively correlated with higher levels of motivation to transfer learning. In contrast, the bureaucratic subculture was negatively correlated with higher

levels of motivation to transfer learning (Egan, 2008). These findings suggest that subculture environments that encourage creativity, collaboration, knowledge sharing and experimentation with newly acquired skills, tend to enable greater levels of transfer of learning. Egan (2008) found that each of these subcultures and teams were led by leaders with a style that supports such a subculture. The transformational leadership style – defined as a leader who focuses on development of mutual trust, team commitment, and effective relationships with followers – fostered more supportive and innovative subcultures. Such leaders tend to establish rapport through engagement, encouragement, and support, and signal to followers both an acknowledgment of their individuality and the importance of mutual obligation (Egan, 2008).

Evidence, therefore, suggests that different leadership styles, usually unique to each individual leader, impact their team's effectiveness (Gully et al., 2002). Transformational leaders, for example, focus on developing their followers and creating a common and shared sense of purpose amongst them (Sivasubramaniam et al., 2002). These leaders demonstrate and role model the team's values and increase the importance and stature of the team. They also build momentum in the commitment that team members have for the greater good (Burns, 1978) and deliberately build perceptions of integrity that encourage followership (Kaiser & Hogan, 2010). Transactional leaders focus primarily on correcting the mistakes people make, and that style is consequently correlated with lower levels of team motivation, satisfaction and performance (Kaiser & Hogan, 2010). More passive leaders within the transactional leadership approach generally avoid facing problems or delay making important decisions, and have been associated with low levels of team performance and motivation (Avolio & Bass, 1995).

To add further evidence of the influence an individual leader has on the team they lead, it has been shown that individual leaders and how they present themselves within their team context significantly impact the self-belief and efficacy of a team. For example, teams who described

themselves as transformational at the beginning of a ten week period of group work had higher levels of belief and performance (Sivasubramaniam et al., 2002). Those rating themselves as 'good' became better, and teams that rated themselves as 'poor' got increasingly worse. These findings confirm the extent to which the collective beliefs and behaviours within the team drive their team culture, in combination with a leader's style of leadership (Sivasubramaniam et al., 2002).

Hansen and Wernerfelt (1989, as cited in van den Berg & Wilderom, 2004) reported that profits were explained twice as much by organisational factors than by economic factors. Organisational factors were defined as the intangible, human-oriented factors at play in organisational work practices. This is significant because of the confirmed importance of human elements in determining organisational culture and the aforementioned impact that has on profitability (van den Berg & Wilderom, 2004). By inference then, there is mounting evidence to support the salience of continued research into leaders of work units, teams and subcultures, and the environments they foster.

The vital contribution of teams to organisational success is best illustrated through research that an estimated 70% of all culture change interventions fail (Jorritsma & Wilderom, 2012) mainly due to a lack of consultation with those who were to receive and enact the change; a lack of change leadership capability by the leaders; a lack of training and support to achieve the behaviour change required; and a lack of specific behavioural indicators of the change required (Jorritsma & Wilderom, 2012). It seems that top-down approaches fail because they are leader-centric and not focused enough on each individual's capability to change, and a lack of understanding of individual responses and attitudes towards change. Thus, in environments where leaders are in closest proximity to their people, such as in teams, there is a higher likelihood of change succeeding (Jorritsma & Wilderom, 2012). This is because team leaders

motivate their team members directly and indirectly through their capability, expertise, planning and execution success (Zaccaro et al., 2001). A primary role of a leader is, thus, to raise the levels of team effectiveness and belief in the team. Belief in the team is strongly influenced by what Bandura (1982) described as efficacy beliefs or potency. These are shaped by a track record of past successes, consistent role modelling of behaviours and practices that lead to success, and persuasion and other social influencing processes. The findings reviewed in this sub section illustrate the relevance of including teams as a focus of this study, and further confirm the value of specifically focusing on further understanding the influence of a leader on the collective behaviours of a team culture.

There are two broad theoretical positions on the affective tone of a team. One is 'bottom up' and is a combination of all the individual affective states of each of the individual team members. The other is 'top down' – the combined influence of team dynamics and processes on team tone (Barsade & Gibson, 1998). Interestingly, little work has been done to link a leader's behaviour to the affective tone of a team (Zaccaro et al., 2001). The main body of research in this area has been team leader behaviour when their teams are under pressure and has revealed that the calmer and more decisive the leader, the less intense the negative affective impact. It also seems that team norms of what is acceptable emotion and what is not appropriate help to moderate the intensity of team affect (Barsade & Gibson, 1998). Team leaders who craft clear goals, roles and responsibilities will react less emotionally to challenging contexts and limit emotional contagion, in comparison with teams whose leaders provide little or no structure and direction (Zaccaro et al., 2001).

Senior management team effectiveness, and the nature of its subculture, is thus influenced by numerous factors (Zaccaro & Klimoski, 2001). The first building block of team performance is the assumption that each individual member of the team understands and competently executes

the actions they are responsible for. Thereafter, it becomes incumbent on all team members to synchronise and manage their collective actions (Zaccaro et al., 2001). To further complicate the ability to perform, senior management teams operate in complex environments. These contexts are characterised by large stakeholder groups and their sometimes-divergent agendas; high and rapid rates of change and information overload – often accelerated by the evolution of modern technologies. The individual contributions of team members and the impact of external influences are then managed through team processes, which often mediate the extent to which a senior management team is successful (Zaccaro et al., 2001). To help steer these actions within an evolving context, leadership is considered a critical role and should focus primarily on setting goals and shaping the processes, structures and resources required to attain them. There is, however, minimal research on the direct impact that leadership behaviours have on cohesion, integration and general working relationships (Zaccaro et al., 2001). This is the specific focus of this review and the hypothesised link between a leader's behaviours and senior management team subculture.

In summary, the evidence is mounting that the specific values, principles, and behaviours of a team leader influence the subculture of that team, which in turn impacts the team's performance. The initial phase of subculture identity formation begins with the leader who sets the tone of the permitted behaviours and practices that are either enhanced or limited in alignment with the primary organisational culture (Hofstede, 2001). Organisations, with their specific subcultures, teams and work units, then attract and retain people who are aligned with those practices and behaviours.

In many organisations, subcultures coexist mainly due to the different people that constitute these groups. The groups have a relationship of belonging to the primary culture, and in many cases, have specific interests that use the shared goals and values of the organisation to further

the sub-group or team's interests (Kujala et al., 2016). The optimum constellation of relationships between the primary and sub cultures is a healthy tension between unity and fragmentation. As in any relationship, more fragmentation and low trust means less effective and efficient outcomes; more unified and trusting relationships lead to more flow and productivity (Kujala et al., 2016).

In summary, theoretical perspectives and some empirical evidence suggests an interrelationship between team culture and a leader's characteristics. For example, teams are most directly impacted by a leader's style of leadership, including transformational leadership, in their pursuit of desired team and organisational outcomes (Pearce & Herbik, 2004). The effective functioning and culture of a team is, thus, influenced significantly by the quality of the relationship between a leader and the members of their team (Hiller et al., 2011). The application of the conceptualisation of character to leadership primarily explores how a person's character impacts the experiences and relationships with others, whilst also providing deep insight into these actions and reactions towards others (Barlow et al., 2003). Integrity, as a further characteristic of a leader, is most accurately measured through the perceptions of people who are directly exposed to an individual through regular interactions, such as through the interactions between a leader and their team (Baker & Craig, 2006). Effective leaders, thus, demonstrate consistent patterns of behaviour that enhance trust and perceptions of integrity, in turn encouraging constructive followership (Kaiser & Hogan, 2010). In short, the higher the levels of perceived integrity, the more likely that a follower will emulate the leader's moral disposition (Leonard, 1997). The integration of psychosocial experiences and developmental learning over a person's life course has a direct influence on their levels of perceived integrity (Lickona, 2014). Furthermore, when a leader balances their self-interests with the interests of greater society – as demonstrated through character – they strengthen their perceived integrity

and shape the quality of relationships and trust that others, and their teams, have in them (Kaiser & Hogan, 2010).

Synthesis and Integration

The literature review was informed by contemporary research conclusions drawn in the area of transformational leadership research, where numerous studies have demonstrated empirical evidence of transformational leadership's positive influence on dimensions of organisational outcomes and success. The findings suggest significant correlations between transformational leadership and improved commercial performance and profitability; higher levels of follower sense of well-being; increased satisfaction, self-esteem and commitment; higher levels of job satisfaction; increased motivation (due to the encouragement of intrinsic sources of motivation); enhanced levels of organisational commitment (demonstrated through a desire to achieve medium to long-term organisational goals), healthy psychological wellbeing, and lower levels of staff turnover (Asrar-ul-Haq & Anwar, 2018).

The sub sections of the literature review provided conceptual and theoretical explanations of these concepts, whilst also delineating a theoretical basis for the interrelationships between and amongst them. The literature review was focused on comprehensively addressing the following research objectives 1–4, through the corresponding research questions:

1. Research Objective 1: To review and define the concepts of character, integrity, stage of adult development, and team culture, and to provide conceptual interrelationships between them.

2. Research Objective 2: To explore whether the relationship between a leader and their team is an important contributor to team culture.

3. Research Objective 3: To explore whether the concepts of character, stage of adult development, and integrity are important concepts in explaining the relationship between a leader's character and team culture.

4. Research Objective 4: To explore the conceptual and theoretical interrelationships amongst and between the concepts of character, integrity, stage of adult development, and team culture, in order to formulate and test a model of the interrelationships between these concepts in the context of transformational leadership.

The literature review provided answers to each of the research questions 1 – 4, as outlined below.

Research Question 1: What are the conceptual and theoretical interrelationships between a leader's character, integrity, stage of adult development and team culture? (Referring to Research Objective 1)

Extensive theoretical and conceptual support for the interrelationships between character, integrity, stages of adult development and team culture were provided by the literature review. At a high level, the concepts of character and integrity share moral orientation as a significant factor, whilst character, integrity and adult development all share a socio-developmental genesis over the life course and from life experience (Crossan et al., 2013). In other words, the development of character and integrity is influenced and shaped by life experiences gathered over a person's life, as they interact with the context, environment, and relationships around them. Finally, the influence of a leader on followers and team culture was clearly established (Lok et al., 2005). This suggests that the leader characteristics of character, integrity, and stage

of adult development, as aspects that inform and instigate leader behaviour, are interrelated with team culture.

Research Question 2: How is the relationship between the team leader and their team conceptualised in existing leadership theory? (Referring to Research Objective 2)

Explanations of how teams and work units are most directly impacted by a leader's style of leadership in their pursuit of attaining desired team and organisational outcomes (Pearce & Herbik, 2004) were provided by the literature review. Teams, as groups of individuals, are expected to align their actions and focus to achieve collective goals, which therefore implies that a leader directly influences the collective behaviours and culture of the team members (Lok et al., 2005). The effective functioning and culture of a team is, thus, influenced significantly by the quality of the relationship between a leader and the members of their team (Hiller et al., 2011).

Research Question 3: What role do the leader's characteristics of character, integrity, and stage of adult development play in explaining the relationship between the team leader and their team? (Referring to Research Objective 3)

At a high level, the literature review found that character influences the relationship between a leader and their team by deliberately balancing their self-interests with the interests of the greater organisation, team and collective (Effelsberg et al., 2014). Similarly, in the latter stages of adult development, a leader's ego-needs are carefully balanced with the needs and health of the greater good and others (Cook-Greuter, 2013). Furthermore, when a leader balances their self-interests with the interest of the greater good, they also strengthen their perceived integrity and shape the quality of relationships and trust that others have in them (Kaiser & Hogan, 2010). A review of character in leadership primarily shows how a person's character

impacts their experiences and relationships with others, whilst also providing deep insight into these actions and reactions towards others (Barlow et al., 2003). Integrity, too, has been conceptualised as both intrapersonal and interpersonal, and is most accurately measured through the perceptions of people directly exposed to an individual through regular interactions (Baker & Craig, 2006). Thus, effective leaders who demonstrate consistent patterns of behaviour are likely to enhance trust and perceptions of integrity, which in turn encourages constructive followership (Kaiser & Hogan, 2010). Higher levels of perceived integrity mean that followers are more likely to emulate a leader's moral disposition (Leonard, 1997). Kegan (1982), Levinson (1986) and Erikson (1959) surmise that the influence and impact of important relationships in a person's life are key drivers of an individual's developmental sequence and pace. Interestingly, followers struggle to transcend the developmental level of their leader, and entire teams may become stuck at the developmental level of their leader too (Avolio & Bass, 1995).

> Research Question 4: What is the validity of a model of interrelationships between the concepts of a leader's character, integrity, stage of adult development and team culture in the context of transformational leadership? (Referring to Research Objective 4)

The literature review revealed that contemporary leadership theories and models have progressed the field of leadership research towards transformational leadership. As has been established, transformational leadership is correlated with numerous leader characteristics, including those defined in this study and team culture. The utility of a model of interrelationships between a leader's character, integrity, stage of adult development and team culture – as proposed in this study – may add value in the following ways:

1. Providing intra and inter-personal understanding of a leader and the impact they have on their teams (and the team's culture) through their characteristics of character, integrity, and stage of adult development.

2. Offering an understanding of a leader's behaviours as they are influenced and explained by their character, integrity, and stage of adult development.

3. Providing explanations for the relative relationships and directions of influence between character, integrity, stage of adult development and team culture.

4. Providing further understanding of how the relationships between and amongst the concepts of character, integrity, stage of adult development and team culture determine the field of interactions that describe the inner dynamics of transformational leadership.

The study will empirically explore whether the model presented in Figure 3 exists and, if so, how the model and the descriptions of its various interrelationships may be useful in the context of leadership theory, specifically, transformational leadership theory.

The empirical method chapter that follows will discuss the statistical processes and steps outlined in The Scientific Overview of the Research (Chapter 1).

CHAPTER 3: EMPIRICAL METHOD

The empirical method followed in this study addresses the primary problem of limited empirical evidence to explain the interrelationship between the concepts of character, integrity, stage of adult development and team culture. The problem statement was translated into the following primary research question:

What are the interrelationships between a leader's character, integrity, stage of adult development, and team culture, and how do these interrelationships explain and inform the inner dynamics of transformational leadership?

The empirical method addresses Research Objective 5.

> Research Objective 5: To conduct an empirical analysis of the interrelationships between a leader's character, perceived level of integrity, stage of adult development, and team culture.

The empirical method focused on answering the following research question:

> Research Question 5: What are the empirical interrelationships between a leader's character, integrity, stage of adult development, and team culture? (Referring to Research Objective 5)

The selected research methodology should be considered the most suitable approach to develop further knowledge about the subject under review (Crossan, 2003). The choice of the research methodology is, thus, based on the types of evidence to be collected, understood, and analysed, and therefore a positivist approach was utilised in this study. Positivism focuses on a quantitative approach to research and prioritises clearly defined, specific and efficient structures

of methodology that can be replicated (Crossan, 2003). The primary aim of the study was to organise the investigation from hypothesis towards logical deductions.

The entities referred to in the research questions are the senior team leader and the senior team leader's team. These entities are objects with characteristics that this study investigated to obtain positive knowledge (that is ontologically or universally true). This study focused on the relationships among the characteristics of these entities and is embedded in object ontology (as opposed to relational ontology). Identifying objects and considering the relationships among these objects or entities means that the objects come first and the relationships among them are secondary to these objects.

The research assumptions were based on these particular worldviews as they relate to each of the research concepts and the interrelationships between and amongst a senior leader's character, integrity, stage of adult development and team culture.

1. A senior team leader's character: the literature review broadly conceptualised character as the product of the internal dynamics of a person that are driven by impulses, needs, drives and wants. However, character is also considered a pattern of behaviour that is often, but not exclusively, observable to others. In this study, senior leaders' characters were assessed through multi-rater observations of behaviours that are demonstrated through self-focused and other-focused behaviours where it is assumed that these behaviours occur primarily in relation to events and things in their environment. Based on observations of such interactions and interrelationships, it was assumed that there are psychological attributes inherent to the person that cause the behaviours that provide evidence of a person's character. This assumption reflects an objective, realist

worldview in which the person is viewed as an object (with attributes) that exists independently from observations.

2. A senior team leader's integrity. The literature review broadly conceptualised integrity as the product of the internal dynamics of a person that include morals and ethics, which are informed by an inherent knowledge of right and wrong, and are demonstrated through consistency of behaviours over time and across contexts. These observable behaviours include the consequent avoidance of wrongdoing and the willingness to stand up for what is right in the face of observed wrongs. In this study, senior leaders' integrity was assessed through multi-rater observations of behaviours, assuming that the behaviours occur primarily in relation to events and things in their environment. Again, observations of such interactions and interrelationships led to the assumption that the leaders have inherent psychological attributes giving rise to the behaviour. The assumption indicates an objective, realist worldview with leaders viewed as objects (with attributes) that exist independently from observations.

3. A senior team leader's stage of adult development. The literature review broadly conceptualised the stages of adult development along age- and social development-related perspectives. When these perspectives are theoretically integrated, they suggest that a person's stage of adult development is both the product of the internal dynamics of the person's development across the life course and the outcomes of behavioural patterns that are often, but not exclusively, observable to others. In the study, senior leaders' stages of adult development were assessed through self-assessment of attitudes and behaviours, where it was assumed that these behaviours occur primarily in relation to events and things in their environment. Based on observations of such interactions and interrelationships it was again assumed that psychological attributes inherent to the

person cause the patterns of behaviour indicating the stage of adult development. Once more, this assumption reflects an objective, realist worldview where the person is viewed as an object (with attributes) that exists independently from observations.

4. A senior team leader's team culture. The literature review conceptualised team culture as the collective patterns of behaviour demonstrated by the members of a work unit, which are also significantly influenced by the leader of the team. Team culture is, thus, conceptualised as the product of the internal dynamics of the team and demonstrated through the team members' behaviours that are observable to others. In this study, the senior team leaders' team culture will be assessed through multi-rater observations of the behaviours of the individual team members, which are demonstrated as self-focused and other-focused behaviours. It was assumed that these behaviours occur primarily in relation to events and things in their environment, most prominently influenced by the relationships between team members, and between team members and the team leader. Based on observations of such interactions and interrelationships it was assumed that there are psychological attributes inherent to the team that cause these collective behaviours. This assumption reflects an objective, realist worldview. The team was viewed as an object (with attributes) that exists independently from observations.

The empirical method of the research was conducted according to the following steps.

Step 1: Define research questions and concepts.

Step 2: Select assessment and survey instruments.

Step 3: Define the study population and select the sample.

Step 4: Formulate the research hypotheses.

Step 5: Administer measurement instruments.

Step 6: Capture and error check the data.

Step 7: Statistically analyse the data.

Step 8: Interpret and report results.

Step 9: Integrate and report conclusions, recommendations and limitations of the study.

Steps 1 to 6 are described in the Empirical Method chapter (Chapter 3). The defined steps 7, 8 and 9 will be addressed in the Analysis and Results (Chapter 4) and Exploration of Results (Chapter 5) and Conclusions (Chapter 6).

Empirical Research Questions and Concepts

The previously defined research questions sought to understand the relationships between the characteristics of the following four concepts, as they relate to a senior team leader and a senior team: character, integrity, stage of adult development, and team culture. The empirical method sought to research Objective 5 and was associated with Research Question 5: What are the empirical interrelationships between a leader's character, integrity, stage of adult development, and team culture? The following empirical research questions were formulated to address:

Research Question 5:

1. Empirical Research Question 1: Is the senior team leader's character (as demonstrated through self- and other-focused behaviours) correlated with the senior team leader's perceived level of integrity?

2. Empirical Research Question 2: Is the senior team leader's character (as demonstrated through self- and other-focused behaviours) correlated with the senior team leader's team culture (as demonstrated through self- and other-focused behaviours)?

3. Empirical Research Question 3: Is the senior team leader's character (as demonstrated through both self- and other-focused behaviours) correlated with the senior team leader's stage of adult development?

4. Empirical Research Question 4: Is the senior team leader's perceived level of integrity correlated with the senior team leader's stage of adult development?

5. Empirical Research Question 5: Is the senior team leader's stage of adult development correlated with the senior team leader's team culture (as demonstrated through self- and other-focused behaviours)?

6. Empirical Research Question 6: Is the senior team leader's perceived level of integrity correlated with the senior team leader's team culture (as demonstrated through self- and other-focused behaviours)?

7. Empirical Research Question 7: Is the relationship between the senior team leader's character (as demonstrated through self- and other-focused behaviours) and the senior team leader's team culture (as demonstrated through self- and other-focused behaviours) moderated by the senior team leader's stage of adult development?

8. Empirical Research Question 8: Is the relationship between the senior team leader's character (as demonstrated through self- and other-focused behaviours) and the senior team leader's team culture (as demonstrated through self- and other-focused behaviours) moderated by the senior team leader's perceived level of integrity?

9. Empirical Research Question 9: Is the senior team leader's character (as demonstrated through self- and other-focused behaviour) a function of the senior team leader's team culture (as demonstrated through self- and other-focused behaviours), the senior team

leader's stage of adult development, and the senior team leader's perceived level of integrity?

10. Empirical Research Question 10: Is the senior team leader's stage of adult development a function of the senior team leader's character (as demonstrated through self- and other-focused behaviours), the senior team leader's level of perceived integrity, and the senior team leader's team culture (as demonstrated through self- and other-focused behaviours)?

11. Empirical Research Question 11: Is the senior team leader's perceived level of integrity a function of the senior team leader's team culture (as demonstrated through self- and other-focused behaviours), the senior team leader's stage of adult development, and the senior team leader's character (as demonstrated through self- and other-focused behaviours)?

12. Empirical Research Question 12: Is the senior team leader's team culture (as demonstrated through self- and other-focused behaviours) a function of the team leader's perceived level of integrity, the senior team leader's character (as demonstrated through self- and other-focused behaviours), and the senior team leader's stage of adult development?

Selection, Administration of Instruments and Data Capturing

The conceptual and theoretical underpinnings of the identified research concepts, and the theoretical interrelationships between and amongst these concepts were all explored in the literature review. Consequently, the measurement instruments selected in this study were considered to be relevant to the measurement and analysis of the constructs of a senior team leader's character, integrity, stage of adult development, and the senior team leader's team

culture. These instruments were administered to yield empirical evidence to answer the identified research question.

The following instruments fulfilled the expected levels of validity and reliability, and were thus selected for use in the empirical component of this research:

1. The Heartstyles Individual Indicator (HSII) (Klemich & Klemich, 2013)

2. The Perceived Leader Integrity Scale (PLIS) (Craig & Gustafson, 1998)

3. The Maturity Assessment Profile (MAP) (Cook-Greuter, 2013)

4. The Heartstyles Team Indicator (HSTI) (Klemich & Klemich, 2013)

Each of these instruments is reviewed in the following section and a clear rationale for their inclusion in the study is provided.

The Heartstyles Individual Indicator (HSII)

The following section explores the rationale, purpose, administration, interpretation, validity, reliability, and reasons for selecting the Heartstyles Individual Indicator (HSII, Klemich & Klemich, 2013).

Rationale and Purpose

The literature review in Chapter 2 revealed that there are limited practice-based assessments that assist in the identification or measurement of character (Crossan et al., 2013). The choice of measurement instruments with which to assess a leader's character was assessed against the comprehensive collection of definitions presented in Chapter 2 and important criteria are discussed below.

First, it is important to note that character can be assessed and explained through describing observable behaviour (Banicki, 2017) where these behaviours are most likely the demonstrated result of a set of learned and habituated behaviour traits (Peterson & Seligman, 2004). Leonard (1997) similarly conceptualised character as the behavioural outcome of a person's internal battle with their impulses, drives, psychological defences, and coping mechanisms, all of which have become habituated behaviours and are largely unconscious. These behaviours are often, but not exclusively, observable to others (Leonard, 1997). For the purposes of this study, it was important that the selected instrument was a multi-rater instrument that assesses character through the observations that others (primarily the senior team leader's team members) make of the leader's behaviours.

Second, the conceptualisation of character differentiates itself from being exclusively focused on behavioural traits and habituated behaviours by including integrity, moral orientation, courage, and relational impacts in the assessment of these traits and responses. Definitions of character include numerous dimensions, and it was, thus, important that the assessment instrument chosen measure the most comprehensive set of dimensions used to define character. A review of these salient dimensions follows.

Sperry (1999) described character as the holding of good principles (honesty, integrity, and duty), conscience (sense of right and wrong), and courage (the will and power to act on one's principles) in an integrated and congruent manner. Grahek et al. (2010) defined character as a combination of the dimensions of integrity and ethics, courage, humility, and gratitude. Lickona (1991) similarly conceptualised character as knowing, desiring, and doing good; as values in action, and a set of habits of the heart and mind. These definitions further support the prior conceptualisations within which character integrates an individual's moral and ethical awareness and the ability to assess varying situations and contexts and apply effective and

consistent behaviours, judgement, and decision-making. This moral awareness, thus, assists leaders to steer their judgement towards doing the right thing, converting their desire to do good into observable actions that do good (Lickona, 1991), also described as 'good character'. The character of the leader will, thus, be displayed through the choices they make in response to their contexts and will provide evidence of their unique moral and mental models of their world (Barlow et al., 2003).

Sarros et al. (2007) offered an additional view of the constructs of character by grouping these into the following concepts.

1. Universalism of character – refers to the outward expression of leadership character as observed through the leader's levels of respectfulness for others, fairness, cooperativeness, compassion, spiritual respect, and humility.

2. Transformational character – refers to how leaders achieve universal and benevolent outcomes. Transformational leaders demonstrate their character through courage, passion, wisdom, competency, and self-discipline.

3. Benevolent character – associated with consistent and enduring loyalty, selflessness, integrity, and honesty.

In summary, character is the collective repertoire of the most effective and ineffective behaviours that a person demonstrates (Sperry, 1999). These refined conceptualisations of character indicate self-focused and other-focused demonstrations of behaviour, and the salience of balancing self-interest with the interests of the greater good, or in other words, balancing self-focused behaviours with other-focused behaviours. These conceptualisations of character were a primary influence on the selection of the Heartstyles Individual indicator (HSII) instrument. Table 1 compares the various conceptualisations of character against the eight dimensions of the HSII.

Table 1

Comparison of Conceptualisations of Character and the Heartstyles Individual Indicator (HSII)

Conceptualisations of Character	Heartstyles Individual Indicator dimensions
• Conscience (sense of right and wrong) • Honesty • Courage (the will and power to act on one's principles)	Authentic: measures an individual leader's ability to be transparent and themselves around others; to speak their truth, be frank, open, and express themselves freely.
• Fairness • Compassion	Compassionate: measures the leader's ability to be compassionate, caring, kind and considerate toward others.
• Passion • Wisdom • Competency and self-discipline • Perseverance to achieve goals in the face of resistance	Achieving: measures a leader's ability to take reasonable risk to attain effective results; and to act and take initiative.
• Consistent • Enduring loyalty • Integrity • Honesty • Knowing, desiring, and doing good	Reliable: measures a leader's level of dedication, reliability, dependability, discipline, and congruence.
• Connecting and relating to others • Respectfulness for others • Cooperativeness	Relating: measures a leader's ability to get along and relate well to others; be a good communicator and approachable.
• Investing in the community • Investing in others and the collective	Developing: measures a leader's willingness to take time with people to develop and broaden their skills and capabilities through teaching and coaching.
• Appreciates the bigger picture	Transforming: measures an individual leader's ability to continuously improve their thinking and behaviour, seek

• Humility and openness	opportunities and take responsibility for their personal growth, and consistently study to develop and grow.
• Selflessness	Encouraging: measures a leader's ability to actively encourage, compliment and listen to others.

Finally, in choosing the appropriate instrument to measure character, a review was conducted of tools that measure character strengths and virtues. Character strengths are defined as positive psychological traits reflected in a person's thoughts, feelings, and behaviours. Virtues are defined as the demonstration of behaviour that displays a high moral standing (and are often synonymous with character strengths) (Peterson & Seligman, 2004). Character strengths help leaders to pursue what is in their own interests whilst also preserving the best interest of others and broader society (Noronha & Campos, 2018). Character strengths seek to achieve satisfaction through individual and collective happiness whilst encouraging people towards a moral orientation. The actions chosen to pursue these are conducted without obvious rewards, are stable over time and are considered conceptually and empirically distinct from other strengths. Peterson and Seligman (2004) summarised them as follows.

1. Wisdom is a cognitive strength demonstrated by the seeking and applying of knowledge.
2. Courage is an emotional strength demonstrated through the perseverance to achieve goals in the face of resistance that can be both internal and external to an individual.
3. Humanity is an interpersonal strength that is demonstrated best through connecting and relating to others.
4. Justice is a civic strength that is demonstrated by investing in the community and the greater good of others and the collective.
5. Temperance is a strength that guards against excess.

6. Transcendence is a strength that appreciates the bigger picture and perspective beyond the self and into the spiritual realm.

Whilst there is inherent value in the measurement of character strengths, current character strengths measuring instruments do not offer a multi-rater assessment process and were, thus, not considered.

In summary, character is described as the thinking and action applied through choices and behaviours that become habits. Where these habits are based on manifestations of past experience and life events, they influence the forming of moral and integrous behaviours (Crossan et al., 2013). A concise reflection on the concept of character surmises that people demonstrate their morals and integrity along a continuum from the 'bright side' to the 'dark side' (Hogan & Hogan, 2001). The 'bright side' is the successful ability to manage and regulate one's behaviour to make a positive impression on those around them, whereas the 'dark side' represents the person's behaviour when they are less concerned about the impression they are making (Hogan & Hogan, 2001). Character is, thus, assessed through the demonstration of a person's unique behavioural spectrum, which can be accurately assessed by the HSII that measures the character of an individual, as demonstrated through self- and other-focused behaviours.

Character of senior team leaders was assessed primarily through self- and other-focused behaviours and was defined as a 'senior leader's character (as demonstrated through self- and other-focused behaviours).'

Dimensions of the Heartstyles Individual Indicator (HSII)

The HSII scale is constituted of 16 dimensions. Eight of these dimensions are defined as effective behavioural dimensions that are equally divided between four dimensions that

measure growing-self (self-focused) and four dimensions that measure growing-others (other-focused) behaviours. The remaining eight dimensions are defined as ineffective behavioural dimensions and are equally divided between the four dimensions of self-protecting (self-focused) behaviours and self-promoting (other-focused) behaviours.

The conceptual overview of character provides clear alignment between the conceptualisation of character and the eight effective dimensions as measurable constructs. However, whilst the literature review indicated the 'dark side' of character, there was no alignment between the limited conceptualisations of ineffective character and the eight ineffective dimensions of the HSII. Thus, it was decided that only the eight effective dimensions of growing self and growing others would be measured.

Dimensions one to four of the HSII consider self-focused and primarily growing-self, whereas dimensions five to eight are considered other-focused and aimed at growing others. It is important to note that the measurement of a leader's character is thus, not a single score, but rather eight separate dimension scores that can be combined together or reviewed separately.

The growing-self (self-focused) behaviours consist of four dimensions, namely Authentic, Transforming, Reliable and Achieving. These dimensions are defined below.

1. Authentic – measures an individual leader's ability to be transparent and themselves around others; to speak their truth; be frank, open, and express themselves freely.

2. Transforming – measures an individual leader's ability to continuously improve their thinking and behaviour; seek opportunities and take responsibility for their personal growth, and consistently study to develop and grow.

3. Reliable – measures a leader's level of dedication, reliability, dependability, discipline, and congruence.

4. Achieving – measures a leader's ability to take reasonable risk to attain effective results; and to act and take initiative.

The growing-others (other-focused) behaviours consist of four dimensions, namely Relating, Encouraging, Developing and Compassionate. These dimensions are defined below.

1. Relating – measures a leader's ability to get along and relate well to others; be a good communicator and approachable.

2. Encouraging – measures a leader's ability to actively encourage, compliment and listen to others.

3. Developing – measures a leader's willingness to take time with people to develop and broaden their skills and capabilities through teaching and coaching.

4. Compassionate – measures the leader's ability to be compassionate, caring, kind and considerate toward others.

These eight dimensions were measured against the survey items listed in Table 2.

Table 2

Heartstyles Individual Indicator Dimensions and Survey Items (based on Klemich & Klemich, 2013)

Dimensions	Survey Items/Descriptors
1. Growing Self (self-focused) - Authentic	(a) Is one's self around others (b) Speaks the truth, frank and open (c) Expresses self freely (d) Transparent about self
2. Growing Self (self-focused) - Transforming	(a) Continuously tries to improve thinking and behaviour (b) Seeks and takes opportunities for personal growth (c) Takes responsibility for personal growth (d) Consistently studies to develop growth areas (e) Knows personal growth needs and seeks ways to develop
3. Growing Self (self-focused) - Reliable	(a) Dedicated and disciplined (b) Congruent – does what they say they will do (c) Dependable person (d) Reliable and steady
4. Growing Self (self-focused) - Achieving	(a) Takes reasonable risk to attain effective results (b) Sees what needs to be done and acts (c) Takes responsibility to achieve goals (d) Takes initiative when opportunities arise
5. Growing Others (other-focused) - Relating	(a) Gets along well with others (b) Relates well to others (c) Good communicator (d) Friendly and approachable
6. Growing Others (other-focused) - Encouraging	(a) Actively encourages others (b) Genuinely compliments others (c) Good listener and encourager

		(d)	Praises others

7.	Growing Others (other-focused) - Developing	(a)	Willing to take time with people to develop them
		(b)	Enjoys teaching others
		(c)	Good teacher
		(d)	Coaches others to broaden skills and capabilities
		(e)	Develops others
		(f)	Assists others in solving problems

8.	Growing Others (other-focused) - Compassionate	(a)	Compassionate toward others
		(b)	Cares for others
		(c)	Sympathetic, without encouraging self-pity
		(d)	Considerate
		(e)	Genuine concern for others
		(f)	Kind and generous

Administration of the Heartstyles Individual Indicator

HSII is a 75-item questionnaire that uses a 5-point Likert scale where 1 = never, 2 = rarely, 3 = sometimes, 4 = often and 5 = almost always. It is administered online and takes between 20–30 minutes to complete. Each individual completes a benchmark scale that defines what they believe to be ideal and aspirational scores for each dimension, followed by a self-score that defines their own estimation of scores for each dimension as applied to themselves. Finally, each individual has to choose between three, six, nine, 12 or 15 respondents to provide multi-rater feedback across each of the dimensions. For the purposes of this study, no benchmark or self-scores were included in the empirical method. Hensel et al. (2010) demonstrated that between six to ten raters are needed to reach a satisfying reliability. However, it is common practice to use only two or three peer raters, which often results in low reliability levels. Therefore the multi-rater score from six respondents was included in the study. Furthermore, reliability is a function of the potential (and realised) variability of the ratings. Variability

depends on how clear the criteria are that raters use and if the criteria are clearly defined and if raters are able to distinguish reliably between different ratings one can use fewer raters. The ratings in this instrument relied on well-defined criteria, which lowered error variance and therefore 6 raters were considered sufficient.

Interpretation

The scoring guidelines for the HSII interpret raw scores below 50 on a scale of 0 to 100 as a development area, whilst any score above 50 is considered a strength. No specific scale is provided to extrapolate different ranges of strengths or weaknesses within the 0–50 and the 50–100 score ranges.

Reliability and Validity of the Heartstyles Individual Indicator

The HSII validation studies have provided evidence of construct validity with a value of .806 (Anderson & Jahng, 2011). Reliability analyses demonstrated internal consistency through Cronbach's alpha coefficients along with test-retest correlations. The minimum accepted norm for Cronbach's alpha is >7. The Cronbach's alphas for the eight effective dimensions of the HSII (Anderson & Jahng, 2011) are presented in Table 3. The test provider currently pools the data they receive for analysis; therefore, the questionnaires' validity and reliability are calculated on an international dataset cross 26 language groups. The test provider declined to provide the validity and reliability data for the SA sample or provide the raw scores that would enable the researcher to calculate the validity and reliability (because the data for the SA sample are pooled and not available as SA data).

Table 3

Internal Consistency of the Eight Self- and Other-Focused Dimensions (Cronbach's Alpha)

Heartstyles Dimensions and corresponding Cronbach's Alpha scores.

1. Authentic = .740

2. Transforming = .879

3. Reliable = .777

4. Achieving = .782

5. Relating = .769

6. Encouraging = .814

7. Developing = .855

8. Compassionate = .820

Motivation for Using the Heartstyles Individual Indicator

The HSII instrument measures eight dimensions of character broadly balanced across behaviours that focus on self and behaviours that focus on others. The alternative instruments focused more specifically on virtues or divided their leadership assessments into component parts focused only partially on character construct as defined in this study. The HSII provides dimensions of measurement that fulfil the theoretical conceptualisation of character and can be assessed in a multi-rater format.

Perceived Leader Integrity Scale (PLIS)

The following section focuses on the PLIS (Craig & Gustafson, 1998), exploring the rationale, purpose, administration, interpretation, validity, reliability, and reasons for selecting the instrument for use in this study.

Rationale and Purpose

The literature review in Chapter 2 reviewed a broad range of conceptualisations of integrity. The selection of the appropriate instrument to measure integrity, however, was based primarily on the findings that the assessment of a leader's integrity are most valid and accurate when based on the perceptions and experiences of a leader's followers (Kaiser & Hogan, 2010). This is an important determinant of the most appropriate measures of integrity in research, and therefore, alters the description of the concept of integrity to be a senior leader's level of perceived integrity.

There are numerous definitions of integrity, which include abiding by the laws, regulations and rules set forth in the formal legal system (often also referred to as ethics). At an intra- and interpersonal level, integrity commonly refers to how a person treats those around them and behaves over time with honesty, candour and moral awareness (Mayer et al., 1995). Integrity is conceptualised as being informed by an inherent knowledge of right and wrong, the consequent avoidance of wrongdoing, and the willingness to stand up for what is right in the face of observed wrongs (Sarros et al., 2007). Northouse (2006) introduced the concepts of conduct and character integrity. The former focuses on the conduct or actions of a person and the extent to which they comply with rules; the latter refers to the nature of a person's moral disposition and character (Northouse, 2006). Then, there is personal integrity, defined as the extent to which a person is committed to personal values, principles and moral integrity; and the extent to which a person adheres to moral values and principles (van Luijk, 2004). McFall (1987) proposed three categories of integrity. First, it refers to consistency of values and principles; second, to consistency of behaviour that is aligned with principles and values (especially under pressure), and finally, to consistency of behaviours based on true values and most commonly demonstrated when a person is under pressure.

The word 'integrity' derives from the Latin root 'integritas', defined as wholeness, coherence, rightness, or purity (Sarros et al., 2007). Integrity refers to an individual's ability to integrate parts of themselves into a harmonious whole. However, this integrated-self view must include a person being in conflict with their values and commitments at times to strengthen the integrated-self view (Cox et al., 2003). Wholeness, commitment and honesty, however, do not infer advanced levels of morality, mainly because their commitments may not be constructive (Cox et al., 2003). Thus, to align with the moral descriptor of integrity, a person's actions should be guided by values and principles that are considered good, right and just. They should satisfy a minimum moral standard and willingly act beyond that moral standard (Halfon, 1989). Integrity is not exclusively measured by the consistency of a person's conduct because it is inclusive of a moral disposition that differentiates it from predictability and reliability (Kaiser & Hogan, 2010).

PLIS was selected for use in this study specifically because of its multi-rater feedback format and clear delineation between ethical and unethical aspects of behaviours as applied to integrity. It was considered essential to not conduct self-report integrity scales, and to rather focus on the integrity that peers and colleagues perceive through the leader's behaviour over time. The Giotto work-based personality questionnaire was considered as an assessment of integrity due to its validity and reliability in the South African context designed to assess integrity. It contains 101 items and generates scores on seven scales based on the Prudentius model of personality. However, it is a self-report assessment, and was thus deemed undesirable due to the choice of rather prioritising a multi-rater tool of integrity.

The main goal of the PLIS is to assess follower perceptions of moral or ethical issues evidenced in the behaviour of their leader. Craig and Gustafson (1998) developed PLIS as a 360° leadership assessment instrument for assessing impressions of the integrity, ethics, and

destructive behaviours of managers and leaders. Table 4 compares the survey items of the PLIS with the conceptual definitions of integrity as reviewed in Chapter 2.

Table 4

Perceived Leader Integrity Scale (PLIS) Survey Items and Conceptualisation and Operationalisation of Integrity (Based on Craig & Gustafson, 1998)

Conceptualisation and Operationalisation of Integrity	Perceived Leader Integrity Scale Survey Items
- Ethics - Abiding by the laws, regulations, and rules	- Would steal from the organization. - Would falsify records if it would help his or her work situation. - Would do things that violate organizational policy and then expect others to cover for him or her. - Would deliberately avoid responding to e-mail, telephone, or other message to cause problems for someone else. - Likes to bend the rules. - Would withhold information or constructive feedback because he or she wants someone to fail.
- How a person treats those around them - Positive moral disposition and character	- Would risk other people to protect him or herself in works matters. - Puts his or her personal interests ahead of the organization. - Ridicules people for their mistakes.

	• Would allow someone else to be blamed for his or her mistake. • Would make trouble for someone who got on his or her bad side. • Would deliberately distort what other people say. • Would try to take credit for other people's ideas. • Would spread rumours or gossip to try hurt people or the organization. • Deliberately fuels conflict between other people. • Would blackmail an employee if she or he thought she or he could get away with it. • Would deliberately exaggerate people's mistakes to make them look bad to others. • Would treat some people better if they were of the other sex or belonged to a different ethnic group. • Would try to hurt someone's career because of a grudge. • Shows unfair favouritism toward some people. • Is rude or uncivil to co-workers.
• The avoidance of wrongdoing • Rightness and purity	• Would engage in sabotage against the organization. • Is vindictive.

• Commitment to personal values and principles • Adherence to moral values and principles • Inherent knowledge of right and wrong • Willingness to stand up for what is right	• Is evil. • Is not interested in tasks that do not bring personal glory or recognition. • Has high moral standards.
• Trustworthy and reliable	• Can be trusted with confidential information. • Would lie to me. • Enjoys turning down requests.
• Wholeness • Coherence • Consistency of behaviour (aligned with principles and values	• Is a hypocrite.

Dimensions of the Perceived Leader Integrity Scale

The dimensions of the PLIS are behaviourally classified as unethical using a rule-based utilitarian approach. With this approach, an act is labelled wrong or unethical if it violates explicit or implicit rules that ideally maximise outcomes for the majority of individuals. The scale is based on the statements in Table 5.

Table 5

Scale Items of the Perceived Leader Integrity Scale (PLIS) based on Craig and Gustafson (1998)

Puts his or her personal interests ahead of the organization
Would risk other people to protect him or herself in works matters
Enjoys turning down requests
Deliberately fuels conflict between other people
Would blackmail an employee if she or he thought she or he could get away with it
Would deliberately exaggerate people's mistake to make them look bad to others
Would treat some people better if they were of the other sex or belonged to a different ethnic group
Ridicules people for their mistakes
Can be trusted with confident information
Would lie to me
Is evil
Is not interested in tasks that do not bring personal glory or recognition
Would do things that violate organizational policy and then expect others to cover for him or her
Would allow someone else to be blamed for his or her mistake
Would deliberately avoid responding to e-mail, telephone, or other message to cause problems for someone else
Would make trouble for someone who got on his or her bad side
Would engage in sabotage against the organization
Would deliberately distort what other people say
Is a hypocrite
Is vindictive
Would try to take credit for other people's ideas
Likes to bend the rules
Would withhold information or constructive feedback because he or she wants someone to fail
Would spread rumours or gossip to try hurt people or the organization
Is rude or uncivil to co-workers
Would try to hurt someone's career because of a grudge

Shows unfair favouritism toward some people

Would steal from the organization

Would falsify records if it would help his or her work situation

Has high moral standards

Administration of the Perceived Leader Integrity Scale

The 30-item, 4-point Likert scale demonstrates a unidimensional factor structure, reflecting perceivers' overall impression of a leader's ethical integrity. The respondent must indicate to what extent the statements referenced in Table 4 describe their immediate leader. The assessment was administered via a closed Google survey to all the team members of the senior management leaders. All scores were manually collected via a downloadable spreadsheet and then manually coded.

Interpretation

The response choices on a 4-point Likert scale include 1 = not at all; 2 = somewhat; 3 = very much; and 4 = exactly, to describe a leader against the scale statements. Higher scores signify lower perceptions of a leader's integrity (Baker & Craig, 2006), except for items 9 and 30, which were reverse scored (for these two items a lower score indicates higher perceptions of a leader's integrity). The PLIS contains 27 items that address specific unethical behaviours and 4 items that assess global impressions of integrity for a total of 30 items. The scale is divided into three score ranges, as noted in Table 6.

Table 6

Perceived Leader Integrity Scale (PLIS) Score Ranges and Interpretation

30–32 High ethical: If a score is in this range, it means that the person is evaluated as highly ethical. The impression is that the person is very trustworthy and principled. This score is further interpreted to designate a leader as having high levels of perceived integrity.

33–45 Moderate ethical: Scores in this range mean that the person is viewed as moderately ethical. The impression is that the person might engage in some unethical behaviours under certain conditions. This score is further interpreted to designate a leader as having moderate levels of perceived integrity.

46–120 Low ethical: Scores in this range describe people who are very unethical. The impression is that the person does things that are dishonest, unfair, and unprincipled almost any time he or she has the opportunity. This score is further interpreted to designate a leader as having low levels of perceived integrity.

Reliability and Validity of the Perceived Leader Integrity Scale

Cronbach's alpha to assess internal consistency for the PLIS is $\alpha = .95$ and demonstrates appropriate patterns of convergent validity relative to other variables. For developmental feedback purposes, the instrument can be interpreted in terms of multiple facets of the leader's reputation for integrity (Craig & Gustafson, 1998).

Motivation for Using the Perceived Leader Integrity Scale

The PLIS was designed to assess follower perceptions of moral, ethical and integrous disposition as evidenced in the behaviour of their leader. The research aimed to offer a multi-rater perspective on a leader's integrity, and the PLIS conforms to that requirement. The assessment of a senior leader's integrity was, thus, more accurately the assessment of a 'senior leader's perceived level of integrity.'

The Maturity Assessment Profile (MAP)

The following section explores the rationale, purpose, administration, interpretation, validity, and reliability of the MAP (Cook-Greuter, 2013), concluding with the reasons for selecting it for this study.

Rationale and Purpose

The literature review explored numerous theoretical and conceptual perspectives with respect to adult development and, in particular, the stages of adult development. A review of adult development theory reveals several complementary theoretical perspectives, which introduce an essential lens to view and understand leaders at their different stages of life and development. Leaders increase their skills and experience over the course of their careers, but also change as people in ways that fundamentally shift their motives and aspirations (Allen & Wergin, 2009) . The interrelationships between these changes and the remaining research variables were of particular interest to this study.

The review of theoretical perspectives placed the development of a leader on a continuum of relationships, needs, ego and impact. Cook-Greuter (2013) defined the stages of adult development in an eloquent synthesis of the majority of the theoretical work in the field, which led to the development of the Maturity Assessment Profile SCTi-MAP (MAP). This assessment is a Harvard-tested, reliable and cost-effective measure of adult meaning-making (Cook-Greuter, 2013). The MAP is based on the Leadership Maturity Framework (LMF) and measures an individual's level of vertical development, defined as the level from which they routinely operate and view experience and act in the world (Cook-Greuter, 2013). The MAP is a valid and robust assessment of leadership maturity. It is also the most recent evolution in the field of

adult development and its direct application to leaders means it was deemed the most appropriate assessment of a senior leader's stage of adult development.

Dimensions of the Maturity Assessment Profile

The MAP is a 36-item sentence completion assessment. Table 7 provides examples of MAP sentence completion items.

Table 7

Sample Statements of the Maturity Assessment Profile (MAP) Sentence Completion Items (from Cook-Greuter, 2013)

Sample MAP Statements

1. Raising a family…
2. When I am criticized…
3. A true friend…
4. A man's job…

The MAP places an individual at one of the stages of development listed in Table 8 (detailed descriptions of these stages are provided below).

Table 8

Maturity Assessment Profile (MAP) Stages of Development (from Cook-Greuter, 2013)

Stage 2/3: Pre-conventional stages - Self-centric stage

Stage 3: Conventional stage - Group-centric stage

Stage 3/4: Conventional stage - Skill-centric stage

Stage 4: Conventional stage - Self-determining stage

Stage 4/5: Post-conventional stage - Self-questioning

Stage 5: Post-conventional stage - Self-actualizing

Stage 5/6+: Post-conventional stage – Construct-aware

Administration of the Maturity Assessment Profile

The MAP instrument is a semi-projective test. It offers 36 sentence 'stems' for the respondent to complete to the best of their understanding. It can be explained as a kind of 'verbal Rorschach', where the individual completes the sentences in a way that expresses their meaning-making. A trained rater then interprets these responses and creates a developmental profile. The results of the MAP are delivered according to the placement of the leader within or between stages of development.

Interpretation

Interpretation of the MAP is based on the Leadership Maturity Framework, with individuals identified as being within or between the stages of development presented in Table 9 (Cook-Greuter, 2013).

Table 9

Maturity Assessment Profile (MAP) Stages of Adult Development Descriptions (based on Cook-Greuter, 2013)

The pre conventional stage consists of a single stage numbered 2/3.

The Self-centric stage has the following core characteristics	A person at this stage of development gives and defends against feedback. They focus primarily on their own self-protection, personal needs, material things and immediate opportunities. They may manipulate, deceive, and coerce others when they manage them. They often distrust others and feel like they are being manipulated and as a result hear feedback as an attack. They possess fragile self-control; hostile humour; stereotyping; external blame and view luck as central. They see rules as a loss of freedom and treat what they can get away with as "right." They will punish others according to "eye for an eye" and the "I win, you lose mentality."

The conventional stages consist of multiple stages of development including stages 3, 3/4 and 4.

The Group-centric stage has the core characteristics of conforming and belonging	A person at this stage of development tends to observe protocol and socially expected behaviour, conform to social norms, work to group standards, and generally need approval and a sense of acceptance. They avoid giving a negative impression of themselves and are conflict averse. They think in simple terms and speak in generalities and clichés. They primarily seek membership and external signs of status. They feel shame if they violate rules; hear feedback as personal disapproval and face-saving is essential to them feeling good. They attend to the welfare of their own group and adopt an "us versus them" mentality.
The Skill-centric stage has the core characteristics	A person at this stage of development tends to be immersed in being competent in their own area of interest, regard their way as the only valid way of thinking and base their decisions on incontrovertible "facts". They are consistent in their efforts to improve techniques and efficiency; value high standards and hold strong beliefs and opinions. They hear feedback

of comparing and perfecting	as criticism. They employ single-loop problem-solving; are reactive, dogmatic, perfectionistic; and can get stuck in detail. They need to stand out and be counted in order to feel respected. They have conformist moral standards, are critical of and competitive with others and cannot yet prioritise among competing demands.
The Self-determining stage has the core characteristics of analysing and achieving	A person at this stage of development is generally in charge of themselves as agents and initiators rather than pawns of a system. They focus on delivery of results, effectiveness, goals, and success. They pursue results and effectiveness (rather than efficiency only) and are longer-term and future-oriented. They are systematic (scientific) in their gathering of knowledge, seek proactive ways around problems and may be considered quite unorthodox. Behavioural feedback is accepted as useful for improvement. At this stage, the person begins to appreciate complexity and multiple views but can keep them separate. They believe in objectivity; can collaborate by "agreeing to disagree;' and value mutuality and equality in relationships. They feel guilt when not meeting their own standards or goals and can be somewhat self-critical.

The post-conventional stages of development comprise multiple stages of development including stages 4/5, 5 and 5/6+.

The Self-questioning stage has the core characteristics of relativising and contextualising	At this stage, a person sees themselves in relationship to context and in interaction within systems. They are concerned with differences between reality and appearance; have an increased understanding of complexity and see the systemic connections and unintended consequences of actions. They are aware of their impact on others and begin to question their own assumptions (new focus on own inner life) and that of others. They realise the subjectivity of their beliefs; talk of interpretations rather than truth and can play different roles in different contexts. They begin to seek out and value feedback for its own sake. They

	may seek changes in many life and work situations and have developed the ability to adjust behaviour to context. They too are systematic and can double-loop their problem solving.
The Self-actualising stage has the core characteristics of integrating and transforming.	A person at this stage recognises higher principles, the social construction of reality, and the interactions of complex and dynamic systems. They are interested in the interplay of roles, theory, context, judgment, and not just rules and customs. They are more deliberate in linking theory and principles with practice and pursue problem finding and creative problem solving. They are both process and goal-oriented; aware of paradox and contradiction in the system and in themselves. They nurture a deep appreciation of others, tolerance of difference and deliver non-hostile humour. They have sensitivity to historical moments, larger social movements, and unique market niches. They create "positive-sum" games, are acutely aware of their own power and yet still sometimes tempted by it. They seek feedback from others and the environment as vital for growth and making sense of world.
The Construct–aware and beyond stage has core characteristics, which focus attention that is pointed towards constructs, metacognition, and ego traps to encourage final, all-embracing,	They focus on transforming themselves and others in real time and are highly conscious of complexity of meaning making, systemic interplay, and dynamic processes. They seek personal and spiritual transformation and support others in their life quests. They may create events that become mythical and reframe meaning of some situations. They can work with both chaos and order, they can blend opposites, see light and dark, and continually attend to interaction among thought, feeling, perception and action. They appreciate ambiguity and polarities as well as influences from and effects on individuals, institutions, history, and culture. They treat time and events as symbolic, analogical, metaphorical (not merely linear, digital, literal). They are aware of the opportunity for continuous self-redefinition (story telling) and change as part of life process and how that is challenged by the human yearning for permanence and certainty. Sometimes they can become overly attached to complexity. They may embrace what is in the moment in a way that liberates them from many defensive constraints and opens possibilities for wise choice and creative responses. Feedback is seen as a necessary aspect of being a living organism within systems of interacting systems.

and witnessing of what is.	

Reliability and Validity of the Maturity Assessment Profile

Susanne Cook-Greuter developed the LMF and its measurement instrument – the MAP – over 35 years of research. Both the theory and the measurement instrument have a research history that goes back to Dr Jane Loevinger, a pioneer and thought leader in the field of constructive developmental theory. Loevinger's sentence completion test (SCT) is one of the oldest and most validated stage assessments in the adult development field. She first outlined her theory of healthy self-development in the 1960's basing it on the empirical data from her sentence completion test. Building on the study of hundreds of thousands of additional sentence completions, Cook-Greuter developed the MAP instrument, and expanded Loevinger's theory into the present-day LMF.

The MAP and the following sentence completion measures, Torbert/Herdman-Barker Global Leadership Profile (GLP), the Harthill Leadership Development Profile (LDP), and the Loevinger Washington University Sentence Completion Test (WUSCT) all share about 80% of the same sentence stems (Torbert, 2016). This is important information because the validity and reliability of the MAP (which is one of the latter instruments developed amongst this group) has been demonstrated across the earlier instruments. This process commenced most notably with the WUSCT, which is based on Loevinger's ego development model and has been comprehensively studied with over four decades of meta-analyses and critical overviews, and consistent support for its validity and usefulness (Torbert, 2016). According to an overview by Westenberg et al. (2004 in Torbert, 2016), the WUSCT has robust psychometric properties,

having "indicated excellent reliability, construct validity, and clinical utility" (p. 596) and "findings of over 350 empirical studies generally support critical assumptions underlying the ego development construct" (p. 485) (Torbert & Livne-Tarandach, 2009).

Importantly, Cook-Greuter (2013) advanced the original scoring system by adding a structural logic to Loevinger's theory and applying it to the MAP. Given that Cook-Greuter's system is essentially the same as Loevinger's, it can be argued that the strong prior findings on the internal validity, face validity, and construct validity of the sentence completion test continue to apply (O'Fallon et al., 2020).

Motivation for Using the Maturity Assessment Profile

Torbert (2014) conducted a comprehensive analysis of five adult developmental measures, namely the Torbert/Herman-Barker Global Leadership Profile (GLP) (Rooke & Torbert, 2005), the Harthill Leadership Development Profile (LDP) (Torbert & Livne-Tarandach, 2009), the Cook-Greuter Maturity Assessment Profile (MAP) (Cook-Greuter, 2013), the Kegan Subject-Object Interview (SOI) (Kegan, 1994) and the Loevinger Washington University Sentence Completion Test (WUSCT) (Loevinger, 1998). The LDP, MAP and GLP were all based on the WUSCT (Torbert, 2014) and were compared in the research. The MAP and GLP emerged as the most accurate and updated version of an adult developmental measure for leaders and leadership (Torbert, 2014). Thus, the final choice for this study was the MAP primarily because, in comparisons with the GLP, it has a more psychologically-focused set of outcomes and outputs relevant to the present study.

The Heartstyles Team Indicator (HSTI)

The following section describes the rationale, purpose, administration, interpretation, validity, reliability, and reasons for using the Heartstyles Team Indicator (HSTI, Klemich & Klemich, 2013) in this study.

Rationale and Purpose

Organisation-wide cultures can be defined by many indexes and frameworks. The most widely utilised is Wallach's Organisational Culture Index (Egan, 2008). This index suggests that culture is relatively homogenous across all the divisions and aspects of an organisation. However, the literature review in Chapter 2 established that as the research in the area of organisational culture advances, so the monoculture view of organisations is being challenged by the discovery that numerous subcultures coexist within a single organisation.

Subcultures are defined as a group of individuals who share a common identity and experience that differs from the larger, organisational culture. These subcultures often share rituals, practices, values and social connections that assist in their pursuit of common goals and tasks (Gelder, 2007). A subculture, thus, exists within an intact team where the shared perceptions of the team members are influenced by all the attitudes, beliefs, behaviours and motivations of the team members (Gully et al., 2002).

The collective behaviours of a subculture are, therefore, evident amongst and between team members primarily because those behaviours are explicitly encouraged or inhibited by the team's leader (Pearce & Herbik, 2004). Subcultures are, thus, a more direct and intimate context within which practices and rituals are likely to form and are more readily reinforced in an environment of close proximity between people who interact on a regular basis (Lok et al., 2005). To understand a subculture, it is useful to focus on the smallest unit of a subculture – a

team (van den Berg & Wilderom, 2004). Research shows that work behaviours at team level are more significant in shaping the subculture than espoused values (van den Berg & Wilderom 2004). It is clear that subculture-level leadership style and behaviour are associated with subculture content, configuration and survival, which in turn directly impact team performance (Egan, 2008). Teams and work units are, thus, most directly impacted by a leader's style of leadership (Pearce & Herbik, 2004), and the extent to which that leader influences the collective behaviours of the members of the team (Lok et al., 2005). The effective functioning of a team is, thus, based on the relationship between a leader and their followers (Hiller et al., 2011).

Increasing evidence suggests that the specific values, principles, and behaviours of a team leader influence the subculture of that team, which in turn impacts team performance. The initial phase of subculture identity formation begins with the leader who sets the tone of the permitted behaviours and practices that are either enhanced or limited in alignment with the primary organisational culture (Hofstede, 2001). Thus, subcultures influence employee and team member behaviour more profoundly than the primary organisational culture. The driver of subculture and team behaviour is the leader of that team (Lok et al., 2005). Research of subcultures has identified the leader and a shared set of goals, values, and geographical location as key influences on the behaviour of the collective. This reference to the salience of behaviour as an outcome of a leader's influence on a subculture and team guided the selection of a measuring instrument to assess team culture.

Importantly, in the selection of a measuring instrument of team culture, Levinson (1997, in Leonard, 1997) distinguishes between individual and group character that may be observed in organisations, with the latter being demonstrated by consistent and ingrained behaviours that are evident amongst a group of people. As has been previously noted, character is demonstrated through behaviour, in an equivalent way to how culture is demonstrated through behaviour. In

both cases, these behavioural choices that people make are influenced by their relationships, values, beliefs and life experience.

This study specifically endeavoured to measure team culture with a specific grouping of behaviours being self- and other-focused. There is an obvious alignment with the current organisation of the measurement of character in the study. Based on the aforementioned focus on behaviours in the determination of team culture, it was decided to use the team culture assessment of the HSTI. The assessment quantifies the collective behaviours of the team as demonstrated through self- and other-focused behaviours. This collective measurement of behaviour, thus, defines the dimensions of the team's culture. Theoretically, it has been established that team culture is most influenced by the values and behaviours of the senior team leader. Given that this study will measure the senior team leader's character, it was resolved that an instrument with the same survey items for an individual would be prudent to apply to the collective team members and, thus, measure collective behaviour and culture. The naming convention for the senior team leader's team culture was adjusted to 'a senior team leader's team culture (as demonstrated through self- and other-focused behaviours).'

Dimensions of the Heartstyles Team Indicator

The HSTI scale is constituted of 16 dimensions (all equivalent to the dimensions of the Heartstyles Individual Indicator). Eight of these dimensions are defined as effective behavioural dimensions equally divided between growing-self (self-focused) and growing-others (other-focused) behaviours. The other eight dimensions are defined as ineffective behavioural dimensions and are equally divided between self-protecting (self-focused) and self-promoting (other-focused) behaviours.

Only the eight effective behavioural dimensions were included in this study, namely, those focused on growing-self (self-focused) and growing-others (other-focused). This aligns with the specific focus of the individual character instrument. Measurement of a team's culture is not a single score, but rather eight separate dimensions. It is also salient to confirm that the dimensions measured for the individual leader's character are the same dimensions measured at a team level. These dimensions are all measures of perceived behaviour.

Dimensions one to four are considered self-focused and primarily growing-self, whereas dimensions five to eight are other-focused and aimed at growing others. The growing-self (self-focused) construct consists of four dimensions, namely Authentic, Transforming, Reliable and Achieving, as defined below.

1. Authentic – measures a team's collective transparency and ability to be themselves around others; to speak their truth; be frank, open, and express themselves freely.

2. Transforming – measures a team's ability to continuously improve their thinking and behaviour; seek opportunities and take responsibility for their personal growth, and consistently study to develop and grow.

3. Reliable – measures a team's level of dedication, reliability, dependability, discipline, and congruence.

4. Achieving – measures a team's ability to take reasonable risk to attain effective results; and to act and take initiative.

The growing-others (other-focused) construct consists of four dimensions, namely Relating, Encouraging, Developing and Compassionate. These dimensions are defined below.

1. Relating – measures a team's ability to get along and relate well to others; be good communicators and approachable.

2. Encouraging – measures a team's ability to actively encourage, compliment and listen to others.

3. Developing – measures a team's willingness to take time with people to develop and broaden their skills and capabilities through teaching and coaching.

4. Compassionate – measures the team's ability to be compassionate, caring, kind and considerate toward others.

These eight dimensions were measured against the survey items listed in Table 10.

Table 10

Heartstyles Team Indicator (HSTI) Dimensions and Survey Items (from Klemich & Klemich, 2013)

Dimensions	Survey Items/Descriptors
1. Growing Self (self-focused) – Authentic	(a) are themselves around others. (b) Speak the truth, frank and open. (c) Express themselves freely. (d) Transparent about themselves
2. Growing Self (self-focused) – Transforming	(a) Continuously try to improve thinking and behaviour. (b) Seeks and takes opportunities for personal growth. (c) Takes responsibility for personal growth. (d) Consistently studies to develop growth areas. (e) knows personal growth needs and seeks ways to develop
3. Growing Self (self-focused) – Reliable	(a) Dedicated and disciplined. (b) Congruent - does what they say they will do. (c) Dependable people (d) Reliable and steady
4. Growing Self (self-focused) – Achieving	(a) Takes reasonable risk to attain effective results (b) Sees what needs to be done and acts. (c) Takes responsibility to achieve goals.

			(d)	Takes initiative when opportunities arise
5.	Growing (other-focused) Relating	Others –	(a) (b) (c) (d)	Get along well with others. Relate well to others. Good communicators Friendly and approachable
6.	Growing (other-focused) Encouraging	Others –	(a) (b) (c) (d)	Actively encourage others. Genuinely compliment others. Good listeners and encouragers Praise others
7.	Growing (other-focused) Developing	Others –	(a) (b) (c) (d) (e) (f)	Willing to take time with people to develop them. Enjoys teaching others. Good teachers Coaches others to broaden skills and capabilities Develops others. Assists others in solving problems
8.	Growing (other-focused) Compassionate	Others –	(a) (b) (c) (d) (e) (f)	Compassionate toward others. Cares for others Sympathetic, without Encouraging self-pity. Considerate Genuine concern for others Kind and generous

Administration of the Heartstyles Team Indicator

The HSTI is a 75-item questionnaire that uses a 5-point Likert scale structured as follows: a score of 1 = never, 2 = rarely, 3 = sometimes, 4 = often and 5 = almost always. It is administered online and takes between 20–30 minutes to complete. Individuals complete a benchmark scale that defines what they believe to be ideal and aspirational scores for each dimension. They then complete a self-score defining their own estimation of scores for each dimension as applied to

themselves. Finally, each individual has to choose between three, six, nine, 12 or 15 respondents to provide multi-rater feedback across each of the dimensions. For the purposes of this study no benchmark or self-scores were included, and the multi-rater score from six respondents was used in the study.

Interpretation

The scoring guidelines for the HSTI interpret raw scores below 50 on a scale of 0 to 100 as a development area, whilst any score above 50 is considered a strength. No specific scale is provided to extrapolate different ranges of strengths or weaknesses within the 0–50, and the 50–100 score ranges.

Reliability and Validity of the Heartstyles Team Indicator

The HSTI is an adaptation of the HSII and has no distinct reliability and validity metrics apart from those demonstrated for the HSII.

For the HSII the validation studies showed that criterion-related validity was verified through predictive performance studies consisting of significance correlations regression analyses along with factor analysis. Construct-related validity was shown by way of low construct-irrelevant variance along with intra-measure convergent and discriminant validity. Content-related validity evidence was demonstrated through role-based targets and appropriate weightings, ensuring that only the behavioural constructions that are deemed to be important and critical were retained and incorporated. Reliability analyses were also completed that demonstrated internal consistency through Cronbach's alpha coefficients along with test-retest correlations (Anderson & Jahng, 2011). The Cronbach's alphas for the eight effective dimensions of the HSII (Anderson & Jahng, 2011) are shown again for reference in Table 11.

Table 11

Internal Consistency of the Eight Self- and Other-Focused Dimensions (Cronbach's Alpha)

Dimension and corresponding Cronbach Alpha score

1. Authentic = .740
2. Transforming = .879
3. Reliable = .777
4. Achieving = .782
5. Relating = .769
6. Encouraging = .814
7. Developing = .855
8. Compassionate = .820

Motivation for Using the Heartstyles Team Indicator

The HSTI measures eight dimensions of team culture aligned with the constructs of leadership character. These are broadly balanced across behaviours that focus on self and focus on others. The HSTI provides dimensions of measurement that fulfil the theoretical conceptualisation of team culture and are aligned with individual character. The tool, thus, represented the most appropriate measurement instrument for this study.

Limitations of the Psychometric Battery Used in the Study

The conceptualisation of the senior team leader's character (as demonstrated through self- and other-focused behaviour), the senior team leader's perceived level of integrity, the senior team leader's stage of adult development, and the senior team leader's team culture (as demonstrated through self- and other-focused behaviours) may not perfectly align the concepts with the constructs. Therefore, some of the limitations of the selected instruments are discussed.

Limitations of the Heartstyles Individual Indicator (HSII)

The conceptualisation of character and its operationalisation into primary constructs do not exactly align with the dimensions of the HSII instrument. The character constructs measured through the HSII were not evenly distributed across the primary conceptual elements of character. However, as was demonstrated in Table 1, there was sufficient concept-construct alignment across all the dimensions measured by the HSII, despite the weighted dominance of the concept-construct alignment across dimensions, such as Reliable, Authentic and Relating. Of significance to the concept-construct alignment was the equal weighting of self-focused to other-focused instrument dimensions, an important aspect of the conceptualisation and operationalisation of a senior team leader's character.

Limitations of the Perceived Leader Integrity Scale (PLIS)

As shown in Table 2, the concept-construct alignment was not symmetrical, with a handful of conceptual elements being measured significantly more often through the PLIS than others. In addition, the concept-construct alignment was not always as succinct and accurate as would be desired. However, the concept-construct overview provides sufficient alignment to promote confidence that the instrument does indeed measure the conceptualisation of integrity as defined in the study. Craig and Gustafson (1998) developed the PLIS for assessing impressions of the integrity, ethics, and destructive behaviours of managers and leaders. This overarching aim is in alignment with the aims of the study.

Some of the survey items may be considered as slanderous and incriminating, and therefore may dissuade respondents from honestly responding to them. These items may also push respondents to opt out of the completion of this instrument altogether.

Limitations of the Maturity Assessment Profile (MAP)

The conceptualisations of the senior team leader's stage of adult development were directly aligned with the work of Cook-Greuter (2013), who conceptually defined stages of adult development that synthesise key theoretical works in the field. Cook-Greuter's work led to the development of the MAP used in this study and, thus, provided concept-construct alignment. No significant limitations were evident in the use of MAP to measure senior team leaders' stage of adult development.

Limitations of the Heartstyles Team Indicator (HSTI)

The HSTI measures eight dimensions of team culture through evaluation of behaviours through multi-rater inputs. These measured behaviours are equally balanced across behaviours that are self- and other-focused. The HSTI aligns with the conceptualisation of team culture as a combination of the collective behaviours of team members. Therefore, no significant limitations were identified in using HSTI to measure a senior team leader's team culture (as demonstrated through self- and other-focused behaviours).

In conclusion, analysis of available measurement instruments suggested that the HSII, PLIS, MAP and HSTI were appropriate to understand the interrelationships between a senior team leader's character (as demonstrated through self- and other-focused behaviour); a senior team leader's perceived level of integrity; a senior team leader's stage of adult development, and a senior team leader's team culture (as demonstrated through self- and other-focused behaviour).

Description of the Population and Selection of the Study Sample

Senior team leaders and senior team leader's teams comprised the population that was the focus of this research. The population of senior team leaders is commonly referred to as executives

or leadership team members. These leaders lead businesses that have their primary operations within the geographical borders of South Africa and vary in terms of gender, age, ethnicity, race, and educational background. In addition, the population of senior team leaders studied had all been in their executive and/or leadership team roles for an uninterrupted period of a minimum of 12 months.

The population of senior team leader's teams are commonly referred to as senior, executive or leadership teams. This population of senior team members are led by an executive and/or leadership team member and have their primary operations in South Africa. These teams comprise between three to 12 members of any gender, age, ethnicity, race, and educational background. The population of team members did not include temporary, task-focused or project teams.

The sampling frame adopted was a combination of the following non-probability sampling methods, namely – convenience sampling and snowball sampling. The sample selection was conducted in the following steps:

Step 1: An initial list of 41 senior team leaders' contact details was created from a network of 16 leadership and strategy consultants based in Cape Town, South Africa.

Step 2: An email was sent to each of the identified senior team leaders. This email described the purpose and aim of the study, an overview of the assessments to be completed, the approximate research and data gathering timelines, the requirement to include their senior team members in the study, estimated time required to participate in the study (defined in hours and minutes), and key ethical considerations such as assured confidentiality, anonymity, and duty of care. In addition, each senior team leader was offered a 30-minute telephonic conversation

to discuss and further explain the purpose, content, process, and general context of the study, should they have desired more information.

Step 3: A total of 25 of the 41 initial senior team leaders and their senior teams responded to the introductory email. These 25 senior team leaders volunteered themselves and their senior teams to participate in the study.

Step 4: After an additional review, 25 was considered an insufficient number of participants for the study sample. Therefore, an additional request for senior team leaders' contact details was made to the aforementioned 16 leadership and strategy consultants, and the 25 senior team leaders who had already confirmed their participation in the study. Multiple appeals for qualified study participants were also posted on the LinkedIn social media network by the researcher.

Step 5: An additional 11 qualified, senior team leaders volunteered to participate and were each sent the information pack outlined in Step 2. The total sample of senior leaders and their senior teams was, thus, eventually 36.

Step 6: After the sample of 36 senior leaders and their teams had been confirmed, an email was sent to each of the identified senior team members who were included in the study by their senior team leader. This email described the purpose and aim of the study, an overview of the assessments, the approximate research and data gathering timelines, the requirement to include senior team members in the study, estimated time required to participate in the study (defined in hours and minutes), and key ethical considerations such as assured confidentiality, anonymity, and duty of care.

Due to time constraints none of these identified senior team members (excluding the leader of the senior team) were offered telephonic conversations to gather more information for themselves from the researcher.

Step 7: Each senior team leader was sent an Excel spreadsheet with pre-populated headings to complete. The name, contact detail, role, and tenure in team of each of the senior team members had to be recorded on the designated spreadsheet. The senior team leaders were required to send this information sheet back to the researcher as confirmation of their inclusion in the study, and to initiate the process of data gathering.

Step 8: All assessments were then distributed via emailed documents and portal links to all identified participants in the study. The initial number of 36 senior team leaders and their teams who signed up to the study was reduced to 31 senior team leaders and their teams who eventually completed all the required steps in the data gathering process (a completion rate of 86%). The primary reason provided by the senior team leaders for not completing their involvement in the study was a lack of time.

In summary, the data for the study were gathered from 31 senior team leaders and their senior teams. These teams volunteered their participation and represented various sectors from within the South African economy, including manufacturing (5 teams = 16% of sample), financial services (14 teams = 45% of sample), technology and software (5 teams = 16% of sample), retail (4 teams = 13% of sample), quick service restaurants (2 teams = 7% of sample) and marketing/advertising (1 team = 3% of sample).

A total of 180 senior team members of the 31 identified senior leader's teams participated in the study (excluding their senior team leader). These 180 senior members invited 1080

additional people to participate as raters in the measurement of the senior team culture (as demonstrated through self- and other-focused behaviours).

The 31 senior team leaders requested that the 180 senior team members also provide multi-rater feedback as a measurement of their senior team leader character (as demonstrated through self- and other-focused behaviours). The senior team leader requested the same 180 senior team members provide multi-rater feedback to measure their senior team leader's levels of perceived integrity. However, only 160 senior team members participated in the completion of this instrument.

The 31 senior team leaders each individually completed a self-report assessment of their stage of adult development. The use of three multi-rater instruments meant a total of 1451 completed assessments and surveys were collected and submitted for statistical analysis. The total completed assessments are summarised in Table 12.

Table 12

Summary of Total Completed Assessments

Maturity Assessment Profile (MAP) (self-feedback)	Senior leadership Team Culture Indicator (HSTI) – Multi-rater feedback	Senior team leader character indicator (HSII) – Multi-rater feedback	Perceived Level of integrity of individual senior team leader (PLIS) – multi-rater feedback
31 individual senior team leaders were assessed	31 senior leadership teams were assessed	31 individual senior team leaders were assessed	31 individual team leaders were assessed
31 individuals submitted an assessment	1080 individuals submitted an assessment	180 individuals submitted an assessment	160 individuals submitted an assessment
Total completed assessments	1451		

Ethical Considerations in Administration of the Psychometric Battery

Ethical clearance was obtained from the University Research Ethics Committee. The researcher adhered to the moral principles of ethics as outlined in the UNISA Research Ethics Policy, which are the following (UNISA, 2013):

1. Autonomy – the research will respect the autonomy, rights, and dignity of the participants.
2. Beneficence – the research should make a positive contribution towards the welfare of people.

3. Non-maleficence – the research will not cause harm to the participants specifically or to people in general.

4. Justice – the benefits and risks of research should be fairly distributed among people.

The researcher ensured the above-mentioned ethical considerations through the following activities and means:

1. The researcher obtained permission from each of the senior team leaders and their senior team members to conduct this study.

2. All participants were assured of the right to withdraw and disengage from the research at any time.

3. Participants were assured that their results would be deleted and not included in the study should they wish to disengage.

4. All participants were promised confidentiality and anonymity of their inputs, and to that end each assessment completed by an individual was converted into a participant code, which was then used to conduct the scoring.

5. The senior team leaders who were the primary unit of analysis all received detailed, written feedback (and an optional one-on-one feedback session of 60 minutes) to unpack the results of the various assessments that they completed.

6. Participants incurred no costs other than their time (which was clearly defined as a precursor to their voluntary participation).

The listed processes were designed to ensure that the rights, dignity, and welfare of the participants were protected through strict confidentiality, and that the outputs of the individual results were shared to add value to the individuals' further development. It is important to note that despite these processes it was still likely that the higher rank and power of the senior leaders sending invitations to their lower rank and power team members and colleagues would have

made them feel compelled to participate. In other words, the voluntary participation that was offered may not have felt possible for all the participants. It should be noted that a small number of people did take up the voluntary option and declined to participate.

Formulation of the Research Hypotheses

The statistical analysis related to the following research objectives, research questions and research hypotheses:

Research Objective 5: To conduct an empirical analysis of the interrelationships between a leader's character, perceived level of integrity, stage of adult development, and team culture.

The research question related to Research Objective 5 was: What are the empirical interrelationships between a leader's character, integrity, stage of adult development, and team culture?

Empirical evidence for the correlation of transformational leadership (a contemporary subfield of leadership theory) with the concepts of character (Hendrix et al., 2015), integrity (Palanski & Yammarino, 2007), moral orientation (as an outcome of adult development) (McGregor, 2003), and team effectiveness (as an outcome of team culture) (Schaubroeck et al., 2011) were provided in the literature review in Chapter 2. However, these concepts have not been empirically correlated with each other. The review of relevant leadership theory in Chapter 2 revealed the following theoretical interrelationships between a senior team leader's character (as demonstrated through self- and other-focused behaviours), the senior team leader's stage of adult development, the senior team leader's perceived level of integrity, and the senior team leader's team culture (as demonstrated through self- and other-focused behaviours).

The literature review suggested that there may be a model that fits the constellation of concepts depicted in Figure 2. It is possible that this model has explanatory value in contemporary leadership theory, and specifically, with respect to transformational leadership theory. Two main objectives, thus, emerged with respect to these theoretical interrelationships, including:

1. The opportunity to explore whether the model presented in Figure 2 exists.

2. The opportunity to explore the usefulness of the model in the context of transformational leadership theory (should the model exist as presented in Figure 2).

The following research hypotheses were formulated to address the theoretical relationships between a senior team leader's character (as demonstrated through self- and other-focused behaviours), the senior team leader's perceived level of integrity, the senior team leader's stage of adult development, and the senior team leader's team culture (as demonstrated through self- and other-focused behaviours):

1. Research Hypothesis 1 (H1): The senior team leader's character (as demonstrated through self- and other-focused behaviours) is correlated with the senior team leader's perceived level of integrity.

2. Research Hypothesis 2 (H2): The senior team leader's character (as demonstrated through self- and other-focused behaviours) is correlated with the senior team leader's team culture (as demonstrated through self- and other-focused behaviours).

3. Research Hypothesis 3 (H3): The senior team leader's character (as demonstrated through self- and other-focused behaviours) is correlated with the senior team leaders' stage of adult development.

4. Research Hypothesis 4 (H4): The senior team leader's perceived level of integrity is correlated with the senior team leader's stage of adult development.

5. Research Hypothesis 5 (H5): The senior team leader's stage of adult development is correlated with the senior team leader's team culture (as demonstrated through self- and other-focused behaviours).

6. Research Hypothesis 6 (H6): The senior team leader's perceived level of integrity is correlated with the senior team leader's team culture (as demonstrated through self- and other-focused behaviours).

7. Research Hypothesis 9 (H9): The senior team leader's character (as demonstrated through self- and other-focused behaviour), is a function of the senior team leader's team culture (as demonstrated through self- and other- focused behaviours), the senior team leader's stage of adult development, and the senior team leader's perceived level of integrity.

8. Research Hypothesis 10 (H10): The senior team leader's stage of adult development is a function of the senior team leader's character (as demonstrated through self- and other-focused behaviours), the senior team leader's level of perceived integrity and the senior team leader's team culture (as demonstrated through self- and other-focused behaviours).

9. Research Hypothesis 11 (H11): The senior team leader's perceived level of integrity is a function of the senior team leader's team culture (as demonstrated through self- and other-focused behaviours), the senior team leader's stage of adult development and the senior team leader's character (as demonstrated through self- and other-focused behaviours).

10. Research Hypothesis 12 (H12): The senior team leader's team culture (as demonstrated through self- and other-focused behaviours) is a function of the team leader's perceived level of integrity, the senior team leader's character (as demonstrated through self- and other-focused behaviours), and the senior team leader's stage of adult development.

In Chapter 2 it was revealed that a leader's capability and style directly influence the success or failure of organisational outcomes (Asrar-ul-Haq & Anwar, 2018) and that teams, as subsets of organisational structure, most directly influence these organisational outcomes (Lok et al., 2005). Teams and work units are, thus, most directly impacted by a leader's style of leadership (Pearce & Herbik, 2004), and the extent to which that leader influences the collective behaviours of the members and the culture of the team (Lok et al., 2005). The effective functioning of a team is influenced significantly by the relationship between a leader and their followers (Hiller et al., 2011). Team potency, defined as team members' belief in their team's ability to achieve collective goals, was significantly and positively correlated with transformational leadership (Schaubroeck et al., 2007). Of particular interest in this study are the influences on collective behaviours and the culture of a team. Thus, this study explored the moderating influence that a senior team leader's stage of adult development and perceived level of integrity has on the relationship between the senior team leader's character and senior team leader's team culture.

The following hypothesis was formulated to address the theoretical moderating effect of the senior leader's stage of adult development on the relationship between the senior team leader's character (as demonstrated through self- and other-focused behaviours) and the senior team leader's team culture (as demonstrated through self- and other-focused behaviours).

> Research Hypothesis 7 (H7): The relationship between the senior team leader's character (as demonstrated through self- and other-focused behaviours) and the senior team leader's team culture (as demonstrated through self- and other-focused behaviours) is moderated by the senior team leader's stage of adult development.

The following hypothesis was formulated to address the theoretical moderating effect of the senior team leader's level of integrity on the relationship between the senior team leader's

character (as demonstrated through self- and other-focused behaviours) and the senior team leader's team culture (as demonstrated through self- and other-focused behaviours):

> Research Hypothesis 8 (H8): The relationship between the senior team leader's character (as demonstrated through self- and other-focused behaviours), and the senior team leader's team culture (as demonstrated through self- and other-focused behaviours) is moderated by the senior team leader's perceived level of integrity.

The empirical research objectives, hypotheses and statistical analysis applied in the study are summarised in Table 13.

Table 13

Summary of Research Questions, Hypotheses, and Statistical Procedures

Research Questions	Research Hypotheses	Statistical Procedures
Research Question 5: What are the empirical interrelationships between a leader's character, integrity, stage of adult development, and team culture? (Referring to Research Objective 5)	**Research Hypothesis 1:** The senior team leader's character (as demonstrated through self- and other-focused behaviours) is correlated with the senior team leader's perceived level of integrity.	Pearson's correlation coefficient Kendall tau-b correlation coefficient
	Research Hypothesis 2: The senior team leader's character (as demonstrated through self- and other-focused behaviours) is correlated with the senior team leader's team culture (as demonstrated through self- and other-focused behaviours).	Pearson's correlation coefficient Kendall tau-b correlation coefficient
	Research Hypothesis 3: The senior team leader's character (as demonstrated through self- and other-focused behaviours) is correlated with the senior team leader's stage of adult development.	Pearson's correlation coefficient
	Research Hypothesis 4: The senior team leader's perceived level of integrity is correlated with the senior team leader's stage of adult development.	Pearson's correlation coefficient

	Research Hypothesis 5: The senior team leader's stage of adult development is correlated with the senior team leader's team culture (as demonstrated through self- and other-focused behaviours).	Pearson's correlation coefficient
	Research Hypothesis 6: The senior team leader's perceived level of integrity is correlated with the senior team leader's team culture (as demonstrated through self- and other-focused behaviours).	Pearson's correlation coefficient Kendall tau-b correlation coefficient
	Research Hypothesis 7: The relationship between the senior team leader's character (as demonstrated through self- and other-focused behaviours) and the senior team leader's team culture (as demonstrated through self- and other-focused behaviours) is moderated by the senior team leader's stage of adult development.	Moderation Regression Analysis
	Research Hypothesis 8: The relationship between the senior team leader's character (as demonstrated through self- and other-focused behaviours), and the senior team leader's team culture (as demonstrated through self- and other-focused behaviours) is moderated by the senior team leader's perceived level of integrity.	Moderation Regression Analysis

	Research Hypothesis 9: The senior team leader's character (as demonstrated through self- and other-focused behaviour), is a function of the senior team leader's team culture (as demonstrated through self- and other-focused behaviours), the senior team leader's stage of adult development and the senior team leader's perceived level of integrity.	Multiple Analysis	Regression
	Research Hypothesis 10: The senior team leader's stage of adult development is a function of the senior team leader's character (as demonstrated through self- and other-focused behaviours), the senior team leader's level of perceived integrity, and the senior team leader's team culture (as demonstrated through self- and other-focused behaviours).	Multiple Analysis	Regression
	Research Hypothesis 11: The senior team leader's perceived level of integrity is a function of the senior team leader's team culture (as demonstrated through self- and other-focused behaviours), the senior team leader's stage of adult development, and the senior team leader's character (as demonstrated through self- and other-focused behaviours).	Multiple Analysis	Regression
	Research Hypothesis 12: The senior team leader's team culture (as demonstrated through self- and other-focused behaviours) is a function of the team leader's perceived level of integrity, the senior team leader's character (as demonstrated through self- and other-focused behaviours); and the senior team leader's stage of adult development.	Multiple Analysis	Regression

Chapter Summary

The objective of this chapter was to map, explain and discuss the empirical approach to addressing the research objectives of the study. This chapter explained the steps one to six identified at the beginning of the chapter, namely:

Step 1: Define research questions and concepts.

Step 2: Select assessment and survey instruments.

Step 3: Define the study population and select the sample.

Step 4: Formulate the research hypotheses.

Step 5: Administer measurement instruments.

Step 6: Capture and error check the data.

The empirical research objectives, hypotheses and statistical analysis applied in the study were summarised in Table 13. The results of the statistical analyses are presented in the Research Results chapter (Chapter 4) that follows.

CHAPTER 4: ANALYSIS AND RESULTS

This chapter presents the analysis of the collected data and the results of the analysis. A logical positivistic approach was used in analysing and discussing the results. Following this approach, a specific reality (or truth) is presupposed (e.g., that two variables are not correlated). The observed data are assessed in terms of the presupposed reality or truth. For example, an observed correlation is assessed in terms of the presupposed non-correlation. If the observed correlation deviates significantly from the presupposed non-correlation, one concludes that the observed correlation cannot be a non-correlation. In other words, following this logic the conclusion is that observed data support or do not support a presupposed reality (conclusion 1). However, this conclusion is not equivalent to the conclusion that a presupposed reality supports or does not support the observed data (conclusion 2).

Viewing these conclusions as equivalent confuses aleatory and epistemic approaches to probability, which are fundamentally different. Clayton (2021) refers to this confusion as Bernoulli's fallacy. Thus, conclusion 1 (employing an aleatory approach to probability) should not be confused with conclusion 2, which employs an epistemic approach. In other words, the probability used to predict an observation given a probable reality should not be confused with the probability used to determine a probable reality given an observation.

The present chapter follows an aleatory approach in which a frequentist theory of probability is employed. It begins with a probable reality of no relationships among the variables in question and considers the probability that this reality supports the relationships observed in the study. Not all the observed relationships are found to be supported, and an alternative model of reality is formulated to better accommodate the observed relationships. However, it is important to note that, although the alternative model is derived from the originally assumed reality, the

alternative model is not an assumed reality. It is a probable reality given the observed data. The probability of this reality is epistemic (not aleatory), following from rational and logical considerations of the implications of an observation. The implications of the alternative model are discussed in Chapter 5.

This chapter is structured according to the topics that are traditionally associated with a logical, positivistic approach. The chapter will first present the model to be analysed and the data collected for that analysis. This is followed by general considerations of hypothesis testing and the nature of research hypotheses, whereafter there is a presentation of the hypotheses to be tested, the methods and results of the analyses, and the exploration of these results.

Model Subjected to Analysis

Whilst Figures 1 and 3 are similar, Figure 1 is a conceptual framework and Figure 3 is a conceptual model. The terms 'framework' and 'model' are often used interchangeably. However, a framework presents the proposed structure of something and a model represents something that is real. The conceptual framework (Figure 1), therefore, presents the concepts and their interrelationships (the conceptual structure) at the heart of the theoretical framework depicted in Figure 2. The concepts in a conceptual framework are, therefore, not operationalised. The conceptual model depicted in Figure 3 represents the real-life processes that are understood in terms of the theoretical framework (Figure 2) and the concepts of the model are operationalised as constructs. The concepts of a leader's character, integrity, stage of adult development, and a leader's team culture were operationalised as HSII, PLIS, MAP and HSTI scores, respectively. The descriptive statistics are provided in Tables A21 to A30 in Appendix A.

Data Collected for Analysis

The data collected for analysis were gathered through the administration of four questionnaires (HSII, PLIS, MAP and HSTI). The HSII data are multi-rater observations of a leader's behaviour and are interval data. The HSTI data are multi-rater observations of a team of a leader's behaviours and are interval data. The MAP data are self-report descriptions of the experiences of a leader and are interval. The PLIS data are multi-rater observations of a leader's behaviour, also interval.

As referenced by In'nami and Koizumi (2013), a sample size below 100 participants is often considered small, between 100 and 200 is medium, and one exceeding 200 participants is large. The sample size of the current study was 31 senior team leaders. This sample was small primarily because of the practicality of recruiting participants at senior levels of management within companies due to the following challenges:

1. There are a limited number of such leaders.

2. These senior leaders are often time poor and unavailable.

3. Each case included up to 15 additional raters who generated data about the senior leader and their team. Thus, increasing the number of cases would involve an exponential increase in people required to generate the data for the study.

General Considerations of Hypothesis Testing and the Nature of Research Hypotheses

Models, and the hypotheses derived from them, vary in degree of complexity. However, a similar logic of hypothesis testing is utilised when considering the truthfulness and value of a model. The aim of hypothesis testing is to determine whether a general reality (or truth) is probable based on a particular observation or statistic obtained from a sample. Therefore, the

closer the observation or statistic is to the reality (or truth) the more probable the reality (or truth).

The method requires a reversed way of thinking. Instead of beginning with the observed value or statistic, hypothesis testing begins with the general reality. The orthodox way to relate the probability of the reality to the observation is to presuppose a particular reality, and then determine the probability of the observation given the assumed reality or truth. Thus, the orthodox logic of hypothesis testing is to presuppose a statistical value and its distribution of observation frequencies and then determine where the observed statistic lies within this distribution.

The analysis reported in this chapter relies on this orthodox approach to hypothesis testing. The presupposed reality is that the model depicted in Figure 1 does not exist. Thus, for the correlation analyses conducted in this study, the presupposed reality or truth is that there are no correlations between the variables associated with the concepts of a leader's character, a leader's perceived level of integrity, a leader's stage of adult development, and a leader's team culture. In other words, the assumed parameter values are null correlations between these variables – the null model.

The aim of the analysis was to determine where the correlations that have been observed between the variables (the observed statistics) lie in the distributions associated with the null correlations (the assumed parameters). A similar logic is employed in further explorations of the nature of the model, looking for moderation and regression effects. The observed statistics of interaction and regression coefficients are considered in terms of the parameter distributions of null interaction and null regression coefficients.

Importantly, a parameter's distribution is the distribution of an infinite number of observations of the parameter. While most observations correspond to the parameter, there are many observations that also do not correspond to the parameter. Hence the observations constitute a distribution around the parameter and the distribution is a matter of frequencies. The closer an observed statistic is to the assumed parameter, the higher the frequency of that observation's occurrence. Intuitively this translates to probability, where the closer an observed statistic is to the assumed parameter, the higher the probability of observing the statistic in question. This is the interpretation of probability that the orthodox approach to hypothesis testing relies on. Technically, the probability associated with an observed statistic is the limit of its frequency given an infinite number of observations. This is a frequentist interpretation of probability.

Employing the orthodox logic of hypothesis testing has implications for how one understands research hypotheses. Research hypotheses must be considered in terms of null and alternative hypotheses. Null hypotheses are deduced from the reality that is assumed to be true. Thus, if the assumption is that the variables associated with the concepts of the model depicted in Figure 1 do not intercorrelate, the null hypotheses would state that there are no correlations between the variables associated with the concepts of leader's character, perceived levels of integrity, stage of adult development, and a leader's team culture. These are the hypotheses that are subjected to hypothesis testing, and they are either accepted or rejected. It is important to note that it is not the observation (e.g., an observed correlation) but the pre-assumed reality (the model of null correlations) that is tested.

Thus, one can ask about the likelihood of an observation given the presumed reality or truth. However, one cannot turn this question around and ask about the likelihood of a presumed reality or truth given an observation. In other words, in the present case, one can ask about the likelihood of the observed correlations between the variables associated with the concepts

depicted in Figure 1, given the assumption that these concepts are not related. However, one cannot ask about the likelihood of the model having null correlations given the correlations observed in the study. This is not simply a matter of semantics. When one asks how much an observation (statistic) differs from a presumed reality or truth (parameter), one considers the observation in terms of the distribution of observations of a presumed reality or truth. However, when one asks how much a presumed reality or truth (parameter) differs from an observation (statistic), one considers the reality or truth in terms of the distribution of realities or truths associated with the observation. These are different distributions.

Therefore, the orthodox approach to hypothesis testing employed in the analyses reported in the present chapter allows one to consider the reality or truth of a model of null correlations. However, it does not allow us to speculate about the realities or truths of models of non-null correlations. The best we can do, should the model of null correlations be fully or partly rejected, is to accept a reality or truth that opposes the model of null correlations. The hypotheses deduced from an oppositional model are the alternative hypotheses. However, they do not convey any information over and above stating the opposites of the null hypotheses. They do not allow or guide any further considerations of models of non-null correlations. In fact, they exclude considerations beyond null hypotheses and their opposites. The orthodox approach to hypothesis testing does not encourage the kind of speculative considerations required for explorative research, which means useful information may be ignored and lost in the process.

The following sections contain the hypotheses deduced from the model depicted in Figure 1, the analyses of the model and the results of the analyses. First, the assumption was tested that the correlations between the variables associated with the concepts of leader character, perceived leader integrity, leader stage of adult development and leader's team culture were

null correlations. As the assumption of null correlations did not hold, the correlations were explored further, looking for moderating and regression effects.

Analysis of Intercorrelations

The conceptual model (Figure 3) was operationalised in terms of the scores obtained from four questionnaires. Thus, the concepts of a leader's character, perceived levels of integrity, stage of adult development, and a leader's team culture were operationalised as HSII, PLIS, MAP and HSTI scores, respectively. The relationships among the four concepts were expressed as correlations between the construct variables of questionnaire total scores and questionnaire subscale scores.

Research Hypotheses

The following research hypotheses were formulated as alternatives to the expected null-correlations derived from the model depicted in Figure 3.

- Research Hypothesis 1: The senior team leader's character (as demonstrated through self- and other-focused behaviours) is correlated with the senior team leader's perceived level of integrity.

- Research Hypothesis 2: The senior team leader's character (as demonstrated through self- and other-focused behaviours) is correlated with the senior team leader's team culture (as demonstrated through self- and other-focused behaviours).

- Research Hypothesis 3: The senior team leader's character (as demonstrated through self- and other-focused behaviours) is correlated with the senior team leaders' stage of adult development.

- Research Hypothesis 4: The senior team leader's perceived level of integrity is correlated with the senior team leader's stage of adult development.

- Research Hypothesis 5: The senior team leader's stage of adult development is correlated with the senior team leader's team culture (as demonstrated through self- and other-focused behaviours).

- Research Hypothesis 6: The senior team leader's perceived level of integrity is correlated with the senior team leader's team culture (as demonstrated through self- and other-focused behaviours).

Method of Analysis

The relationships among the four concepts of the conceptual model were expressed as correlations between the construct variables of the questionnaire total scores. The distributions of these scores were parametric. Therefore, the Pearson's Product Moment correlation coefficients were used to calculate the strengths and directions of the correlations.

Two of the questionnaires, the HSII and the HSTI, are multidimensional and consisted of eight subscales each. The correlations between these subscale totals were calculated using Kendall's tau-b because the distributions of these scores were non-parametric. The information used for analysis is summarised in Table 14.

Table 14

Information Used for Correlational Analysis

Concept	Construct	Construct Variables
Adult development (of leader)	Maturity Assessment Profile (MAP)	Questionnaire total score
Perceived integrity (of leader)	Perceived Leader Integrity Scale (PLIS)	Questionnaire total score
Character (of leader)	Heartstyles Individual Indicator (HSII)	Questionnaire total score
		Subscales total scores
Team culture (of leader's team)	Heartstyles Team Indicator (HSTI)	Questionnaire total score
		Subscales total scores

Note: On the PLIS, a higher level of perceived integrity is reflected in lower total scores, resulting in negative correlations with other questionnaire totals and subscale totals.

Results of Analysis

The results of the correlational analyses are provided in Tables 15 and 16. Table 15 contains the Pearson product-moment correlations between the four questionnaire total scores. It depicts the correlations between the subscales of the multidimensional questionnaires of the HSII and the HSTI. These correlations are expressed as Kendall's tau-b coefficients.

Table 15

Summary of Correlations between the Heartstyles Individual Indicator (HSII), Perceived Leader Integrity Scale (PLIS), Heartstyles Team Indicator (HSTI) and Maturity Assessment Profile (MAP)

		HSII	PLIS	HSTI	MAP
Pearson's Correlation Coefficient	HSII				
	PLIS	-0.601** (*p*=.000)			
	HSTI	0.564** (*p*=.000)	-0.528** (*p*=.001)		
	MAP	0.039 (*p*=.399)	0.048 (*p*=.146)	0.195 (*p*=.418)	

n=31, ** $p \leq .001$

The *p*-value of each correlation coefficient is shown in brackets and reflects the probability of obtaining the correlation coefficient in question given the pre-assumed null model (Figure 3). Probability values of less than or equal to 0.05 are identified with *, and those less than or equal to 0.01 with **. These *p*-values are used as cut-off points for statistical significance. Although these cut-off points are arbitrary, they are used here because of their orthodox role in determining significant deviation from the pre-assumed model.

The downside of using fixed cut-off points is that they impose all-or-none decisions about accepting or rejecting aspects of the pre-assumed model, which may result in the loss of information that could be useful, especially in exploratory research. Exploratory research aims to include and not suppress potential alternatives to the pre-assumed model. Thus, it is considered prudent to resist increasing *p*-value cut-off points and risk committing Type I errors (falsely rejecting null hypotheses) rather than Type II errors (failing to reject null hypotheses). Therefore, for the purposes of this study, *p*-values were not adjusted to accommodate multiple calculations to avoid missing the opportunity for further investigation of significant correlations

(Rothman, 1990). In addition, the current small sample size suggests that a significant correlation might be reported with a moderate to large effect size. Adjusting the *p*-value could, in this instance, result in moderate correlations being flagged as non-significant. In addition to *p*-values, the following correlation effect guidelines were used, as suggested by Cohen (1988). The effect of a correlation coefficient (*r*) is defined as small when *r* is equal to or greater than 0.1, moderate when *r* is equal to or greater than 0.3, and strong when *r* is equal to or greater than 0.5.

The results provided in Table 15 reflect strong and statistically significant correlations between the total scores of the PLIS, HSII and HSTI, but no significant correlations between these questionnaires and the MAP. However, a weak correlation effect was found between the MAP and the HSTI. Closer inspection of potential correlation effects of the MAP using the information provided in Table 16 reveals that the MAP's effect is largely due to the HSTI Authentic dimension (subscale). This is also true for the HSII, which demonstrates a weak correlation effect between the MAP and the Authentic dimension (subscale) of the HSII despite the absence of a correlation effect between the total scores of these two questionnaires.

The strong and statistically significant correlations between the PLIS total scores and those of the HSII and the HSTI are grounded in moderate to strong and statistically significant correlations between the PLIS total score and the HSII and HSTI subscale totals. It seems that a leader's perceived level of integrity plays an important role in leader character and a leader's team culture, with the transforming dimension of leader character the only exception.

Table 16

Kendall's Tau Correlation Matrix of the Perceived Leader Integrity Scale (PLIS), Maturity Assessment Profile (MAP), Eight Dimensions of the Heartstyles Individual Indicator (HSII) and Eight Dimensions of the Heartstyles Team Indicator (HSTI)

	Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	PLIS	-																	
2	MAP	-.118	-																
3	HSII Authentic	-.305*	.240	-															
4	HSII Transforming	-.240	.101	.090	-														
5	HSII Reliable	-.467**	.090	.189	.449**	-													
6	HSII Achieving	-.321*	-.044	.164	.626**	.583**	-												
7	HSII Relating	-.452**	-.003	.343**	.224	.474**	.332**	-											
8	HSII Encouraging	-.436**	.075	.388**	.222	.359**	.320*	.543**	-										
9	HSII Developing	-.423**	.163	.439**	.497**	.428**	.458**	.392**	.561**	-									
10	HSII Compassionate	-.499**	.065	.323*	.312*	.458**	.376**	.564**	.763**	.557**	-								
11	HSTI Authentic	-.329*	.261	.172	.196	.342**	.209	.082	.226	.252*	0,213	-							
12	HSTI Transforming	-.356**	.121	.022	.217	.398**	.230	.159	.213	.265*	.303*	.574**	-						
13	HSTI Reliable	-.356**	.121	.039	.217	.441**	.239	.198	.213	.230	.286*	.634**	.673**	-					
14	HSTI Achieving	-.361**	.194	.030	.346**	.432**	.325*	.121	.213	.273*	.252*	.652**	.708**	.733**	-				
15	HSTI Relating	-.512**	.065	.116	.226	.467**	.299*	.396**	.419**	.342**	.458**	.523**	.613**	.630**	.596**	-			
16	HSTI Encouraging	-.499**	.188	.194	.226	.441**	.299*	.370**	.523**	.385**	.510**	.591**	.561**	.647**	.639**	.725**	-		
17	HSTI Developing	-.427**	.126	.215	.247	.376**	.303*	.271*	.398**	.441**	.394**	.561**	.609**	.643**	.626**	.609**	.746**	-	.
18	HSTI Compassionate	-.436**	.095	.095	.222	.419**	.243	.366**	.406**	.303*	.488**	.467**	.574**	.557**	.548**	.832**	.686**	.553**	-

*. Correlation is significant at the 0.05 level (2-tailed).   **. Correlation is significant at the 0.01 level (2-tailed).

The intercorrelations among the dimensions (subscales) of leader character (HSII) and team culture (HSTI) are generated by four factors, namely self- and other-focused behaviour reflecting a leader's character and self- and other-focused behaviour reflecting a leader's team culture.

Table 17 draws on the results presented in Table 16 to show how prominent these factors are in generating the intercorrelation matrix. Table 17 shows the frequencies of statistically significant, strong and moderate intercorrelations between the dimensions of the four behaviour factors and their corresponding 16 dimensions. The cells in the columns labelled SSC (statistically significant correlation) show how many of the correlations between the dimension in question and the remaining 15 dimensions were significant. The columns labelled MCE and SCE show how many of the statistically significant correlations had moderate (≥ 0.3) and strong (≥ 0.5) effects.

Table 17

*Frequencies of Significant, Moderate and Strong Intercorrelations between Heartstyles
Individual Indicator (HSII) and Heartstyles Team Indicator (HSTI) Subscale Totals*

	SSC	MCE	SCE	Self-focused	SSC	MCE	SCE	Other-focused
Leader Character	4	4	---	Authentic	10	8	2	Relating
	5	4	1	Transforming	10	6	4	Encouraging
(HSII)	14	13	1	Reliable	14	12	2	Developing
	10	8	2	Achieving	14	10	4	Compassionate
	33	29	4	Total	48	36	12	Total
Team Culture	9	3	6	Authentic	13	6	7	Relating
	10	3	7	Transforming	13	4	9	Encouraging
(HSTI)	9	2	7	Reliable	13	6	7	Developing
	12	5	7	Achieving	12	6	6	Compassionate
	40	13	27	Total	51	22	29	Total

Notes: SSC = Statistically significant correlation, MCE = Moderate correlation effect, SCE = Strong correlation effect

The frequencies of intercorrelations presented in Table 17 show that behaviour reflecting team culture was more prominent than behaviour reflecting leader character. The dimensions of team culture generated 91 (40 + 51) statistically significant correlations with 56 (62%) strong and 35 of moderate effect. The dimensions of leader character, on the other hand, brought on 81 (33 + 48) significant correlations, with 16 (20%) strong and 65 of moderate effect.

Other-focused behaviour, with 99 statistically significant and 41 (41%) strong correlations, was more prominent than self-focused behaviour, which brought on 73 significant correlations with 31 (42%) showing strong effect. Considered more closely, other-focused behaviour reflecting team culture was most prominent and self-focused behaviour reflecting leader character least prominent, with 51 versus 33 significant correlations and 29 (57%) versus 4 (12%) strong effect correlations, respectively.

Considering each of the four behaviour factors in turn reveals that the Reliable dimension was most prominent in self-focused behaviour reflecting leader character, and the Achieving dimension most prominent in self-focused behaviour reflecting team culture. The Developing and Compassionate dimensions were most prominent in other-focused behaviour reflecting leader character, whereas all four dimensions of Relating, Encouraging, Developing and Compassionate were prominent in other-focused behaviour reflecting team culture.

Therefore, in the interactions between leaders and their teams, behaviour associated with team culture seems to be more prominent than behaviour associated with leader character, and other-focused behaviour more prominent than self-focused behaviour. Furthermore, the leader's self-focus seems to be on being reliable, whereas the team's self-focus concerns behaviour aimed at achieving. In focusing on others, the leader concentrates on development and compassion, whereas the team's focus on others involves relating, encouraging, developing and being compassionate in near equal measures.

Table 18 shows the frequencies of statistically significant, strong and moderate intercorrelations contained in the column-row intersections of the four behaviour factors. The information shared in the column-row intersections indicates the strength of the intercorrelation between the two factors in question. The diagonal of the table contains the information that a factor shares with

itself, which is an indication of the internal consistency of the factor in question in term of its dimensions.

The internal consistency of team culture was higher than the consistency of leader character. In the case of team culture, all dimensions of both self-focused and other-focused behaviour intercorrelated significantly with strong correlational effect. In the case of leader character and self-focused behaviour only three of the six intercorrelations between its four dimensions were significant, and only two of these showed strong effects. Leader character other-focused behaviour showed better internal consistency with all intercorrelations between its four dimensions being statistically significant. However, one of these still showed a moderate, as opposed to strong, effect.

Table 18

Frequencies of relationships between Factors in Terms of the Statistical Significance and Effect Sizes of the Correlations of their Dimensions

	LC-SF			LC-OF			TC-SF			TC-OF		
	SSC	MCE	SCE	SSC	MCE	SCE	SSC	MCE	SCE	SSC	MCE	SCE
LC-SF	3	1	2									
LC-OF	14	14	--	6	1	5						
TC-SF	6	6	--	6	6	--	6	--	6			
TC-OF	7	7	--	16	14	2	16	1	15	6	--	6

Notes

LC-SF	Leader Character Self-focused	SSC	Statistically significant correlation
LC-OF	Leader Character Other-focused	MCE	Moderate correlation effect
TC-SF	Team Culture Self-focused	SCE	Strong correlation effect
TC-OF	Team Culture Other-focused		

Table 18 contains six column-row intersections in addition to those on its main diagonal. Three of these column-row intersections show information that confirms the strong relationships between the behaviour factors in question. In the case of team culture, there was a strong relationship between self-focused and other-focused behaviour, with significant correlations between all dimensions shared – all but one showed a strong effect. Leadership character showed a weaker (but still strong) relationship between self-focused and other-focused behaviour, but with only 14 of the potential 16 intercorrelations significant and all showing moderate as opposed to strong effects. The third strong relationship was observed between leader character other-focused behaviour and team culture other-focused behaviour, with all dimensions correlated significantly but with 14 showing moderate as opposed to strong effects.

The column-row intersections that contained information that at best confirmed moderate relationships between the behaviour factors in question were:

1. The column-row intersection between leader character self-focused and team culture self-focused: The correlation between these two factors depended largely on the leader's self-focus on behaving reliably and the team's self-focus on achieving.

2. The column-row intersection between leader character self-focused and team culture other-focused: The correlation between these two factors depended largely on the leader's self-focus on reliable and achieving behaviour.

3. The column-row intersection between leader character other-focused and team culture self-focused: The correlation between these two factors depended largely on the leader's other-focus on developing and compassionate behaviour, and the team's self-focus on transforming and achieving.

Concluding Summary

Figure 4 is a summary of the discussion of the information obtained from the correlation analysis. This figure shows the alternative model that resulted from failures of the null model when subjected to analysis.

Figure 4

Conceptual Model of Prominence of Behaviour Factors and Interrelationships
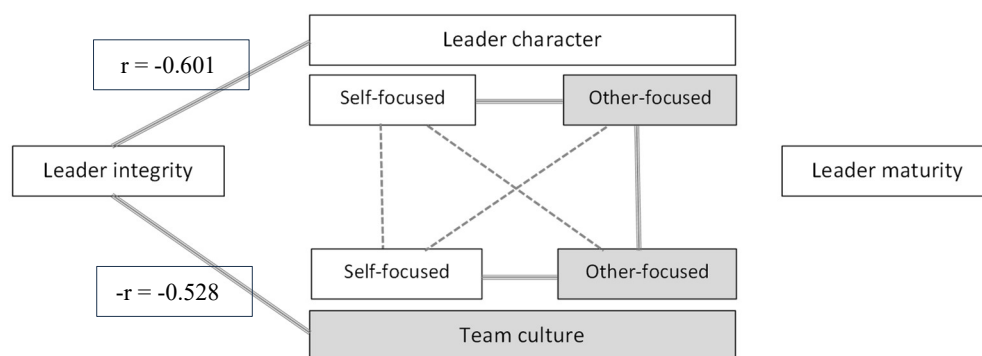
Note: The shaded behaviour factors are more prominent than those that are unshaded. The solid connecting lines represent strong intercorrelations, the dashed lines moderate correlations and the absence of connecting lines no correlations. There are 120 intercorrelations between leader character self-focused and team culture self-focused and leader character other-focused and team character other-focused that are summarised in Table 18 and inform the representation of the effect sizes of the intercorrelations in Figure 4

In conclusion, the reported results of the correlation analyses provide the following levels of evidence with respect to the research hypotheses H1–H6.

The reported results provide only partial empirical support for H1:

H1: The senior team leader's character (as demonstrated through self- and other-focused behaviours) is correlated with the senior team leader's perceived level of integrity.

The reported results provide only partial empirical support for H2:

H2: The senior team leader's character (as demonstrated through self- and other-focused behaviours) is correlated with the senior team leader's team culture (as demonstrated through self- and other-focused behaviours).

The reported results provide no empirical support for H3:

H3: The senior team leader's character (as demonstrated through self- and other-focused behaviours) is correlated with the senior team leader's stage of adult development.

The reported results provide no empirical support for H4:

H4: The senior team leader's perceived level of integrity is correlated with the senior team leader's stage of adult development.

The reported results provide no empirical support for H5:

H5: The senior team leader's stage of adult development is correlated with the senior team leader's team culture (as demonstrated through self- and other-focused behaviours).

The reported results provide only partial empirical support for H6:

H6: The senior team leader's perceived level of integrity is correlated with the senior team leader's team culture (as demonstrated through self- and other-focused behaviours).

Analysis of Moderating Effects

A moderation regression analysis was considered next to explore the possibility that a senior team leader's stage of adult development and the senior team leader's perceived level of integrity, moderated the relationship between the senior team leader's character and the senior team leader's team culture. The literature review in Chapter 2 provided theoretical grounding

for this possible moderating effect. Thereafter, a multiple regression analysis was conducted in which each of the four concepts was set up as a dependent variable in relationship with the remaining variables that were set up as independent variables.

Research Hypotheses

The following research hypotheses were formulated as alternatives to the expected null-correlations derived from the model depicted in Figure 3.

Research Hypothesis 7: The relationship between the senior team leader's character (as demonstrated through self- and other-focused behaviours) and the senior team leader's team culture (as demonstrated through self- and other-focused behaviours) is moderated by the senior team leader's stage of adult development.

Research Hypothesis 8: The relationship between the senior team leader's character (as demonstrated through self- and other-focused behaviours), and the senior team leader's team culture (as demonstrated through self- and other-focused behaviours) is moderated by the senior team leader's perceived level of integrity.

Method of Analysis

A moderating effect occurs when a third variable has an influence or impact on the strength of the relationship between two variables. In other words, a moderating relationship refers to situations when the relationship between an independent and dependent variable change due to the influence of a third, moderating variable (Howell, 2013). To confirm that a third variable has a moderating effect on the relationship between the two variables X and Y, we must show that the nature of this relationship changes as the values of the moderating variable changes. This is done by including an interaction effect in the model and checking to see if indeed such

an interaction is significant and if it helps explain the variation in the response variable better than before.

Moderation therefore implies an interaction effect, where introducing a moderating variable changes the direction or magnitude of the relationship between two variables. A moderation effect could be (a) Enhancing, where increasing the moderator would increase the effect of the predictor (IV) on the outcome (DV); (b) Buffering, where increasing the moderator would decrease the effect of the predictor on the outcome; or (c) Antagonistic, where increasing the moderator would reverse the effect of the predictor on the outcome (Aiken & West, 1991).

A moderated regression analysis was thus performed to determine the main and interaction effects of the senior team leader's stage of adult development between a senior team leader's character (as demonstrated through self- and other-focused behaviours) and the senior team leader's team culture (as demonstrated through self- and other-focused behaviours). The PROCESS macro was used in SPSS to conduct the moderated regression analysis.

Results of Analysis

In the first step, HSII and MAP were included in the regression model. These variables accounted for a significant amount of variance in HSTI (R^2 = 37.2%) (Figure 5). Next, the interaction term between HSTI and PLIS was added to the model. The R^2 change was not significant (ΔR^2 = .007, $F(1,27)$=.312, p=.581). The hypothesis that MAP has a significant moderating effect between HSII and HSTI is, therefore, not supported.

Figure 5

Interaction Effect of Heartstyles Individual Indicator (HSII) (IC_Mean) and the Maturity Assessment Profile (MAP) in Predicting HSTI (TC_Mean)
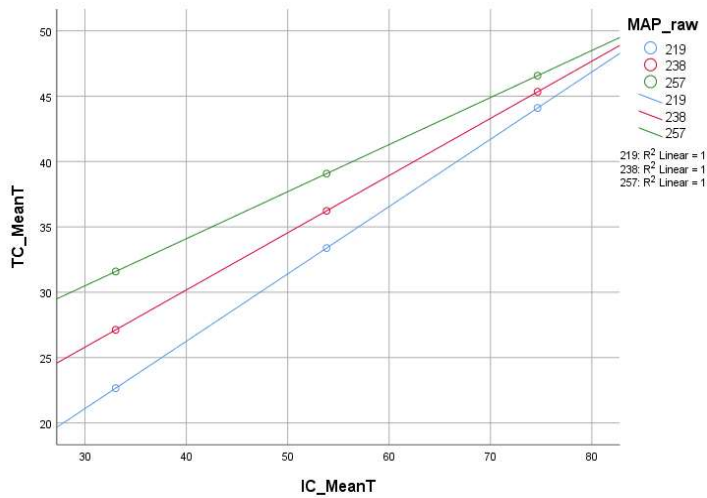
In the second step, HSII and PLIS were included in the regression model. These variables accounted for a significant amount of variance in HSTI (R^2= 35%) (Figure 6). Next, the interaction term between HSII and PLIS was added to the model. The R^2 change was not significant (ΔR^2 = .008, ΔF (1,27) = 0.333, p = .568). The hypothesis that PLIS has a significant moderating effect between HSII and HSTI was also not supported.

Figure 6

Interaction Effect between the Perceived Leader Integrity Scale (PLIS) and the Heartstyles Individual Indicator (HSII) (IC_Mean) in Predicting the Heartstyles Team Indicator (HSTI) (TC_Mean)
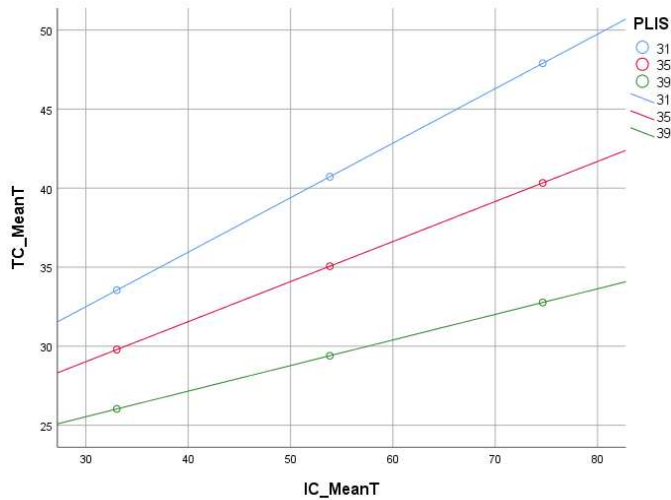
Concluding Summary

In conclusion, the reported results of the moderation regression analyses provide the following evidence with respect to the research hypotheses H7 and H8.

The reported results provided no empirical support for H7:

H7: The relationship between the senior team leader's character (as demonstrated through self- and other-focused behaviours) and the senior team leader's team culture (as demonstrated through both self- and other-focused behaviours) is moderated by the senior team leader's stage of adult development.

The reported results provided no empirical support for H8:

H8: The relationship between the senior team leader's character (as demonstrated through self- and other-focused behaviours), and the senior team leader's team culture (as demonstrated

through self- and other-focused behaviours) is moderated by the senior team leader's perceived level of integrity.

Analysis of Regression Effect

Perceived leader integrity, leader character and team culture were strongly related (see Table 15), but the Pearson Product Moment method that was used to calculate these correlations does not distinguish between variables being dependent or independent. For example, the correlation analysis does not show whether integrity depends on character, or character on integrity. Thus, the correlation between integrity and character is the same as the correlation between character and integrity. In this case, the correlation is considered symmetrical.

Literature reviewed in Chapter 2 points to the possible deterministic role of integrity in the development of character, team culture and moral orientation (as outcomes of adult development); a deterministic role of character in the development of integrity, team culture and moral orientation (as outcomes of adult development) and a deterministic role of moral orientation (as an outcome of adult development) on character, team culture and integrity. However, the literature did not provide evidence for a deterministic influence of team culture on a leader's integrity, moral orientation (as an outcome of adult development) or character. Therefore, the relationships between the variables of perceived leader integrity, leader character, team culture and adult development may not be symmetrical.

Regression analysis distinguishes between dependent and independent variables and can, therefore, be used to explore possible asymmetries in the intercorrelations between variables that are not visible in correlation analysis.

Multiple regression is an extension of simple linear regression. It is used when the researcher wants to predict the value of a variable based on the value of two or more other variables.

However, in most cases, as in the present case, multiple regression is utilised to understand the relationship between variables rather than to make a prediction (Howell, 2013).

Research Hypotheses

Regression analysis was used to test the following research hypotheses:

Research Hypothesis 9: The senior team leader's character (as demonstrated through self- and other-focused behaviour) is a function of the senior team leader's team culture (as demonstrated through self- and other-focused behaviours), the senior team leader's stage of adult development, and the senior team leader's perceived level of integrity.

Research Hypothesis 10: The senior team leader's stage of adult development is a function of the senior team leader's character (as demonstrated through self- and other-focused behaviours), the senior team leader's level of perceived integrity and the senior team leader's team culture (as demonstrated through self- and other-focused behaviours).

Research Hypothesis 11: The senior team leader's perceived level of integrity is a function of the senior team leader's team culture (as demonstrated through self- and other-focused behaviours), the senior team leader's stage of adult development, and the senior team leader's character (as demonstrated through self- and other-focused behaviours).

Research Hypothesis 12: The senior team leader's team culture (as demonstrated through self- and other-focused behaviours) is a function of the team leader's perceived level of integrity, the senior team leader's character (as demonstrated through self- and other-focused behaviours), and the senior team leader's stage of adult development.

Method of Analysis

Multiple regression analysis allows for a prediction of the dependent variable based on knowledge of the independent variable(s). The analysis offers not only a prediction of outcomes, but also an understanding of the relationship between variables. Multiple regression is an extension of simple linear regression used to predict the value of a variable based on the value of two or more other variables (Howell, 2013).

Results of Analysis

A multiple linear regression was calculated to express HSII in terms of HSTI, MAP and PLIS. A significant regression equation was found ($F(3,27)=7.257$, $p=.001$), with an R^2 of .446 (Figure 7). The result indicated that HSII = 115.47 -2.149 (PLIS) +.450 (HSTI) -.0009 (MAP), where PLIS is measured by levels of integrity, HSTI is measured by a percentage of self- and other-focused behaviours, and the MAP is coded between levels 3 to 6. HSTI increased by -2.149 levels of integrity, and .450 percentage points of HSTI, and -0.009 maturity scale points for each percentage increase. PLIS ($B=$ -2.149, $p<.05$) is thus a significant contributor of HSII. However, HSTI ($B=$ .450, $p=.059$) and MAP ($B=$ -0.009, $p=.957$) are not significant contributors to HSII.

Figure 7

*Regression of Perceived Leader Integrity Scale (PLIS), Heartstyles Team Indicator (HSTI)
and Maturity Assessment Profile (MAP) on the Heartstyles Individual Indicator (HSII)*
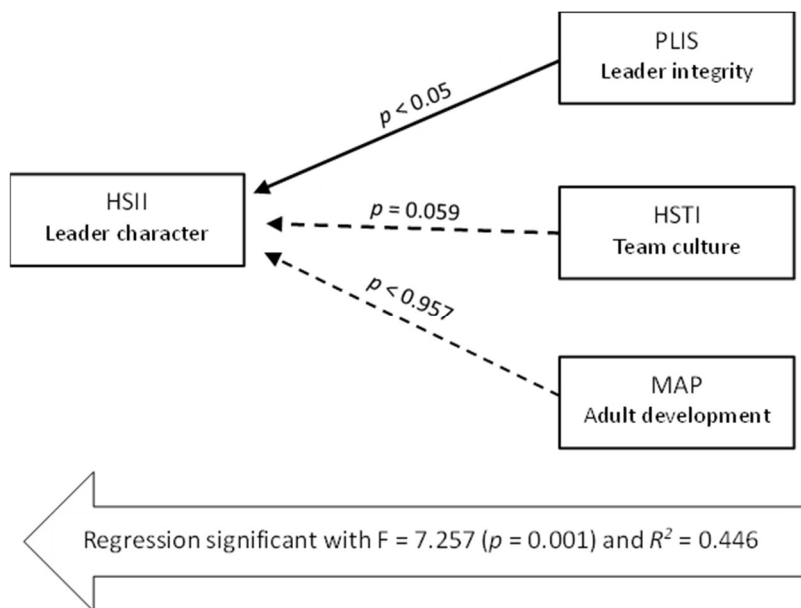
Note: A solid connecting arrow represents a significant contribution ($p < 0.05$), a dashed arrow a near significant contribution ($p < 0.1$) and a thin arrow a near zero contribution.

A multiple linear regression was calculated to predict MAP based on HSTI, HSII and PLIS. No significant regression equation was found. A multiple linear regression was then calculated to express PLIS in terms of HSII, MAP and HSTI. A significant regression equation was found ($F_{(3,27)} = 6.755$, $p = .002$), with an R^2 of .429.

The result indicated that PLIS = 36.392 -.078 (HSTI) -.084 (HSII) +.026 (MAP), where PLIS is measured by levels of integrity, HSII is measured by a percentage of self- and other-focused behaviours, HSTI is measured by a percentage of self- and other-focused behaviours, and the MAP is coded between levels 3 to 6. PLIS increased by -.78 percentage points of HSTI, -.084 percentage points of HSII, and .026 maturity scale points for each single increase on the PLIS. HSII ($B= -.084$, $p<.05$) is thus a significant contributor of PLIS. However, HSTI ($B= -.078$ $p=.099$) and MAP ($B= .026$, $p=.408$) are not significant contributors to PLIS.

Finally, a multiple linear regression was calculated to express HSTI in terms of HSII, MAP and PLIS. A significant regression equation was found ($F(3,27)=6.313$, $p= .002$), with an R^2 of .412. The result indicated that HSTI = 26.449 -1.247 (PLIS) +.281 (HSII) +.162 (MAP), where HSTI is measured by a percentage of self- and other-focused behaviours, PLIS is measured by levels of integrity, HSII is measured by a percentage of self- and other-focused behaviours, and the MAP is coded between levels 3 to 6. HSTI increased by -1.247 levels of integrity, .281 percentage points of HSII, and .162 maturity scale points for each percentage increase. The PLIS ($B= -1.247$, $p=.099$), HSII ($B= .281$ $p=.059$) and MAP ($B= .162$, $p=.197$) are not significant contributors to HSTI.

These four multiple regression treatments were conducted according to the following combinations presented in Figures 8, 9 and 10, and are inclusive of the salient empirical findings.

The model fit (R^2) is weak-moderate with R^2 between 0.33 and 0.50, as per a combination of Chin (1998) and Hair et al. (2011). Regarding interpretation of R^2 values, a final interpretation can be made as follows:

1. If R^2 is less than 0.19 it is a very weak model.
2. If R^2 is between 0.19 and less than 0.25, it is quite a weak model.
3. If R^2 is between 0.25 and less than 0.33, it is a weak model.
4. If R^2 is between 0.33 and less than 0.50, it is a weak-moderate model.
5. If R^2 is between 0.50 and less than 0.67, it is a moderate model.
6. If R^2 is between 0.67 and less than 0.75, it is a moderate-strong model.
7. If R^2 is equal to or greater than 0.75, it is an absolute strong model.

Figure 8

Regression of Perceived Leader Integrity Scale (PLIS), Heartstyles Individual Indicator (HSII) and Maturity Assessment Profile (MAP) on the Heartstyles Team Indicator (HSTI)
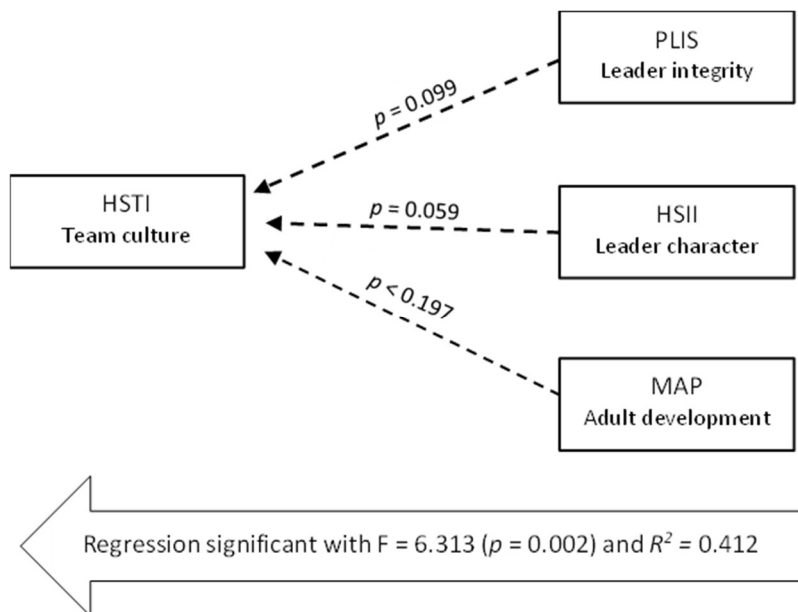
Note: A solid connecting arrow represents a significant contribution ($p < 0.05$), a dashed arrow a near significant contribution ($p < 0.1$) and a thin arrow a near zero contribution.

The model fit (R^2) is weak-moderate with R^2 between 0.33 and 0.50.

Figure 9

Regression of the Heartstyles Individual Indicator (HSII), Heartstyles Team Indicator (HSTI) and Maturity Assessment Profile (MAP) on the Perceived Leader Integrity Scale (PLIS)
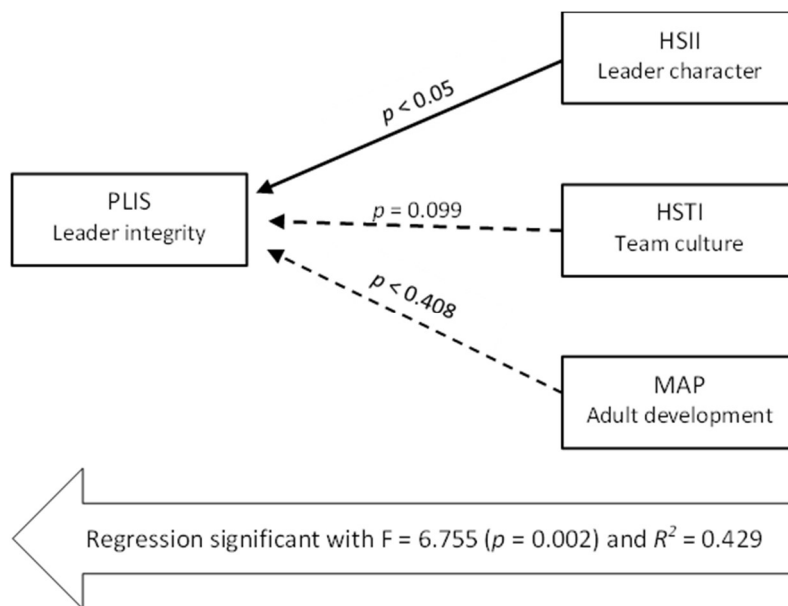
Note: A solid connecting arrow represents a significant contribution ($p < 0.05$), a dashed arrow a near significant contribution ($p < 0.1$) and a thin arrow a near zero contribution.

The model fit (R^2) is weak-moderate with R^2 between 0.33 and 0.50.

Figure 10 shows the relationships between the variables of leader character, leader integrity, and team culture reported as the slopes (B) of the lines of least residuals. These slopes are not symmetrical when swapping dependent and independent variables. However, the probabilities (expressed as p-values) of attaining these slopes reveal that the underlying interrelationships between the constructs are symmetrical. Therefore, one cannot conclude that one or more of these variables play a deterministic role in the relationships between them. For example, one cannot conclude that leader integrity determines leader character and/or team culture, or that it is itself determined by these variables. Similarly, one cannot conclude that leader character determines team culture or vice versa.

Figure 10

Regression Symmetries of Dependent and Independent Variables
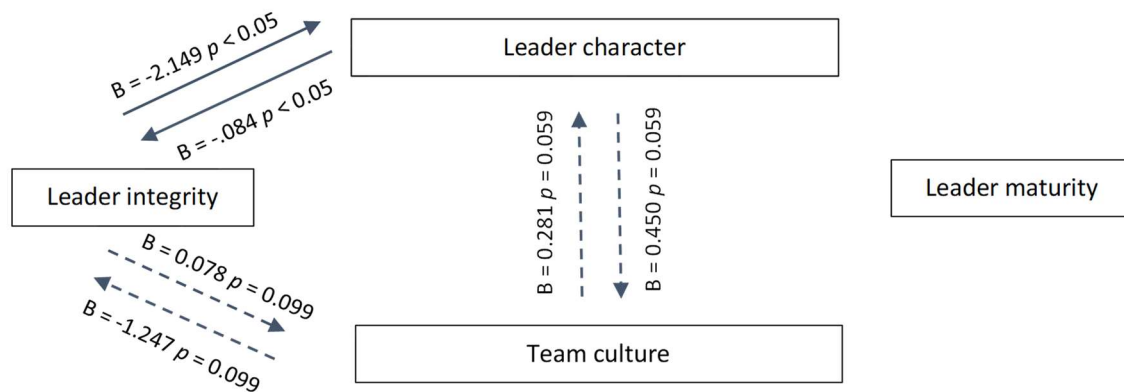
Note: Solid connecting arrows represent significant contributions ($p < 0.05$), dashed connecting arrows near significant contributions ($p < 0.1$) and absence of connecting arrows near zero contributions.

Concluding Summary

The reported results of the multiple regression analyses for the research hypotheses H9, H10, H11 and H12 are offered below.

The multiple regression analysis provided no empirical support for H9:

H9: The senior team leader's character (as demonstrated through self- and other-focused behaviour) is a function of the senior team leader's team culture (as demonstrated through self- and other-focused behaviours), the senior team leader's stage of adult development, and the senior team leader's perceived level of integrity.

It is important to note that whilst there was no empirical support for H9, there was evidence that a senior team leader's character is a function of the senior team leader's perceived level of integrity.

The multiple regression analysis provided no empirical support for H10:

H10: The senior team leader's stage of adult development is a function of the senior team leader's character (as demonstrated through self- and other-focused behaviours); the senior team leader's level of perceived integrity, and the senior team leader's team culture (as demonstrated through self- and other-focused behaviours).

The multiple regression analysis provided no empirical support for H11:

H11: The senior team leader's perceived level of integrity is a function of the senior team leader's team culture (as demonstrated through self- and other-focused behaviours), the senior team leader's stage of adult development, and the senior team leader's character (as demonstrated through self- and other-focused behaviours).

It is important to note that whilst there was no empirical support for H11, there was evidence that a senior team leader's perceived level of integrity is a function of the senior team leader's character.

The multiple regression analysis provided no empirical support for H12:

H12: The senior team leader's team culture (as demonstrated through self- and other-focused behaviours) is a function of the team leader's perceived level of integrity, the senior team leader's character (as demonstrated through self- and other-focused behaviours), and the senior team leader's stage of adult development.

Conclusion

Data concerning behaviour in the leader-team domain were analysed. Most of the results of the analysis were not supported by the presupposed null-model. Observations of leader maturity were the only observations supported, whereas observations of leader integrity, leader character and team culture were not supported, resulting in the need to resort to alternative perspectives.

The results were used to derive an alternative model (see Figure 4) from the original null model. However, unlike the null-model, the alternative model was not meant to accommodate the observed data, but to be a model accommodated by the observed data.

The alternative model shows the importance of leader integrity in the interaction between a leader and their team. It reflects a strong correlation between behaviour that demonstrates leader integrity and behaviour associated with leader character, and a strong correlation between leader integrity and team culture. Closer inspection of the model reveals that in the leader-team interaction domain behaviour associated with team culture is more prominent than behaviour associated with leader character. Self-focused and other-focused forms of behaviour are strongly correlated for leader character and team culture. The model also incorporates a strong correlation between other-focused behaviour associated with leader character and other-focused behaviour associated with team culture, but only a moderate relationship between these variables in the case of self-focused behaviour. The cross correlations between leader character self-focused and team culture other-focused behaviour and leader character other-focused and team culture self-focused behaviour are displayed as moderate in the model. The interactions between the leader and their team are not mediated by leader integrity, despite leader integrity being strongly implicated in both leader character and team culture. The model also incorporates these interactions as symmetrical and, thus, non-deterministic (see Figure 10). Therefore, the model does not allow one to conclude that leader integrity determines leader character and/or team culture or is itself determined by these variables. Similarly, one is not allowed to conclude that leader character determines team culture or vice versa.

CHAPTER 5: EXPLORATION OF RESULTS

The previous chapter documented the data collected and the analysis of the data. The analysis followed a deductive, logical, positivistic approach. A null model – the model of no interrelationships between the concepts of adult development, leader integrity, leader character, and the culture of the leader's team – was presupposed, and then considered as to whether it could accommodate the observed data. The model failed to support several aspects of the observed data. An alternative model was derived from the presupposed null model taking the results of the observed data as a point of departure. Thus, the logic was not to formulate a model that could accommodate the observed data, but rather to formulate a model that could be accommodated by the observed data. This difference is subtle but fundamentally important, as indicated in the introduction to Chapter 4.

Chapter 5 contains an exploration of the alternative model. The aim is to arrive at probable truths following from the model. This approach requires epistemic as opposed to aleatory probability (see introduction to Chapter 4). Unlike an aleatory approach to probability, epistemic probability does not begin with absent or no knowledge (formalised as randomness) and logical deduction, but with partial knowledge and logical-rational induction (see Clayton, 2021, pp. 57–58). Matters of induction, prior knowledge, and probability-as-logic are captured in an approach put forward by Jaynes (2003). Jaynes criticised frequentist probability for creating a false sense of objectivity, allowing scientists to ignore the preconceptions and background knowledge they bring to the research problem. However, ignoring researcher assumptions by masquerading them as random distributions of ignorance does not make assumptions go away. Research problems are never assumption free, and probability, therefore, always partly subjective. The second part of Jaynes's approach to probability concerns probability-as-logic, which adds an objective component. Thus, according to Jaynes, if two

people start with the same assumptions and reason rationally, they would arrive at the same conclusion. The probability of a valid conclusion depends on the correctness of the assumptions. However, assumptions are not fixed truths. They are consequences of background knowledge and may change as new knowledge is gained. Therefore, the probability of a conclusion is a matter of validity given a current state of knowledge rather than a matter of truth given a fixed, eternal reality.

Given this perspective, the exploration of the results of the present study does not focus on how the results obtained in the previous chapter confirm or disconfirm already existing research findings. Instead of this conventional approach aimed at the justification of results, the current discussion contains the results as assumptions, with consequences to be explored. According to Clayton (2021): "The tools of probability can assist us with determining the consequences of a set of assumptions, but they cannot justify those assumptions for us." (p. 302).

Following this approach, the aim of the present chapter is to consider the consequences of the assumptions contained in the alternative model for the inner dynamics of transformational leadership. Stated more precisely, the aim of this chapter is to construct a model of the inner dynamics of transformational leadership, through inductive, rational reasoning, departing from these assumptions.

Transformational Leadership as Context of the Alternative Model

In this chapter the consequences of the assumptions contained in the alternative model for the inner dynamics of transformational leadership are considered. Therefore, transformational leadership constitutes the context within which the implications of these assumptions are considered. In other words, transformational leadership is the primary target of the

consequences of the assumptions. This follows from the theoretical framework that guided the study from the start.

The theoretical framework of the study was based on prior evidence that related transformational leadership to the concepts of character, integrity, moral orientation (as a subset of adult development), and team culture. Transformational leadership studies consistently confirm moderate to strong relationships between the four dimensions of transformational leadership, namely, idealised influence, intellectual stimulation, individualised consideration, and inspirational motivation – and the concepts of a leader's character (Hendrix et al., 2015), integrity (Palanski & Yammarino, 2007), moral orientation (as a subset of adult development) (McGregor, 2003), and team culture (Schaubroeck et al., 2011). However, the literature lacked a deeper understanding of the interrelationships between and amongst these concepts, and how these interrelationships might help to explain the inner dynamics of transformational leadership.

Assumptions of the Alternative Model

The alternative model represents the likelihood of obtaining the empirical observations of the study. However, the likelihood of obtaining an empirical observation given a particular model does not translate into the likelihood of the model given a particular observation. In other words, the alternative model represents the probability of the observed information, but this was not the probability of the alternative model given the observed information. Although there is a way to calculate the probability of the alternative model from the probability of the observation using Bayes' theorem (see Clayton, 2021, p. 36, for a simplified explanation of the theorem), the two probabilities (as indicated earlier) differed not only in quantity but also in kind. Thus, the alternative model was considered as a set of assumptions about the observed information rather than a set of conclusions to serve as prior knowledge in logical-rational inductive inference of

the consequences of these assumptions for transformational leadership, or more precisely the inner dynamics of transformational leadership.

Transformational leadership is characterised by interactions between the leader, individuals, and the social systems encountered by the leader. Leadership, therefore, occurs in the interactive space between the leader and those they lead, with most of the interactions occurring in the form of overt and observable behaviour. Importantly, underlying factors determine the nature of these behaviours, and the space in which these factors exist and operate constitutes the inner space and dynamics of transformational leadership.

The alternative model embodied the following assumptions:

1. Transformational leadership involves interactions between a leader, the people they lead, and the social systems they encounter. This constitutes an interaction space that contains the inner dynamics of transformational leadership.

2. The concepts of leader character, leader integrity, and team culture are not determined by any of the others. Thus, it seems that the inner dynamics of transformational leadership, as explained by leader character, leader integrity and team culture, are not deterministic.

3. Leader integrity is an important factor in both leader character and team culture.

4. Leader maturity is not a factor in the inner dynamics of transformational leadership.

5. Team culture behaviour is more prominent than leader character behaviour in the inner dynamics of transformational leadership.

6. Other-focused behaviour is more prominent in transformational leadership than self-focused behaviour.

7. A relational inner dynamic of transformational leadership manifests in the network of leader and team self-focused and other-focused behaviour relationships.

Consequences of Assumptions for Transformational Leadership

Transformational leadership theory is singularly conceptualised and defined through four foundational dimensions and, because it is considered a foundational definition, this four-dimensional model is a useful framework for discussing the consequences of the seven assumptions listed above.

The four dimensions are: idealised influence, inspirational motivation, intellectual stimulation, and individual consideration (Bass, 1985). The dimension of idealised influence describes transformational leaders who behave in ways that serve as role models for their followers. These leaders are trusted, admired, and respected to such an extent that their followers want to emulate them. These leaders are assumed to have extraordinary capabilities, persistence, and determination in the eyes of their followers. There are, thus, two aspects to idealised influence, namely, the leader's behaviours and the elements that are attributed to the leader by their followers. Leaders who have significant levels of idealised influence are also willing to take risks whilst always striving to do the right thing by demonstrating high standards of ethical and moral conduct (Bass & Riggio, 2006).

The dimension of inspirational motivation describes characteristics of a transformational leader that inspire and motivate people by providing meaning and consistently challenging their followers to stretch themselves. They are masterful at generating team spirit, enthusiasm, and optimism. These leaders tend to include their followers in envisioning attractive future states and clearly communicate expectations that they wish their followers to achieve. This future focus is quantified in their demonstrated commitment to goals and a shared vision (Bass & Riggio, 2006).

The dimension of intellectual stimulation describes the behaviour of a transformational leader who encourages their followers' efforts to be innovative and creative by questioning assumptions, reframing problems, and approaching old situations in new ways. Creativity is stimulated and criticism of mistakes is minimised in public. As a result, ideas and solutions are generated from their teams as followers are encouraged to try new approaches. Followers' ideas are not criticised when they differ from leaders' ideas (Bass & Riggio, 2006).

The final dimension of individualised consideration describes a transformational leader who affords value and attention to each individual follower's needs for achievement and growth by acting as a coach or mentor. These leaders, thus, develop potential in others as a deliberate aspect of their role, usually through the curation of new learning opportunities and a supportive climate. The individual attention and personalised approach are paramount and preceded by the leader's high levels of acceptance of individual differences, leading to a clear plan and approach to development for each follower. This approach is enhanced through the leader's consistent listening, empowerment, and delegation.

At a general level, transformational leadership behaviour is epitomised by a leader who enhances and extends the motivation levels of their followers towards achieving longer term goals and outcomes (Asrar-ul-Haq & Anwar, 2018). To successfully influence their followers towards achieving these desirable outcomes, transformational leaders are expected to demonstrate high levels of conviction to their moral orientation, be consistent in their communication, be congruent role models of the behaviours they expect of others, constantly encourage their followers, and maintain a clear and compelling focus on the overarching organisational goals and vision (House & Shamir, 1993). Effective transformational leaders consistently demonstrate high levels of self-esteem, emotional stability and control over their

inner conflicts. They can recognise and own their capacity to monitor their own future progress (Khan et al., 2016).

In the following exploration of results, transformational leadership theory – and specifically the four dimensions of transformational leadership – are explored in terms of the assumptions and consequences of the assumptions listed previously.

Consequences of Assumption 1

Transformational leadership involves interactions between a leader, the people they lead and the social systems they encounter. This constitutes an interaction space that contains the inner dynamics of transformational leadership.

A concise definition of transformational leadership refers to leaders who promote the achievement of superior results by employing one or more of the four dimensions of transformational leadership (Bass & Riggio, 2006). This impact of transformational leadership and its underlying dimensions on individuals and organisations has been extensively studied. However, the internal forces that prompt a leader to act in a transformational manner have been given less academic attention.

Thus, whilst the four dimensions of transformational leadership are measurable, an understanding of the inner dynamics that influence the behaviours associated with transformational leadership is more limited (Hartsfield, 2003). It follows from Assumption 1 that these four dimensions of transformational leadership intersect and are grounded in the inner dynamics of transformational leadership. The inner dynamics of transformational leadership are, thus, the dynamic field constituted by leader character, leader integrity and team culture, and the interrelationships between them. Thus, the source of the four dimensions of

transformational leadership is the dynamic field of the interactions among the leader, the people they lead, and the social systems they encounter.

Transformational leadership is theorised to be the result of certain antecedent conditions (Bass & Avolio, 1990) hypothesised to include a combination of a leader's early experiences with role models and their current life experiences, both at and away from work. Forces much deeper and stronger than mere performance and goal orientation are hypothesised to be operating in the transformational leader to motivate their choice to demonstrate the full or partial spectrum of transformational leadership behaviours (Hartsfield, 2003). Whilst the psychological influences underlying the four dimensions are fairly ambiguous (Yukl, 1999), Assumption 1 indicates that the aforementioned deeper forces and psychological influences of a leader's character, integrity, and team culture are the antecedent influences on the inner dynamics of transformational leadership.

Therefore, the question to be addressed here is: how does the field of leader character, team culture, and leader integrity interrelationships give rise to and shape our understanding of the four dimensions of transformational leadership?

Two points are raised and discussed to address this question:

(a) The four dimensions of transformational leadership intersect and are grounded in the field of the inner dynamics of transformational leadership.

(b) The four dimensions of transformational leadership are not orthogonal, and thus, not statistically independent.

The Grounding of the Dimensions of Transformational Leadership

The four dimensions of transformational leadership originate in the interaction space in which the inner dynamics of transformational leadership materialise. This dynamic field comprises leader character, integrity and team culture, and the interrelationships between them. The four dimensions of transformational leadership, thus, follow from leader character, leader integrity and team culture. Each of these concepts is presented now to inform the detail of the exploration of results, and to offer insight into these as conceptual foundations of the four transformational leadership dimensions.

Leonard (1997) defined character as the behavioural outcomes of a person's internal battle with their impulses, drives, psychological defences, and coping mechanisms, that become habituated in a largely unconscious way. Hogan and Sinclair (1997), similarly, believed that character is a combination of numerous overlapping, psychological dimensions, such as interpersonal traits, intrapsychic processes, interests, preferences, attitudes, morals, and values. Sperry (1999) described character as the holding of good principles (through honesty, integrity, and duty), conscience (through a sense of right and wrong), and courage (the will and power to act on one's principles in an integrated and congruent manner). Grahek et al. (2010) defined the character to lead as the combination of integrity and ethics, organisational integrity and courage, humility, gratitude, and personal courage. Lickona (1991) conceptualised character as knowing, desiring, and doing good, values in action, and habits of the heart and mind. These definitions support conceptualisations of character integrating an individual's moral and ethical awareness, and the ability of a person to assess dynamic situations to apply effective and consistent behaviours, judgement, and decision-making consistently. This moral awareness assists leaders to shift their judgement towards doing the right thing and converts their desire to do good into

observable actions (Lickona, 1991). Clearly this moral compass influences the quality of judgements and decision making, and indicates that character has the potential to offer achievement and performance a moral purpose within a greater community of people. (Lickona, 2014).

Integrity is defined as the inherent knowledge of right and wrong, the consequent avoidance of wrongdoing, and the willingness to stand up for what is right in the face of observed wrongs (Sarros et al., 2007). Integrity is a state of wholeness; consistency between actions and words; being true to oneself, and demonstrating moral and ethical behaviour, especially in adverse times (Palanski & Yammarino, 2007). Barnard et al. (2008) found that people who live in alignment with their moral principles and a universally accepted moral orientation, have higher levels of perceived integrity, suggesting they may demonstrate higher levels of transformational leadership.

These conceptualisations of character and integrity are clearly conceptually aligned and foundational to the specific dimension of idealised influence. Idealised influence describes leaders who serve as role models for their followers, and where their followers want to emulate doing the right thing through high standards of ethical and moral conduct (Bass & Riggio, 2006).

The final concept is team culture, defined in the context of subcultures (Lok et al., 2005) mainly because, in practical terms, employees interact more directly with their subculture and their direct team than the primary organisational culture. Subcultures influence employee and team member behaviour more profoundly than the primary organisational culture (Lok et al., 2005). A subculture is a more direct and intimate context within which practices, rituals and collective behaviours can form. These are based on values more readily reinforced in an environment with close proximity between people who interact regularly with each other (Lok et al., 2005). A

team or work unit is the smallest unit of a subculture (van den Berg & Wilderom, 2004). Work behaviours at a team level are more significant in shaping the subculture than espoused values (van den Berg & Wilderom, 2004). Effective leaders, thus, demonstrate consistent patterns of behaviour that enhance trust and perceptions of integrity, in turn encouraging constructive followership (Kaiser & Hogan, 2010). The culture and behaviour of people within a team are most influenced by the behaviours that are evident amongst and between team members, and usually deliberately encouraged by the team leader (Pearce & Herbik, 2004).

Team culture is a conceptually foundational element to all dimensions of transformational leadership, where followers want to emulate the behaviours of their idealised influencer leader. The inspirational motivator generates team spirit, enthusiasm and optimism, while the intellectual stimulator encourages new follower behaviours that drive innovation and creativity. Individualised consideration of the leader creates learning opportunities and a supportive climate for their followers.

The preceding considerations rely on an asymmetric view of the inner dynamics of transformational leadership, namely, that leadership processes extend from leader to team rather than team to leader. The brief descriptions of the four dimensions offered earlier clearly show the asymmetric dynamics in which they are grounded. The leader is the initiating agent and the team the respondent. The four dimensions, thus, seem to belong to the leader rather than the team. It is the leader's influence that is idealised; the leader who motivates and inspires, offers intellectual stimulation and develops potential in others. Thus, the team's reciprocal role in influencing, motivating, intellectually stimulating and developing the potential of the leader is neglected.

An asymmetric perspective of the dynamics of transformational leadership is not surprising because it follows from our intuitive understanding of leadership. We expect leaders to relate

differently to their teams than their teams do to them. However, maintaining an asymmetric perspective encourages one to consider particular fields of asymmetric dynamics and also discourages one from considering others. This matter is explored in detail in the discussion of Assumption 2, where it is asserted that the interaction space in which the inner dynamics of transformational leadership transpire, is in fact, a symmetric field. If we forget that the dynamics we consider are asymmetric manifestations of an overall symmetry, we also forget that part of the conceptual apparatus of transformational leadership is actively suppressed and barred from our consciousness of transformational leadership. In other words, there is a danger that we do not fully understand transformational leadership, and furthermore, we may be unaware that we do not fully grasp it.

Dimensions of Transformational Leadership are Intercorrelated

Because the four dimensions of transformational leadership share the same ground, one would expect them to be intercorrelated rather than orthogonal – a fact that explains existing research outcomes. The four dimensions of transformational leadership developed with the simultaneous evolution of both the conceptualisation and measurement of transformational leadership. Conceptually, when transformational leaders are charismatic, followers seek to identify with and emulate them. This style of leadership inspires followers by challenging them, persuading them to engage, and providing both meaning and understanding. Transformational leadership is also focused on being intellectually stimulating, and deliberately developmental of their followers' potential and abilities. Finally, this style of leadership supports the attainment of each follower's potential by providing the follower with support, mentoring, and coaching (Bass & Riggio, 2006).

These four dimensions all share conceptual foundations based on the fundamental relatedness between a leader and their followers. The dimensions share the leader's behavioural

demonstration of their intentions and expectations, and the expected responsiveness from the followers to the encouragement of the leader (idealised influence: behave in ways that serve as role models for their followers who want to emulate them; inspirational motivation: inspires and motivates by providing meaning and challenging their followers to stretch themselves and are masterful at generating team spirit, enthusiasm and optimism; intellectual stimulation: encourages followers to be innovative and creative by questioning assumptions, reframing problems, and approaching old situations in new ways).

These dimensions also share a specific focus on leader characteristics, which are hypothesised to engender followership (idealised influence: leaders are trusted, admired, and respected and estimated to have extraordinary capabilities, persistence, and determination and always strive to do the right thing by demonstrating high standards of ethical and moral conduct; individualised consideration: attention to each individual follower's needs for achievement and growth by acting as a coach or mentor, and developing potential in others as a deliberate aspect of their role usually through the curation of new learning opportunities and a supportive climate).

These dimensions do, however, differ along the continuum of collective to individual focal points in the relationship between a leader and a follower. There seems to be an emphasis on groups of followers through the dimensions of idealised influence, inspirational motivation and intellectual stimulation. However, there is a more individualised emphasis through the demonstration of the individual consideration dimensions.

Summary

The consequences of assuming that the inner dynamics of transformational leadership manifest in a dynamic field constituted by the interrelationships between leader character, leader integrity, and team culture were considered in terms of the four primary dimensions of

transformational leadership, namely, idealised influence, inspirational motivation, intellectual stimulation, and individual consideration.

The first consequence was that these dimensions must be understood as grounded in the dynamic field of the interrelationships between leader character, leader integrity and team culture. However, the current practice of grounding the four dimensions ignores the underlying symmetry of the dynamic field, resulting in an asymmetric grounding of these dimensions and possibly an incomplete understanding of transformational leadership. The second consequence was that the four dimensions must be interrelated, and as such, cannot be an orthogonal and rigid framework of transformational leadership.

Consequences of Assumption 2

The three concepts of leader character, leader integrity and team culture are not determined by any of the others. Thus, it seems that the inner dynamics of transformational leadership, as explained by leader character, leader integrity and team culture, are not deterministic.

Figure 10 shows that the interrelationships between the variables of character, integrity, and team culture are not deterministic. Therefore, one cannot conclude that leader integrity determines leader character and/or team culture, or that it is itself determined by these variables. Similarly, one cannot conclude that leader character determines team culture or vice versa.

As previously documented, these concepts and the interrelationships between them constitute a dynamic field, which represents the inner dynamics of transformational leadership. However, there are important distinctions to be drawn between a local and a global view of the field. A global view entails an overall consideration of the field, whereas a local view is about a specific point or area in the field. The field that represents the inner dynamics of transformational leadership is globally symmetric because the directions of the intercorrelations between leader

character, leader integrity, and team culture are equally probable. It is, however, considered to be locally asymmetric because at any specific point or area in the field, the correlations that constitute the intercorrelations are directionally distinguishable. For example, locally the relationship between leader character and team culture can be distinguished from the relationship between team culture and leader character, although globally these relationships are equally probable.

The symmetric field of the inner dynamics of transformational leadership is constituted by an infinite number of asymmetric subfields, with each of these subfields representing a particular state or instance of transformational leadership. In other words, when transformational leadership is considered as a series of leader-team relationship instances these relationships are directionally asymmetric – i.e., leader-to-team relationships differ from team-to-leader relationships – but in the long run, and when viewed globally, these asymmetries become equally probable. For example, for a local instance of transformational leadership one may be able to discern whether the leader influences the team more than the team influences the leader, or vice versa. However, globally and in the long run, many instances of transformational leadership, as demonstrated through leader-on-team influence and team-on-leader influence, become equally probable.

The consequence of forgetting or ignoring the assumption that the local asymmetries of the inner dynamics of transformational leadership constitute a global symmetry of equally probable leader-on-team and team-on-leader influence is a skewed understanding of transformational leadership.

As considered earlier, grounding the four dimensions of transformational leadership in the field of interrelationships between leader character, leader integrity, and team culture reveals that all dimensions are grounded in team culture. The team's desire to emulate the leader's behaviour,

to be inspired and motivated, innovative and creative, and to acknowledge needs for achievement and growth, indicate a particular team culture. However, this team culture is likely to be instigated by the influence of the leader's character and integrity. It is the leader who motivates, inspires, challenges and affords value and attention to each team member. Thus, the four dimensions of transformational leadership are grounded in an asymmetric field of leader-on-team rather than team-on-leader influence. The team's influence on the leader is at best a response initiated by a desire to emulate the leader, but always captured by – and never able to exceed – the influence of the leader. There is seemingly little, if any, room for democratic interrelationships in transformational leadership.

The asymmetric grounding of the dimensions of transformational leadership, therefore, does not explain a likely exchange between a leader and their team of followers (Van Vugt et al., 2008). If such an exchange between a leader and their followers exists, then when an effective leader demonstrates consistent patterns of behaviour that enhance trust and perceptions of integrity, there may not be a unidirectional influence on followership behaviours as indicated by Kaiser and Hogan (2010). The asymmetric view of a leader's influence on a team suggests that a team's effectiveness is the outcome of a leader's behaviour and the quality of the relationship from a leader towards their followers (Hiller et al., 2011). This perspective does not consider the influence of the followers' behaviours, and the quality of their relationship with the leader, on the effectiveness of the team. Of pertinence to this latter point and this exploration is research in the field of organisational culture that supports the equal probability of leader-on-team and team-on-leader influence. Studies show that a subculture usually exists within an intact team where the shared perceptions of the team members are influenced by all the attitudes, beliefs, behaviours and motivations of the team members (Gully et al., 2002), and not only the leader. What is, thus, more likely to guide people's behaviour within a team, are the behaviours evidenced amongst and between team members and especially those encouraged by the team

leader (Pearce & Herbik, 2004). These behaviours are based on values reinforced in an environment where people interact frequently with each other and their leader (Lok et al., 2005). It seems that there is, in fact, evidence for a more symmetrical relationship between a leader and their team.

The consequences on leadership – and transformational leadership – when leader-on-team and team-on-leader influence are equally probable, is the likelihood that a leader and their followers are in multiple relationships with each other and have the potential to influence each other in, and through, these relationships. Transformational leadership may, thus, be a more democratic concept that captures the interplay between all the individuals who constitute a team, some of whom may be identified as followers and others as the leader. Thus, it may be important to consider not only the integrity and character of a leader but also the integrity and character of the followers to understand the equal probability of influence between a leader on a team and a team on a leader.

The discussion of consequences of Assumption 2, thus far, has primarily focused on leader-on-team and team-on-leader influence, where leader character and integrity were considered an implicit part of the leader-on-team influence. The motivation for this was that the interrelationships between leader character and team culture, and between leader integrity and team culture were equally probable, and because leader character and integrity were strongly interrelated (see Figure 10).

It follows from Assumption 2 that the character-integrity and integrity-character relationships are locally asymmetric but globally equally probable (symmetric). When considering current literature, there is theoretical and empirical information relevant to this part of the exploration. First, it seems that both character and integrity are developed through the unique life course and experiences of an individual, and the specific influences of primary caregivers, religion,

educational and cultural contexts (Barnard et al., 2008). This suggests that the integration of psychosocial experiences and developmental learning have a direct influence on their levels of integrity (Lickona, 2014) and character. Therefore, integrity and character develop in relation to others and are not fixed, inborn characteristics but rather fundamentally grounded in interrelations.

Second, various conceptualisations of the interrelationships between character and integrity suggest that integrity is deterministic of character. Sperry (1999) described character as the holding of good principles, conscience, and courage in an integrated and congruent manner. Grahek et al. (2010) defined the character to lead as combining integrity and ethics, organisational integrity and courage, and humility, gratitude, and personal courage. These definitions challenge the unconscious nature of some other definitions of character, introducing integrity as a choice demonstrated by the courage to act in compliance with morals and ethics, and take responsibility for one's own behaviours (Grahek et al., 2010). Lickona (1991) similarly conceptualised character as knowing, desiring, and doing good – further supporting conceptualisations of character as integrating moral and ethical awareness, and the ability to assess situations and contexts to apply effective and consistent behaviours, judgement, and decision-making. This moral awareness helps leaders to do the right thing and converts their desire to do good into actions (Lickona, 1991, 2014). Many theorists and scholars argue that integrity determines character rather than vice versa, which suggests a local asymmetry. However, as mentioned previously, this does not preclude a symmetrical relationship at a global view.

Summary

A first consequence of Assumption 2 is the necessity to distinguish between global and local views of the field that represent the inner dynamics of transformational leadership. This field is globally symmetric but locally asymmetric.

A second consequence of Assumption 2 is either forgetting or ignoring the assumption that the local asymmetries of the inner dynamics of transformational leadership constitute a global symmetry of equally probable leader-on-team and team-on-leader influence. This leads to a skewed understanding of transformational leadership, where the four dimensions of transformational leadership are in an asymmetric local field of leader-on-team rather than team-on-leader influence. Thus, team culture is understood to be determined by leader character and integrity, and the transformation – that transformational leadership is all about – does not follow from democratic interaction between leader and team. This asymmetric view limits current understandings of leadership and transformational leadership.

A third consequence of Assumption 2 is that leader character determines leader integrity as much as leader integrity determines leader character. In other words, although leader integrity and leader character are locally asymmetric, where leader integrity is deterministic of leader character, they remain globally symmetrical. Therefore, any opposing viewpoints of theorists and researchers in current literature should be understood as asymmetric local understandings of the relationship between leader integrity and leader character, which are merely two sides of the same (symmetric) coin.

Consequences of Assumption 3

Leader integrity is an important factor in both leader character and team culture.

Figures 4 and 10 show the importance of leader integrity in the interaction between a leader and their team; and that leader integrity relates to both leader character and team culture. However, the integrity-character relationship seems to be more prominent than the integrity-team culture relationship. This is not surprising because integrity is specifically contextualised in relation to the leader and not the team. What is surprising about this integrity-team culture relationship is the global symmetry between them, which means that overall team culture influences leader integrity as much as leader integrity influences team culture. A further observation is the overall symmetry between leader integrity and leader character, indicating that integrity determines character as much as character determines integrity.

As discussed in reference to Assumption 1, the inner dynamics of transformational leadership manifest in a dynamic field constituted by the interrelationships between leader character, leader integrity, and team culture (all of which are considered in terms of the four dimensions of transformational leadership). According to Assumption 3, transformational leadership and its inner dynamics are, thus, influenced prominently by the integrity of a leader, and the interrelationships that the leader's integrity has with their character and the team culture. Consequent to Assumption 2, the local view of the importance of leader integrity in the relationship with both leader character and team culture may be asymmetric, whereas the global view is that in the long run these interrelationships are symmetrical.

Consequences of Team Culture Influencing Leader Integrity

An important focus of the discussion related to Assumption 3 turns to unpacking the expected observation that leader integrity influences team culture, and the surprising observation that leader integrity is influenced by team culture.

First, current literature focuses mainly on conceptualising integrity as a characteristic of a leader, and then as an influence on a team. A consequence of Assumption 2 is that there is a

local, asymmetrical relationship between a leader and their team, where the leader influences the behaviour of the team. Prior literature suggests that the social contract between the leader and followers in a team is often fragile and critically dependent on the levels of trust between them (Kaiser & Hogan, 2010). Kouzes and Posner (2004) found that followers admire and willingly follow leaders who exhibit high levels of integrity (Hogan & Kaiser, 2005). Thus, it seems that effective team leaders demonstrate consistent patterns of behaviour that enhance trust and perceptions of integrity, which then in turn encourage constructive followership (Kaiser & Hogan, 2010). In short, the higher the levels of perceived integrity of a leader, the more likely that a follower will emulate the leader's moral disposition and other associated behaviours (Leonard, 1997). A leader's perceived integrity is positively correlated with perceptions of the leader's effectiveness (Parry & Proctor-Thomson, 2002), improved business performance, and the attraction and retention of talent (Fulmer, 2004 cited in Baker & Craig, 2006). This aligns with the conceptualisation of transformational leaders who demonstrate and model the team's values, and increase the importance and stature of the team. They build momentum in team members' commitment to the greater good (Burns, 1978).

The importance of integrity in the relationship between a leader and their team is captured most prominently by the transformational leadership dimension of idealised influence, which describes leaders who behave in ways that serve as role models for their followers. These leaders are trusted, admired, and respected so that their followers want to emulate them. These leaders are willing to take risks whilst always striving to do the right thing and show high standards of ethical and moral conduct (Bass & Riggio, 2006). Alternatively, leaders who present with low levels of integrity often behave exclusively for personal gain and are usually driven by the need to win, survive, or gain power, status, wealth and authority (Barnard et al., 2008). Thus, low levels of perceived integrity are linked to acting in self-interest, often with

limited or no regard for others. The salience of integrity as a primary characteristic of effective leadership and influence on team culture is well established in the literature.

In exploring the consequences of Assumption 3, it is interesting to consider the influence of team culture on leader integrity. Thus, whilst effective leaders create conditions that invite the follower to take greater levels of moral ownership and protect the organisation's moral status (Hannah & Avolio, 2010), there is limited evidence of the influence of team culture on the perceived integrity of a leader. There are two approaches to unpacking this. The first approach is to revisit the discussion for Assumption 2, where the relationship between leader and culture was discussed. The second approach is to explore an adjacent conceptual link between integrity and moral potency, and the conceptual influence of team culture and followers, on the demonstration of moral potency.

Of pertinence to this first point of discussion is research in the field of organisational culture that supports the equal probability of leader-on-team and team-on-leader influence by producing evidence that a subculture usually exists within an intact team where the shared perceptions of the team members are influenced by all the attitudes, beliefs, behaviours and motivations of its team members (Gully et al., 2002) – not only the leader. In other words, the collective influences the individual leader. At the same time, team members' behaviours will reflect those behaviours explicitly encouraged by the team leader (Pearce & Herbik, 2004). Evidence, thus, exists for a more symmetrical relationship between a leader and their team. In the literature, this may not have explicitly included integrity but integrity may well be influenced in the correction from a team culture to the leader. As concluded in the discussion for Assumption 2, it may be important to consider not only the integrity and character of a leader but also the integrity and character of the followers to understand the equal probability of

influence between a leader's characteristics on a team and a team's impact on a leader's characteristics.

Hannah and Avolio (2010) contend that leaders, and especially transformational leaders, must demonstrate high levels of moral potency, that is, moral ownership, moral efficacy and moral courage. Moral orientation is separated into the characteristics of moral awareness and moral behaviour and action. Moral orientation and moral ownership are pertinent to the review of integrity, and its relationship to team culture, because moral ownership is not only applied to a leader's actions but also to the action of others, including teams (Hannah & Avolio, 2010). The extent of moral ownership encourages leaders to be both the producers and products of their environment (Bandura, 2002), and thus leaders with high self-efficacy and agency (Bandura, 1982) may interpret themselves as both a product of their context and shapers of the moral orientation of their context. This is a conceptual suggestion of a team-to-leader influence. The observation that team culture influences leader integrity is not specifically covered in the literature. However, when integrity is understood against the backdrop of moral potency (where moral orientation has been a core dimension of conceptualisations of integrity) and the conceptualised interplay between context and the leader, then this assumption adds to this understanding.

Relationship between Leader Character and Integrity

An additional point to explore in this discussion relates to how the concepts of leader integrity and leader character are dealt with in the literature. According to Assumption 3, they should be considered separate but related concepts, where integrity determines character as much as character determines integrity.

Assumption 3 establishes the prominence of demonstrated integrity to the inner dynamics of transformational leadership, where integrity is broadly defined as the inherent knowledge of

right and wrong, the consequent avoidance of wrongdoing, and the willingness to stand up for what is right in the face of observed wrongs (Sarros et al., 2007). Theorists have described character as thinking and action applied through choices and behaviours that eventually become habits, noting that these habits reflect manifestations of past experience and life events (Crossan et al., 2013). Character demonstrates a person's morals and integrity along a continuum (Hogan & Hogan, 2001), from the ability to manage and regulate behaviour to make a positive impression, through to situations when one is less concerned about the impression made (Hogan & Hogan, 2001). Conceptualisations of interrelationships between character and integrity suggest that integrity is deterministic of character. A larger proportion of theorists and scholars have argued that integrity is deterministic of character, rather than vice versa, which suggests a local asymmetry. However, as already noted, this does not preclude a symmetrical relationship at a global view. The mutually determined relationship between these two concepts is important in the discussion of Assumption 3.

It follows from Assumption 2, that character-integrity and integrity-character relationships are locally asymmetric but globally equally probable (symmetric). When considering current literature there is pertinent theoretical and empirical information to include in this part of the discussion. First, it seems that both character and integrity are developed through the unique life course and experiences of an individual and the specific influences of primary caregivers, religion, educational and cultural contexts (Barnard et al., 2008). This suggests that the integration of psychosocial experiences and developmental learning have a direct influence on their levels of integrity (Lickona, 2014) and character. Therefore, integrity and character develop in relation to others and are not fixed, inborn characteristics, meaning they are fundamentally grounded in interrelations.

Summary

Two points were explored under Assumption 3, namely that leader integrity influences team culture as much as team culture influences leader integrity; and that leader integrity and leader character are conceptually mutually determined.

Consequently, whilst current literature does not specifically focus on leader integrity being influenced by team culture, theorists suggest that team culture influences a leader's behaviour. Assumption 3, thus, emphasises the characteristic of a leader's integrity being influenced by the team culture.

An additional consequence of Assumption 3 relates to prior literature, which defines integrity as a determinant of character, more than character as a determinant of integrity. Assumption 3, thus, offers a more symmetrical view of the relationship and distinguishes the two concepts as related but distinct and conceptually equivalent in their influence on each other.

Consequences of Assumption 4

Leader maturity is not a factor in the inner dynamics of transformational leadership

Leader maturity is not related to leader character, leader integrity or team culture (see Figures 4 and 10) and, therefore, not inherent to the field that represents the inner dynamics of transformational leadership. Assumption 4 impacts significantly on current understandings of leader maturity in transformational leadership.

There are two main approaches to understanding adult development: perspectives focusing on social development and on age-related development (Kelly, 2014). In the current study, maturity was defined socio-developmentally as the development of a person (or leader) on a continuum of relationships, needs, ego and impact. This grounding conceptualisation of adult development is aligned with the conceptualisations of integrity and character (as reviewed in

Chapter 2). Cook-Greuter's (2013) synthesis of key theoretical work in the field is primarily socio-developmental, rather than internally, biologically or age-determined. The stages were defined as follows:

1. The Pre-conventional, self-centric stage (giving and defending) focuses primarily on self-protection, personal needs, material things and immediate opportunities.

2. The Conventional, group-centric stage (conforming and belonging) focuses on observing protocol and socially expected behaviour, conforming to social norms, working to group standards, and generally needing approval and a sense of acceptance.

3. The Conventional, skill-centric stage (comparing and perfecting) focuses on being competent in their own area of interest, seeing their way as the only valid way of thinking and basing their decisions on incontrovertible 'facts'.

4. The Conventional, self-determining stage (analysing and achieving) focuses on overseeing themselves as agents and initiators rather than as pawns of a system and focuses primarily on delivering results, effectiveness, goals, and success.

5. The Post-conventional, self-questioning stage (relativising and contextualising) focuses on seeing themselves in relationship to context and in interaction within systems, concerned with differences between reality and appearance; having an increased understanding of complexity and see the systemic connections and unintended consequences of actions.

6. The Post-conventional, self-actualising stage (integrating and transforming) focuses on recognising higher principles, the social construction of reality, and the interactions of complex and dynamic systems.

7. The Post-conventional, construct-aware and beyond stage focuses attention on constructs, metacognition, and ego traps to encourage all-embracing and witnessing of what is.

Across these stages of development, Cook-Greuter (2013) explains a shifting focus from self to others, from narrow self-interest to a morally balanced perspective that elevates the interests of the greater good, as one moves into the latter stages of development. An important implication of Assumption 4 in understanding these conceptualised stages of adult development, and the progression of a leader through these stages, is that these aforementioned shifts from self towards others are the manifestations of the dimensions of transformational leadership as determined by the field of interactions between character, integrity and team culture. In other words, these stages of adult development do not determine character, integrity or team culture.

Theorists in the field of adult development suggest that there is an interrelationship between a leader's stage of adult development and the four dimensions of transformational leadership. Kegan and Lahey (1984) suggested that development is characterised primarily by the ability to make meaning (irrespective of chronological age), and that as a person develops through adulthood, they will outgrow earlier meaning-making systems and integrate those as sub-systems into more evolved processes of meaning making. Assumption 4 places the field of interaction between integrity, character and team culture, and the dimensions of transformational leadership as likely meaning-making processes that determine adult maturity.

Kegan (1982) defined five stages of adult development, with three of them pertinent to leadership. These stages chart the progression from the socialised-mind, through to the self-authoring mind and towards the self-transforming mind with increasingly deep relationships (Hagström & Stålne, 2015). In the Institutional stage, leaders are confident in their self-identity, using their values and principles to navigate life, and giving rise to a sense of autonomy in identity. Kuhnert and Lewis (1987) linked this stage of development to transformational leadership suggesting that, at this stage, leaders look towards the greater good of humanity. Assumption 4 suggests that the dimensions of transformational leadership are the means by

which leadership maturity is expressed, and not vice versa. In other words, the institutional stage, and all associated behaviours are manifestations of the dimensions of transformational leadership. A further salient point is the constructive developmental view of Kegan (1982), which considers that a leader at a lower stage of maturity may be independent, transactional, and unable to influence followers in sustainable ways. With less maturity, these leaders demonstrate minimal transformational leadership, which when aligned with the consequences of Assumption 4 would be explained as an inability to comprehensively demonstrate the four dimensions of transformational leadership – a revelation of their likely early stage of adult development.

As has been illustrated, many sources have theorised relationships between a leader's stage of adult development and the inner dynamics of transformational leadership. However, Assumption 4 suggests that leader maturity is not part of the inner dynamics of transformational leadership, but is rather expressed as a result of, and through, the four dimensions of transformational leadership.

The field of adult development provides distinct and predictable stages of development through the adult life cycle. This super structure is built on a series of principles that influence how people see themselves and ways in which they engage with their environment and in all their relationships over the life course (Hoppe, 2007). Assumption 4 implies that these principles may include the field of intercorrelations between leader character, leader integrity, and team culture from which the four dimensions of transformational leadership deploy, and which manifest the leader's maturity.

The more advanced a leader is in developmental terms, the more they have access to the prior stages they have moved through (Cook-Greuter, 2013). Therefore, as people move towards greater levels of developmental complexity they tend to notice more in their environment and

become more able to describe, articulate, cultivate, influence and transform themselves (Cook-Greuter, 2013). Assumption 4 implies that this personal transformation and ascension through the stages of maturity encourages more autonomy, understanding, tolerance of diversity and ambiguity, and self-awareness – all manifestations of the inner dynamics of transformational leadership as influenced by character, perceived integrity and team culture.

A major consequence of Assumption 4 is, thus, that idealised influence, intellectual stimulation, individualised consideration and inspirational motivation are not determined by the development stage of a leader, but rather by leader character, integrity and team culture. The development stage of a leader manifests along these dimensions.

Summary

That leader maturity is not a factor in the inner dynamics of transformational leadership means that it is a function of, and not a precursor to, leader character, leader integrity, and team culture and that it manifests and deploys in terms of the four dimensions of transformational leadership, namely, idealised influence, intellectual stimulation, individualised consideration, and inspirational motivation.

Consequences of Assumption 5

Team culture behaviour is more prominent than leader character behaviour in the inner dynamics of transformational leadership.

Table 16 contains detailed information about the field that represents the inner dynamics of transformational leadership. In addition to leader integrity, it shows the intercorrelations between the sub-factors that constitute leader character and team culture. Table 17 draws on this information to determine the prominence of each of these factors and their sub-factors in the field that represents the inner dynamics of transformational leadership. Team culture

manifests through 91 (mostly strong) correlations in this field, whereas leader character surfaces through 81 (mostly moderate) correlations. Hence, behaviour demonstrating team culture features more prominently in the inner dynamics of transformational leadership than behaviour reflecting leader character. This information is condensed in Table 18 and visually depicted in Figure 4.

A consequence of Assumption 5 is the team-on-leader asymmetry that manifests in the field of the inner dynamics of transformational leadership. This asymmetry, at least partly, counters the leader-on-team asymmetry that is intuitively assumed in leadership theory, and as such, at least partly, establishes global symmetry in the field of transformational leadership.

This assumption suggests the team-on-leader locally asymmetric finding that the culture and behaviour of people within a team (as influenced by the behaviours amongst and between team members) are more prominent than the leader character behaviours (Pearce & Herbik, 2004). Sivasubramaniam et al. (2002) found that leaders primarily mimic and role-model the team's values and behaviours, and may simply capitalise on aspects of the culture that already exist. The behaviours of both the team culture and the leader are more readily reinforced in an environment of people who interact closely on a regular basis (Lok et al., 2005). Contrasting research has, however, also found the leader-on-team local asymmetry, which suggests that transformational leadership is limited in the extent of its demonstration through an individual leader. These contradictory findings of the relationship between leader character and team culture must be understood as local asymmetries of the global symmetry of transformational leadership (see discussion of Assumption 2). However, the consequence of Assumption 5 is that team culture offers prominence to transformational behaviours that are generated from within the collective behaviours of followers.

When aligned with Assumption 2, and a local asymmetrical view of the relationships between team culture and leader character (yet a global symmetrical view of the relationships between these concepts), Assumption 5 offers consequential salience to the interplay and interaction between the team's leader and their followers.

Summary

According to Assumption 5, team culture – the collective behaviour of a leader's followers – is most prominent in explaining the inner dynamics of transformational leadership. In other words, the collective behaviours of followers can most prominently explain the interrelationships between the four dimensions of transformational leadership. Thus, Assumption 5 establishes a team-on-leader asymmetry, which when read together with the leader-on-team asymmetry promoted by traditional understandings of leadership, supports global symmetry of transformational leadership.

A further consequence of Assumption 5 is that a leader's character, as an individual characteristic of a leader's behaviour, is not as individually prominent as the team culture behaviours. Therefore, despite the dimensions of transformational leadership indicating a predominant influence of a leader's behaviours on their followers, Assumption 5 denotes the followers' behaviours as more prominent in understanding the inner dynamics of transformational leadership.

Consequences of Assumption 6

Other-focused behaviour is more prominent in transformational leadership than self-focused behaviour.

The inner dynamics of transformational leadership are represented by a field that is globally symmetrical but contains numerous local asymmetries (see Figure 10). One of these

asymmetries is captured in the prominence of team culture as highlighted by Assumption 5. Assumption 6 indicates a further asymmetry, namely the prominence of other-focused behaviour in relation to self-focused behaviour (see Figure 4).

Assumption 6 indicates prominence of other-focused behaviours, such as building and maintaining relationships, encouraging others, growing and developing others, and demonstrating care and kindness. Of particular importance are the behaviours that demonstrate relating (getting along and relating well to others, good communicators and being friendly and approachable); encouraging (actively encouraging and praising others, genuinely complimenting others, and being good listeners); developing (being willing to take time to develop others, teaching and coaching others to broaden their skills and capabilities, and developing and assisting others in solving problems); and the behaviours that demonstrate compassion (being compassionate, caring and sympathetic towards others without encouraging self-pity, being considerate, kind and generous, and showing genuine concern for others).

These behaviours listed in the previous paragraph are more prominent in transformational leadership than self-focused behaviours. They are demonstrated through being authentic, transforming, reliable, and achieving. Of course, this does not mean that self-focused behaviour is not important, only that it is less prominent than behaviour demonstrating other-focused behaviour. The relative prominence of correlates affects the reliability of the correlations between them. Higher prominence means a larger domain in the field, and lower prominence a smaller domain. A correlation that projects from a larger to a smaller domain is more focused and reliable than a correlation that projects from a smaller to a larger domain, which is more dispersed and less reliable.

The complexity of the self-focused and other-focused behaviour asymmetry is depicted in Figure 4 and Tables 18–20 (extracted from Table 16). The field in which these behaviours

manifest is asymmetrical in locations where the correlations that constitute an intercorrelation are not equally probable.

Figure 4 and Table 19 show strong symmetry between leader other-focused and team other-focused behaviour, as well as high levels of moderate correlational effects between self- and other-focused behaviour in the case of both leader character and team culture. However, comparing the relationship between the leader's self- and other-focused behaviour with that of the team reveals differences, and the correlations of the intercorrelation between leader self-focused and team self-focused behaviour are asymmetrical. The indicator that best summarises the asymmetry between self-focused and other-focused behaviour is the asymmetry between the leader self-focused / team other-focused intercorrelation and the leader other-focused / team self-focused intercorrelation.

Table 19 (extracted from Table 16)

Intercorrelations between Leader and Team Self-Focused and Other-Focused behaviour

Team Self-focused	Leader Character Self-focused				Leader Character Other-focused			
	Authentic	Transforming	Reliable	Achieving	Relating	Encouraging	Developing	Compassionate
Authentic	.172	.196	**.342****	.209	.082	.226	**.252***	0,213
Transforming	.022	.217	**.398****	.230	.159	.213	**.265***	**.303***
Reliable	.039	.217	**.441****	.239	.198	.213	.230	**.286***
Achieving	.030	**.346****	**.432****	**.325***	.121	.213	**<u>.273</u>***	**.252***
Team Other-focused								
Relating	.116	.226	**.467****	**.299***	**.396****	**.419****	**.342****	**.458****
Encouraging	.194	.226	**.441****	**.299***	**.370****	**.523****	**.385****	**.510****
Developing	.215	.247	**.376****	**<u>.303</u>***	**.271***	**.398****	**.441****	**.394****
Compassionate	.095	.222	**<u>.419</u>****	.243	**.366****	**.406****	**.303***	**.488****

Table 20

Similarity of Self- and Other-focused Behaviour in Leader Character and Team Culture

Leader Character Other-focused	Leader Character Self-focused			
	Authentic	Transforming	Reliable	Achieving
Relating	.343**	.224	.474**	.332**
Encouraging	.388**	.222	.359**	.320*
Developing	.439**	.497**	.428**	.458**
Compassionate	.323*	.312*	.458**	.376**

Team Other-focused	Team Self-focused			
	Authentic	Transforming	Reliable	Achieving
Relating	.523**	.613**	.630**	.596**
Encouraging	.591**	.561**	.647**	.639**
Developing	.561**	.609**	.643**	.626**
Compassionate	.467**	.574**	.557**	.548**

The symmetry between leader other-focused and team other-focused behaviour supports the assumption that the field of the inner dynamics of transformational leadership is globally symmetric, but the asymmetry between leader character self-focused and team culture self-

focused behaviour does not. The asymmetries in the field point to two significant consequences, namely, that transformational leadership is inherently relational, and that it is an incomplete theory of leadership.

The Inherent Relationality of Transformational Leadership

The inner dynamics of transformational leadership were previously defined as manifestations of a field constituted by leader character, leader integrity, and team culture, and the interrelationships between them. This definition encourages, at least implicitly, the understanding of there being persons (leaders and team members) with characteristics expressed in behaviours of integrity, character and culture. These characteristics were assumed to be ontologically more grounded than the relationships between them, and the interrelationships were understood as secondary manifestations. However, this perspective reflects an ontological bias that is imported from outside and not inherent to the definition of the field that carries the manifestations of the inner dynamics of transformational leadership. The inner dynamics of transformational leadership manifest in a relational field of global symmetries and local asymmetries. The prominence of other-focused behaviour relative to self-focused behaviour expresses a relational ontology, that is, an ontology in which characteristics are relationally constituted rather than ontologically preconceived. It is not the already existing authentic, transforming, reliable and achieving person who establishes and drives the relationship. The authentic, transforming, reliable and achieving person comes into being in a relating, encouraging, developing and compassionate globally symmetrical relationship.

The Incompleteness of Transformational Leadership Theory

The distinction between self-focused and other-focused behaviour introduces asymmetry into the field of transformational leadership. Current transformational leadership theory does not offer any conceptual apparatus to counter this asymmetry in the inner dynamics of

transformational leadership. This raises the possibility that transformational leadership theory is incomplete, or at least an incomplete theory of leadership. As such, this assumption supports the argument that transformational leadership is differentiated from other styles of leadership, such as transactional leadership, by its emphasis on other-focused behaviours over self-focused behaviours (Burns, 1978). In fact, transformational leadership and transactional leadership are considered to be on a continuum known as the full range leadership model (Burns, 1978). Assumption 6 supports the notion of this being a continuum between self-focused and other-focused behaviour. It also explains the phenomenon of pseudo-transformational or inauthentic transformational leaders. Such leaders exhibit many transformational leadership behaviours but are primarily self-centred, power-oriented, and morally inconsistent. Authentic transformational leaders primarily transcend their self-interests and do what is morally right both for themselves and the greater collective (Bass & Riggio, 2006).

Summary

The asymmetry between self-focused and other-focused behaviour is complex. The relationship between leader other-focused and team other-focused behaviour is symmetrical and there are high levels of moderate correlational effects between self- and other-focused behaviour in the case of both leader character and team culture. However, the correlations of the intercorrelation between leader self-focused and team self-focused behaviour are asymmetrical, as are the leader-self-focused / team-other-focused intercorrelation and the leader-other-focused / team-self-focused intercorrelation. The symmetry between leader other-focused and team other-focused behaviour supports the assumption that the field of the inner dynamics of transformational leadership is globally symmetric, but the asymmetry between leader character self-focused and team culture self-focused behaviour does not. The asymmetries in the field point to two significant consequences, namely, that transformational leadership is inherently relational, and that it is an incomplete theory of leadership.

Consequences of Assumption 7

A relational inner dynamic of transformational leadership manifests in the network of leader and team self-focused and other-focused behaviour relationships

In a relational understanding of transformational leadership, behaviours are not expressions of the characteristics of preconceived leaders and teams. Rather, such characteristics are qualities of behaviour, in terms of which behaviours are distinguished from one another. Fundamentally, a behaviour can be thought of as an undulation (technically a vector) in the uniform field within which the inner dynamics of transformational leadership manifest. As such, behaviour has amplitude (strength) and direction (orientation) and is also distinguished in terms of qualities, such as relating, encouraging, developing, and being compassionate, authentic, transforming, reliable and achieving. Behaviour is integrable across such qualities constituting integrals of the areas (domains) over which the integrations take place. For example, given a particular domain in the field of behaviour, behaviours of relating, encouraging, developing and compassion can be integrated to constitute an integral of other-focused behaviour. Integrals are interrelated if their domains are interrelated. Domains are interrelated if all or some of the behaviours in one domain relate to those in the other.

Therefore, the assumption is that empirically transformational leadership begins with a field of behaviour manifestations, primarily distinguished as leader associated behaviour and team associated behaviour. These behaviours are distinguished from each other through eight primary forms of behaviour, namely authentic, transforming, reliable, achieving, relating, encouraging, developing and compassionate, and constitute an integral of self-focused behaviour across the first four of these behaviours, and an integral of other-focused behaviour across the remaining four. These integrals are interrelated, and interrelated self-focused and other-focused behaviour integrals constitute relational nodes. A relational node produces other-

focused behaviours in relation to self-focused behaviours, and vice versa. Transformational leadership involves two within behaviour type relational nodes: one within leader-associated behaviour and one within team associated behaviour. Furthermore, there are two cross-over behaviour type relational nodes relating leader associated self-focused and team associated other-focused behaviour, and team associated self-focus and leader associated other-focused behaviour. The within behaviour type relational nodes are related more tightly than the cross-over type, confirming the initial differentiation between leader and team associated behaviour, but unfortunately encouraging the notion that these nodes express characteristics of an entity called leader and an entity called team, respectively. This idea is problematic because it amounts to an error of category, like confusing the calculator with the abacus. It should be understood that the entities of leader and team are constituted and constructed from these nodes.

Given these considerations, the inner dynamics of transformational leadership can be described in terms of four relational nodes. The two within-behaviour type relational nodes set up a relational space in which the two domains of other-focused behaviour are interrelated symmetrically. This means they can be transformed into each other without affecting the relationship between the two integrals of other-focused behaviour. However, in this relational space, the relationship between the two domains of self-focused behaviour is asymmetrical. In the domain of leader associated self-focused behaviour, reliable behaviour is the only primary form of behaviour that relates to the domain of team associated self-focused behaviour. In contrast, achieving behaviour is the only primary form of behaviour that relates to the domain of leader associated self-focused behaviour. These domains of primary behaviour cannot be transformed into each other without affecting the relationship between the two integrals of self-focused behaviour.

The two across behaviour type relational nodes link symmetrical and asymmetrical components of the relational space constituted by the within behaviour type relational nodes and produce the core of the inner dynamics of transformational leadership. At the core are developing and achieving behaviour, and compassionate and reliable behaviour. This follows from the intersection of the two across behaviour type relational nodes. The leader associated self-focused / team associated other-focused relational node produces team associated other-focused behaviours from leader self-focused reliable and achieving primary behaviours, and vice versa. The team associated self-focused / leader associated other-focused relational node produces team associated self-focused behaviours from leader associated other-focused developing and compassionate primary behaviours, and vice versa.

Summary

A relational interpretation considers the empirical origins of transformational leadership as a field with manifested behaviours. The relational space of these behaviours is differentiable and integrable. It is differentiable as primary forms of behaviour and integrable over domains of primary behaviours. The primary forms of behaviour are distinguished as leader focused and team focused behaviour, adding directionality to each primary behaviour. Consequently, transformational leadership can be considered in terms of two within behaviour type and two across behaviour type relational nodes, with each relational node producing self-focused behaviour from other-focused behaviour, and vice versa. The production of developing and achieving, and compassionate and reliable are forms of primary behaviour at the core of the inner dynamics of transformational leadership.

The current chapter considered the consequences of the assumptions contained in the alternative model for the inner dynamics of transformational leadership. In other words, transformational leadership constituted the context within which the implications of these assumptions were considered.

Conclusion

The exploration of results revealed important consequences for the current literature and perspectives on transformational leadership, including the finding that the four dimensions of transformational leadership are grounded in the dynamic field of the interrelationships between leader character, leader integrity and team culture, and that the asymmetrical relationships between these concepts are a limitation of transformational leadership theory. In contrast, the dimensions of transformational leadership are not considered an orthogonal and rigid framework, and thus, the inner dynamics of transformational leadership may be locally asymmetrical, whilst also globally symmetrical. This local asymmetry and global symmetry was an important consequence of the discussion regarding the majority of the assumptions arising from this work. This was evident in the consequence that character determines leader integrity, as much as leader integrity determines leader character, and that integrity is influenced by team culture, as much as team culture is influenced by leader integrity (despite opposing viewpoints of many theorists and researchers). Similarly, when exploring the relationships between self-focused and other-focused behaviours across leader character and team culture there is an asymmetry and a symmetry that suggests further exploration is required to consolidate a more complete theory of transformational leadership.

Furthermore, the discussion considered that leader maturity is not a factor in the inner dynamics of transformational leadership. However, maturity is most likely a function of leader character, leader integrity and team culture, and manifests within the four dimensions of transformational leadership. Additionally, despite the dimensions of transformational leadership indicating a predominant influence of a leader's behaviours on their followers, the followers' behaviours are more prominent in understanding the inner dynamics of transformational leadership.

The discussion of the consequences of the seven defined assumptions revealed interesting considerations that offer a contribution to the field of consulting psychology, with a more specific emphasis on further explaining transformational leadership theory.

CHAPTER 6: CONCLUSION

This concluding chapter aims to synthesise the key outcomes of the study by locating them within the context of the study focus, the strengths and limitations of the study, and the recommendations for further research that have been identified.

Focus of the Study

The primary problem that this study addressed is the limited exploration and understanding of the interrelationship between leader integrity, character, stage of adult development and team culture, and how these interrelationships explain and inform the inner dynamics of transformational leadership.

This problem statement was converted into the following research question:

What are the interrelationships between a leader's character, integrity, stage of adult development, and team culture, and how do these interrelationships explain and inform the inner dynamics of transformational leadership?

The research question was formulated in terms of a model (see Figure 1) developed from a review and conceptual analysis of existing literature. The model (see Figure 3) allowed for several hypotheses to be formulated, which guided the collection of empirical data. The research hypotheses were set up as null and non-directional alternative hypotheses. The hypotheses were tested following a classical statistical approach, namely, to construct and assess a model of null hypotheses, reverting to the alternative hypotheses where null hypotheses failed.

The outcome was a model (see Figures 4 and 10) that offered the best interpretation of the observed data. However, to avoid Bernoulli's fallacy this was not read as the observed data

validating the truth of the model. Instead, the model was used to generate several assumptions, and the consequences of these assumptions were then explored.

Outcomes of the Study

The outcomes of the study are captured in seven assumptions and the consequences of these assumptions:

1. *Transformational leadership involves interactions between a leader, the people they lead and the social systems they encounter. This constitutes an interaction space that contains the inner dynamics of transformational leadership.*

   The consequences of this assumption were considered in terms of four primary dimensions of transformational leadership (idealised influence, inspirational motivation, intellectual stimulation, and individual consideration).

   The first consequence was that these dimensions must be understood as grounded in the dynamic field of the interrelationships between leader character, leader integrity and team culture. However, it was noted that the current practice of grounding the four dimensions ignores the underlying symmetry of the dynamic field, resulting in an asymmetric grounding of these dimensions and, possibly, an incomplete understanding of transformational leadership.

   The second consequence was that the four dimensions must be interrelated and, as such, cannot be an orthogonal and rigid framework of transformational leadership.

2. *The three concepts of leader character, leader integrity and team culture are not determined by any of the others. Thus, it seems that the inner dynamics of transformational leadership, as explained by leader character, leader integrity and team culture, are not deterministic.*

A first consequence of Assumption 2 is the necessity to distinguish between global and local views of the field that represent the inner dynamics of transformational leadership. This field is globally symmetric but locally asymmetric.

A second consequence of Assumption 2 is either forgetting or ignoring the assumption that the local asymmetries of the inner dynamics of transformational leadership constitute a global symmetry of equally probable leader-on-team and team-on-leader influence. This leads to a skewed understanding of transformational leadership, where the four dimensions of transformational leadership are in an asymmetric local field of leader-on-team rather than team-on-leader influence. Thus, team culture is understood to be determined by leader character and integrity and the transformation (that transformational leadership emphasises) does not follow from democratic interaction between leader and team. This asymmetric view limits current understandings of leadership in general and transformational leadership in particular.

A third consequence of Assumption 2 is that leader character determines leader integrity as much as leader integrity determines leader character. In other words, although leader integrity and leader character are locally asymmetric, where leader integrity is deterministic of leader character, they remain globally symmetrical. Therefore, any opposing viewpoints of theorists and researchers in current literature should be understood as asymmetric local understandings of the relationship between leader integrity and leader character, essentially two sides of the same (symmetric) coin.

3. *Leader integrity is an important factor in both leader character and team culture.*

Two points were explored under Assumption 3, namely, that leader integrity influences team culture as much as team culture influences leader integrity; and that leader integrity and leader character are conceptually mutually determined.

Consequently, whilst current literature does not specifically focus on leader integrity being influenced by team culture, this assumption supports theorists who suggest that team culture influences a leader's behaviour, emphasising that a leader's integrity is influenced by the team culture.

Assumption 3 is contrary to literature that defines integrity as a determinant of character more than character as a determinant of integrity. Assumption 3 offers a more symmetrical view of this relationship, distinguishing the two concepts as related but distinct, and conceptually equivalent in their influence of each other.

4. *Leader maturity is not a factor in the inner dynamics of transformational leadership.*

   That leader maturity is not a factor in the inner dynamics of transformational leadership means that it is a function of, and not a precursor to, leader character, leader integrity and team culture. It manifests and deploys in terms of the four dimensions of transformational leadership.

5. *Team culture behaviour is more prominent than leader character behaviour in the inner dynamics of transformational leadership.*

   Team culture, defined as the collective behaviour of a leader's followers, is most prominent in explaining the inner dynamics of transformational leadership. In other words, the collective behaviours of followers can most prominently explain the interrelationships between the four dimensions of transformational leadership. Thus, Assumption 5 establishes a team-on-leader asymmetry, which when read together with the leader-on-team asymmetry promoted by traditional understandings of leadership, supports global symmetry of transformational leadership.

   A further consequence of Assumption 5 is that a leader's character, as an individual characteristic of a leader's behaviour, is not as individually prominent as the team culture behaviours. Therefore, despite the dimensions of transformational leadership indicating a

predominant influence of a leader's behaviours on their followers, Assumption 5 denotes followers' behaviours as more prominent in understanding the inner dynamics of transformational leadership.

6. *Other-focused behaviour is more prominent in transformational leadership than self-focused behaviour.*

The asymmetry between self-focused and other-focused behaviour asymmetry is complex. The relationship between leader other-focused and team other-focused behaviour is symmetrical and there are high levels of moderate correlational effects between self- and other-focused behaviour in the case of both leader character and team culture. However, the correlations of the intercorrelation between leader self-focused and team self-focused behaviour are asymmetrical, as are the leader-self-focused / team-other-focused intercorrelation and the leader-other-focused / team-self-focused intercorrelation. The symmetry between leader other-focused and team other-focused behaviour supports the assumption that the field of the inner dynamics of transformational leadership is globally symmetric, but the asymmetry between leader character self-focused and team culture self-focused behaviour does not. The asymmetries in the field point to two significant consequences, namely, that transformational leadership is inherently relational and that it is an incomplete theory of leadership.

7. *A relational inner dynamic of transformational leadership manifests in the network of leader and team self-focused and other-focused behaviour relationships.*

A relational interpretation considers the empirical origins of transformational leadership as a field with manifested behaviours. The relational space of these behaviours is differentiable and integrable. It is differentiable as primary forms of behaviour and integrable over particular domains of primary behaviours. The primary forms of behaviour are distinguished

as leader focused and team focused behaviour, adding directionality to each primary behaviour.

Consequently, transformational leadership can be considered in terms of two within behaviour type and two across behaviour type relational nodes, with each relational node producing self-focused behaviour from other-focused behaviour, and vice versa. Developing, achieving, compassion and reliable forms of primary behaviour lie at the core of the inner dynamics of transformational leadership.

In summary, the question of how the obtained interrelationships among a leaders' personal characteristics of character, integrity, stage of adult development, and team culture contribute to understanding and explaining transformational leadership (following from Research Objective 6) can be answered as follows.

First, the transformational leadership dimensions of idealised influence, inspirational motivation, intellectual stimulation, and individualised consideration are grounded in the symmetric, dynamic field of the interrelationships between leader character, leader integrity and team culture, and are all interrelated.

Second, it is important to consider transformational leadership not only in terms of leader-on-team influence, but equally in terms of team-on-leader influence. This is pertinent because the study findings were contrary to current literature, and suggest a need for further study. Leader character may determine leader integrity as much as leader integrity determines leader character, and leader integrity may be influenced by team culture, as much as team culture is influenced by leader integrity.

Third, it is assumed that leader maturity is not considered a factor in the inner dynamics of transformational leadership. Thus, the maturity of a leader and their corresponding stage of

adult development are likely a function of the leader's character, integrity and team culture. A leader's maturity may, thus, still manifest in terms of the four dimensions of transformational leadership. However, character, integrity and team culture are important factors in shaping the leader's maturity and placing them at a specific stage of adult development.

Fourth, despite the dimensions of transformational leadership indicating a predominant influence of a leader's behaviours on their followers, the followers' behaviours are more prominent in the inner dynamics of transformational leadership, necessitating reformulations of these dimensions.

Lastly, the asymmetries of the interrelationships have two important consequences, namely, that transformational leadership is inherently relational and is an incomplete theory of leadership. Being inherently relational means that its traditional realist approach needs re-evaluating in terms of a constructionist perspective, and its incompleteness means that in leadership theory it needs to be considered as a complementary theory rather than an ultimate or alternative theory.

Strengths and Limitations of the Study

A primary limitation of the study was the size and structure of the sample. Data were obtained for 31 senior team leaders and their senior teams, comprising 180 executives in leadership positions and 1080 members in the executives' teams. Several challenges affected the sample size, namely the limited number of senior leaders in the field, the fact that they were often time poor and unavailable, and the exponential increase of participants associated with each additional senior leader. The small sample of senior team leaders meant multivariate analytic techniques (such as structural equation modelling) could not be used.

However, the benefit of the limited sample size was that it encouraged close engagement with the available information and thorough exploration of research processes and logic. Because there were no advanced and complex statistical techniques to hide behind and implement mechanically, the researcher had to work hard to avoid being exposed as a research king without clothes. The close encounter with basic research processes and methodologic logic could be considered a strength of this study in breaking new ground, such as showing how to avoid Bernoulli's fallacy in a study based on a sample that was too small to allow proper Bayesian analysis. Using the findings of the empirical study as pre-knowledge in the form of assumptions and exploring the consequences of these assumptions led to richer discussion and deeper insight than could be afforded by drawing conclusions from the findings.

Recommendations for Further Research

The discussions of the consequences of the assumptions that followed from the findings of the empirical study opened several topics for further research.

1. The origins of the four dimensions of transformational leadership: The notion that the local asymmetries of the inner dynamics of transformational leadership constitute a global symmetry of equally probable leader-on-team and team-on-leader influence needs further exploration. Current literature suggests that the four dimensions of transformational leadership originate in an asymmetric local field of leader-on-team rather than team-on-leader influence. This asymmetric view limits current understandings of leadership and transformational leadership and requires further investigation.

2. The relationship between leader character and leader integrity: The present study offers a symmetrical view on the relationship between integrity and character. The notion that leader character determines leader integrity as much as leader integrity determines leader character opposes the viewpoints of many theorists and researchers in current literature. Despite this

variance being likely explained by the asymmetric local understanding of the relationship between leader integrity and leader character, further research is recommended to elucidate the relationship between leader character and leader integrity.

3. The relationship between leader integrity and team culture: Current literature does not specifically focus on leader integrity being influenced by team culture, but theorists do suggest that team culture influences a leader's behaviour. A specific focus on exploring the bidirectionality of the relationship between integrity and team culture is required.

4. Leader maturity in the inner dynamics of transformational leadership: That leader maturity is not a factor in the inner dynamics of transformational leadership means it is a function of, and not a precursor to, leader character, leader integrity and team culture. Maturity, therefore, manifests and deploys in terms of the four dimensions of transformational leadership. Thus, further research is required to determine whether and how leader maturity manifests as a function of character, integrity and team culture.

5. The symmetry of leader character and team culture: Team culture is most prominent in the inner dynamics of transformational leadership. In other words, there is a team-on-leader asymmetry, which when read together with the leader-on-team asymmetry promoted by traditional understandings of leadership, supports global symmetry of transformational leadership. However, more research is required to confirm this statement. The notion that a leader's character, as an individual characteristic of a leader's behaviour is not as individually prominent as the team culture behaviours contradicts the dimensions of transformational leadership that indicate a predominant influence of a leader's behaviours on their followers. More research is required to explore the followers' behaviours as being more prominent in understanding the inner dynamics of transformational leadership.

6. The need for conceptual analytic studies: The notions that transformational leadership is theoretically incomplete and inherently relational require conceptual analysis of

transformational leadership and its relationships with other leadership theories. Conceptual and philosophical analysis of a relational and constructionist approach to transformational leadership is needed.

In this chapter an integration of the research outcomes and summarised the extent to which the findings of the study provided insight and explanation for the interrelationship between leader integrity, character, stage of adult development, and team culture; and how these interrelationships may explain and inform the inner dynamics of transformational leadership was provided.

At a time when the world is grappling with the quality of judgements and actions of leaders across all spheres of society, there is clear value to expanding and deepening the theory of transformational leadership and understanding the inner dynamics as explained through a wide range of psychological characteristics and their interrelationships. The approach used in this study, where the findings of the empirical study were used to articulate assumptions that were then explored in terms of the consequences of these assumptions, led to a deep review and exploration of these inner dynamics of transformational leadership theory. Of specific value to the field of consulting psychology is the extent to which this study unpacks important, widely researched leadership characteristics (character, integrity, maturity and team culture) and their interrelationships as deeper explanations for the inner dynamics of transformational leadership. The study encourages further investigation of the interplay between and amongst these concepts and further development of a prominent contemporary theory of leadership.

REFERENCES

Aiken, L., & West, S. (1991). *Multiple regression: Testing and interpreting interactions.* Thousand Oaks, CA: Sage.

Allen, B. S. J., & Wergin, J. F. (2009). Leadership and Adult Development theories: Overviews and overlaps. *Leadership Review*, *9*, 3–19.

Allport, G. (1927). Concepts of trait and personality. *Psychological Bulletin*, *24*, 284–293.

Anderson, D., & Jahng, N. (2011). *Refinement and Validation of the Heartstyles Questionnaire*. Unpublished research report. Department of Curriculum Studies, University of British Columbia, Vancouver, Canada.

Asrar-ul-Haq, M., & Anwar, S. (2018). The many faces of leadership: Proposing research agenda through a review of literature. *Future Business Journal*, *4*, 179–188.

Avolio, B. J., & Bass, B. M. (1995). Individual considerations viewed at multiple levels of analysis: A multi-level framework for examining the diffusion of transformational leadership. *Leadership Quarterly*, *6*, 199–218.

Baker, B., & Craig, S. B. (2006). When actions speak louder than words: The relative importance of leader behaviours in predicting global impressions of integrity. In M. Hargis (chair), *Leadership, It's All Relative: Applying Relative Importance Statistics to Leadership*. Symposium conducted at the Annual Conference of the Academy of Management in Atlanta, Georgia, August 2006.

Baltes, P. B., Lindenberger, U., & Staudinger, U. M. (1999). Lifespan psychology: Theory and application to intellectual functioning. *Annual Review of Psychology*, *50*(1), 471–507.

Baltes, P. B., & Nesselroade, J. (1979). *Longitudinal research in the study of behaviour and development*. NY Academic Press.

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, *37*, 122–147.

Bandura, A. (1999). Moral disengagement in the perpetuation of inhumanities. *Personality and Social Psychology Review*, *33*, 193–209.

Bandura, A. (2002). Social cognitive theory in cultural context. *Journal of Applied Psychology: An International Review*, *51*, 269–290.

Banicki, K. (2017). The character-personality distinction: An historical, conceptual, and functional investigation. *Theory & Psychology*, *27*(1), 50–68.

Barlow, C. B., Jordan, M., & Hendrix, W. H. (2003). Character assessment: An examination of leadership levels. *Journal of Business and Psychology*, *17*(4), 563–584. https://doi.org/10.1023/A:1023408403204

Barnard, A., De Beer, M., & Schurink, W. (2008). A conceptual framework of integrity. *South African Journal of Industrial Psychology*, *34*(2), 40–49.

Barsade, S., & Gibson, D. E. (1998). Group emotion: A view from the top and bottom. *Research on Managing Groups and Teams*, *1*, 81–102.

Bass, B., & Avolio, B. (1990). Developing Transformational Leadership: 1992 and beyond. *Journal of European Industrial Training*, *14*(5), 21–27. https://doi.org/10.1108/03090599010135122

Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.

Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership* (2nd ed.). Lawrence Erlbaum Associates.

Bass, B. M., & Steidlmeier, P. (1999). Ethics, character, and authentic transformational leadership behavior. *The Leadership Quarterly*, *10*(2), 181–217.

Becker, T. (1998). Integrity in organisation: Beyond Honesty and conscientiousness. *Academy of Management Review*, *23*(1), 154–161.

Beer, M., Finnström, M., & Schrader, D. (2016). Why leadership training fails - and what to do about it. *Harvard Business Review, 94*(10), 50–57.

Bleidorn, W., & Denissen, J. J. A. (2015). Virtues in action – the new look of character traits. *British Journal of Psychology, 106*, 700–723. https://doi.org/10.1111/bjop.12117

Brocket, R. G. (1997). Humanism as an instructional paradigm. In C. R. Dills & A. J. Romiszowski (Eds.), *Instructional development design* (pp. 477–492). New Jersey: Educational Technology Publications.

Brooks, D. (2015). *The road to character*. New York, NY, US: Random House.

Burns, J. M. (1978). *Leadership*. New York: Free Press.

Calhoun, C. (1995). Standing for something. *The Journal of Philosophy*, *92*(5), 235–260.

Cashman, K. (1999). Leadership from the inside out. Provo, UT: Executive Excellence Publishing.

Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern Methods for Business Research*, *295*(2), 295–336.

Clayton, A. (2021). *Bernoulli's Fallacy: statistical illogic and the crisis of modern science*. Columbia University Press.

Clement, S., & Bollinger, R. (2017). Accelerating progress: A new era of research on character development. *Journal of Youth and Adolescence*, *46*, 1240–1245. https://doi.org/10.1007/s10964-017-0681-9

Cohen, J. (1988). Set correlation and contingency tables. *Applied Psychological Measurement*, *12*(4), 425–434.

Conger, J., & Hollenbeck, G. P. (2010). What is the character of research on leadership character? *Consulting Psychology Journal: Practice and Research*, *62*(4), 311–316. https://doi.org/10.1037/a0022358

Cook-Greuter, S. R. (2013). Nine levels of increasing embrace in ego development: A full-spectrum theory of vertical growth and meaning making. http://www.cook-greuter.com/CookGreuter%209%20levels%20paper%20new%201.1%2714%2097p%5B1%5D.pdf

Cox, D., La Caze, M., & Levine, M. (2003). *Integrity and the fragile self*. Ashgate: Aldershot, Hants.

Craig, S. B., & Gustafson, S. B. (1998a). Perceived Leader Integrity Scale: An instrument for assessing employee perceptions of leader integrity. *Leadership Quarterly*, *9*(2), 127–145. https://doi.org/10.1016/S1048-9843(98)90001-7

Crossan, F. (2003). Research philosophy: towards an understanding. *Nurse Researcher*, *11*(1), 46–55.

Crossan, M., Mazutis, D., Seijts, G., & Gandz, J. (2013). Developing leadership character in business programs. *Academy of Management Learning and Education*, *12*(2), 285–305.

Dansereau, F., Graen, G., & Haga, W. J. (1975). A vertical dyad linkage approach to leadership within formal organisations. *Organisational Behaviour and Human Performance*, *13*, 46–78.

Davidson, J. (2018). *Transforming Culture in Financial Services*. https://www.fca.org.uk/publication/discussion/dp20-1.pdf

De Hoogh, A. H. B., & Den Hartog, D. N. (2008). Ethical and despotic leadership, relationships with leader's social responsibility, top management team effectiveness and subordinates' optimism: A multi-method study, *19*, 297–311. https://doi.org/10.1016/j.leaqua.2008.03.002

DeTienne, K. B., Ellertson, C. F., Ingerson, M. C., & Dudley, W. R. (2021). Moral development in business ethics: An examination and critique. *Journal of Business Ethics*, *170*(3), 429–448. https://doi.org/10.1007/s10551-019-04351-0

Effelsberg, D., Solga, M., & Gurt, J. (2014). Getting followers to transcend their self-interest for the benefit of their company: Testing a core assumption of transformational leadership theory. *Journal of Business and Psychology*, *29*(1), 131–143. https://doi.org/10.1007/s10869-013-9305-x

Egan, T. M. (2008). The relevance of organizational subculture for motivation to transfer learning. *Human Resource Development Quarterly*, *19*(4), 299–322.

Erikson, E. H. (1959). *Identity and the life cycle: Selected papers*. Oxford, England: International Universities Press.

Fiedler, F. (2006). The contingency model: a theory of leadership effectiveness. *Small Groups: Key Readings*, *12*(4), 369–382.

Gelder, K. (2007). *Subcultures: Cultural histories and social practice*. New York: Routledge.

Gill, C. (1983). The question of character development: Plutarch and Tacitus. *Classical Quarterly (New Series)*, *33*, 469–487.

Gill, R. (2006). *Theory and practice of leadership*. London: SAGE publications.

Goldie, P. (2004). *On personality*. London, UK: Routledge.

Goldsmith, M. (2003). *The many faces of leadership*. Upper Sadd: Financial Times/Prentice Hall.

Greenleaf, R.K. (1977). *Servant leadership*. Paulist Press. Retrieved from: https://www.leadershiparlington.org/pdf/TheServantasLeader.pdf

Grahek, M. S., Thompson, A. D., & Toliver, A. (2010). The character to lead: A closer look at character in leadership. *Consulting Psychology Journal: Practice and Research*, *62*(4), 270–290. https://doi.org/10.1037/a0022385

Gully, S. M., Incalcaterra, K. A., Joshi, A., & Beaubien, J. M. (2002). A meta-analysis of team-efficacy, potency, and performance: Interdependence and level of analysis as moderators of observed relationships. *Journal of Applied Psychology*, *87*(5), 819–832. https://doi.org/10.1037/0021-9010.87.5.819

Hagström, T., & Stålne, K. (2015). The generality of adult development stages and transformations: Comparing meaning-making and logical reasoning. *Integral Review*, *11*(3), 30–70.

Hair, J., Black, W. C., Babin, B. J. & Anderson, R. E. (2010). Multivariate data analysis (7th ed.). Upper Saddle River, New Jersey: Pearson Educational International.

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, *19*(2), 139–152.

Halfon, M. (1989). *Integrity: A philosophical inquiry*. Philadelphia: Temple University Press.

Hannah, S. T., & Avolio, B. J. (2010). Moral potency: Building the capacity for character-based leadership. *Consulting Psychology Journal: Practice and Research*, *62*(4), 291–310. https://doi.org/10.1037/a0022283

Hartsfield, M. (2003). *The internal dynamics of transformational leadership: Effects of spirituality, emotional intelligence, and self-efficacy*. Regent University.

Hendrix, W. H., Born, D. H., & Hopkins, S. (2015). Relationship of transformational leadership and character with five organizational outcomes. *Journal of Character and Leadership Integration*, *3*(1), 54–71.

Hensel, R., Meijers, F., Van Der Leeden, R., & Kessels, J. (2010). 360 degree feedback: how many raters are needed for reliable ratings on the capacity to develop competences,

with personal qualities as developmental goals? *International Journal of Human Resource Management*, *21*(15), 2813–2830. https://doi.org/10.1080/09585192.2010.528664

Hiller, N., DeChurch, L., Murase, T., & Doty, D. (2011). Searching the outcomes of leadership: a 25-year review. *Journal of Management*, *37*(4), 1137–1177.

Hofstede, G. (1998). Identifying organizational subcultures: An empirical approach. *Journal of Management Studies*, *35*(1), 1–12. https://doi.org/10.1111/1467-6486.00081

Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviours, institutions, and organizations across nations* (2nd ed.). Thousand Oaks, CA: Sage.

Hogan, R., & Hogan, J. (2001). Assessing leadership: A view of the dark side. *International Journal of Selection and Assessment*, *9*, 41–45.

Hogan, R., & Sinclair, R. R. (1997). For love or money? Character dynamics in consulting. *Consulting Psychology Journal: Practice and Research, 49*, 256–267.

Hogan, R., & Kaiser, R. B. (2005). What we know about leadership. *Review of General Psychology*, *9*(2), 169–180. https://doi.org/10.1037/1089-2680.9.2.169

Hoppe, M. H. (2007). Adult development theory may boost global leadership, *Leadership in Action*, *27*(3), 2–4.

Hougaard, R. (2019). The real crisis in leadership. Retrieved from https://www.forbes.com/sites/rasmushougaard/2018/09/09/the-real-crisis-in-leadership/#3768ba873ee4

House, R. J. (1971). A path goal theory of leader effectiveness. *Administrative Science Quarterly*, *16*(3), 321–339.

House, R. J., & Shamir, B. (1993). Toward the integration of transformational, charismatic, and visionary theories. In M. M. Chemers & R. Ayman (Eds.), *Leadership theory and research: Perspectives and Direction* (pp. 81–107).

Howell, D. (2013). *Statistical methods for psychology* (8th ed.). Wadsworth Cengage Learning.

In'nami, Y., & Koizumi, R. (2013). Review of sample size for structural equation models in second language testing and learning research: A Monte Carlo approach. *International Journal of Testing*, *13*(4), 329–353. https://doi.org/10.1080/15305058.2013.806925

Jaynes, E. T. (2003). *Probability theory: The logic of science*. Cambridge University Press.

Jorritsma, P., & Wilderom, C. (2012). Failed culture change aimed at more service provision: a test of three agentic factors. *Journal of Organizational Change Management*, *25*(3), 364–391. https://doi.org/10.1108/09534811211228102

Kaiser, R. B., & Hogan, R. (2010). How to (and how not to) assess the integrity of managers. *Consulting Psychology Journal: Practice and Research*, *62*(4), 216–234. https://doi.org/10.1037/a0022265

Kegan, R. (1982). *The evolving self: Problem and process in human development*. Cambridge Massachusetts: Harvard.

Kegan, R. (1994). *In over our heads: The mental demands of modern life*. Cambridge, MA: Harvard University Press

Kegan, R., & Lahey, L. (1984). Adult leadership and adult development: A constructivist view. In B. Kellerman (Ed.), *Leadership: Multidisciplinary perspectives* (pp. 199–229). Englewood Cliffs, New Jersey: Prentice Hill.

Kegan, R., & Lahey, L. (2001). *How the way we talk can change the way we work: Seven languages for transformation*. San Francisco, CA: Jossey-Bass.

Kegan, R., Lahey, L., Fleming, A., & Miller, M. (2014). Making business personal. *Harvard Business Review*, *92*(4), 44–52.

Kelly, E. J. (2014). 8/15 – A developmental autobiography: Plateaus and transitions in my development as an adult. *Integral Leadership Review*, Figure 2 https://integral334.rssing.com/chan-39210104/all_p1.html

Khan, Z. A., Nawaz, A., & Khan, I. (2016). Leadership theories and styles: A literature review. *Journal of Resources Development and Management*, *16*, 1–7.

Kjellström, S., & Stålne, K. (2017). Adult development as a lens: Applications of adult development theories in research. *Behavioral Development Bulletin*, *22*(2), 266–278. https://doi.org/10.1037/bdb0000053

Klemich, S. & Klemich, M. (2013). Heartstyles. https://heartstyles.com/

Kohlberg, L. (1981). *The philosophy of moral development*. San Francisco, CA, US: Harper & Row.

Kouzes, J. M., & Posner, B. Z. (2004). Follower-oriented leadership. Chapter in J. M. Burns, G. R. Goethas, & G. J. Sorenson (Eds.). *Encyclopedia of Leadership*. Berkshire Publishing.

Kuhnert, K. W., & Lewis, P. (1987). Transaction and transformational leadership: A constructive/developmental analysis. *Academy of Management Review*, *12*(4), 648–657.

Kujala, J., Lehtimäki, H., & Pučėtaitė, R. (2016). Trust and distrust constructing unity and fragmentation of organisational culture. *Journal of Business Ethics*, *139*(4), 701–716. https://doi.org/10.1007/s10551-015-2915-7

Lennick, D., & Kiel, F. (2005). *Moral intelligence*. Upper Saddle River, NJ: Wharton School.

Leonard, D. C. (2002). *Learning theories, A–Z*. Westport, CT: Greenwood.

Leonard, S. (1997). The many faces of a character. *Consulting Psychology Journal: Practice and Research*, *49*(4), 235–245. https://doi.org/10.1007/BF00761715

Levinson, D. J. (1986). A conception of adult development. *American Psychologist*, *41*(1), 3–13. https://doi.org/10.1037/0003-066X.41.1.3

Lickona, T. (1991). *Educating for character.* New York, NV: Bantam Books.

Lickona, T. (2014). Reflections on Murray, Lapsley, and Educating for Character in the 21st century. *Journal of Character Education*, *10*(1), 23–30.

Loevinger, J. (1998). *Technical foundations for measuring ego development: The Washington University Sentence Completion Test.* Lawrence Erlbaum Associates Publishers.

Lok, P., Westwood, R., & Crawford, J. (2005). Perceptions of organisational subculture and their significance for organisational commitment, *Applied Psychology*, *54*(4), 490–514.

Mbandlwa, Z., Dorasamy, N., & Fagbadebo, O. (2020). Ethical leadership and the challenge of service delivery in South Africa: A discourse. *Test Engineering and Management, 83,* 24986–24998.

Martin, J., & Siehl, C. (1983). Organizational culture and counterculture: An uneasy Symbiosis, *Organizational Dynamics, 12*(2), 52–64.

Mayer, R., Davis, J. H., & Schoorman, D. F. (1995). An integrative model of organisational trust. *Academy of Management Review*, *20*(3), 709–734.

McFall, I. (1987). Integrity. *Ethics*, *98*(1), 5–20.

McGregor, D. M. (2003). *The human side of enterprise*. New York: McGraw-Hill.

Morgan, R. B. (1993). Self-and co-worker perceptions of ethics and their relationships to leadership and salary. *Academy of Management Journal*, *36*(1), 200–214.

Morris, L. E., & Klunk, C. D. (2015). Revisiting adult development. *Adult Learning*, *27*(1), 3–6. https://doi.org/10.1177/1045159515616239

Mouton, J., & Marais, H. (1996). *Basic concepts in the methodology of the social sciences* (4th ed.). Pretoria: Human Sciences Research Council.

Naeem, B., Malik, M. E., & Bano, N. (2014). Nurturing organizational citizenship behaviours by optimism subculture – Empirical evidence from Pakistan. *Pakistan Economic and Social Review*, *52*(2), 175–186.

Nicholson, I. (1998). Gordon Allport, character, and the "culture of personality," 1897–1937. *History of Psychology*, *1*, 52–68.

Noronha, A. P., & Campos, R. R. F. (2018). Relationship between character strengths and personality traits. *Estudos de Pscologia*, *35*(1), 29–37. https://doi.org/10.1590/1982-02752018000100004

Northouse, P. (2006). *Leadership: Theory and practice* (4th ed.). London: Sage.

O'Fallon, T., Polissar, N., Neradilek, M. B., & Murray, T. (2020). The validation of a new scoring method for assessing ego development based on three dimensions of language. *Heliyon, 6*(3), e03472. https://doi.org/10.1016/j.heliyon.2020.e03472

Palanski, M., & Yammarino, F. J. (2007). Integrity and leadership: Clearing the conceptual confusion. *European Management Journal*, *25*(3), 171–184.

Parry, K. W., & Proctor-Thomson, S. B. (2002). Perceived integrity of transformational leaders in organisational settings. *Journal of Business Ethics*, *35*(2), 75–96. https://doi.org/10.1023/A:1013077109223

Pearce, C. L., & Herbik, P. A. (2004). Citizenship behavior at the team level of analysis: The effects of team leadership, team commitment, perceived team support, and team size. *Journal of Social Psychology, 144*(3), 293–310.

Peterson, C., & Seligman, M. (2004). *Character strengths and virtues*. New York: Oxford University Press.

Reich, W. (1949). *Character analysis* (3rd ed.). Orgone Institute Press.

Rest, C., Narvaez, D., Bebeau, M. J., & Thoma, S. (1999). *Postconventional moral thinking: A neo-Kolhbergian approach*. Mahwah, NJ: Erlbaum.

Rooke, D., & Torbert, W. R. (1998). Organizational transformation as a function of CEO's developmental stage. *Organization Development Journal*, *16*, 11–28.

Rooke, D., & Torbert, W. R. (2005). Seven transformations of leadership. *Harvard Business Review*, *83*(4), 66–77.

Rothman, K. J. (1990). No adjustments are needed for multiple comparisons. *Epidemiology*, *1*(1), 43–46.

Sarros, J. C., Cooper, B. K., Santora, J. C., Luther, M., & King, J. (2007). The character of leadership. *Ivey Business Journal, 71*(5), 1–9.

Schaubroeck, J., Lam, S. S. K., & Cha, S. E. (2007). Embracing transformational leadership: Team values and the impact of leader behavior on team performance. *Journal of Applied Psychology*, *92*(4), 1020–1030. https://doi.org/10.1037/0021-9010.92.4.1020

Schaubroeck, J., Lam, S. S. K., & Peng, A. C. (2011). Cognition-based and affect-based trust as mediators of leader behaviour influences on team performance. *Journal of Applied Psychology*, *96*(4), 863–871.

Schinkel, A., & de Ruyter, D. J. (2017). Individual moral development and moral progress. *Ethical Theory and Moral Practice*, *20*(1), 121–136. https://doi.org/10.1007/s10677-016-9741-6

Seijts, G. H., Gandz, J., Byrne, A., & Crossan, M. M. (2015). Finding leader character: The foundation of good governance. *Director Journal*, *177*, 28–32.

Sivasubramaniam, N., Murry, W. D., Avolio, B. J., & Jung, D. I. (2002). A longitudinal model of the effects of team leadership and group potency on group performance. *Group & Organization Management*, *27*(1), 66–96. https://doi.org/10.1177/1059601102027001005

Sosik, J., & Cameron, J. C. (2010). Character and authentic transformational leadership behavior: Expanding the ascetic self toward others. *Consulting Psychology Journal: Practice and Research*, *62*(4), 251–269.

Sperry, L. (1999). The 1999 Harry Levinson lecture: Leadership dynamics: Character assessment in the executive selection process. *Consulting Psychology Journal: Practice and Research*, *51*(4), 211–217. https://doi.org/10.1037/1061-4087.51.4.211

Thompson, A. D., & Riggio, R. E. (2010). Introduction to special issue on defining and measuring character in leadership. *Consulting Psychology Journal: Practice and Research*, *62*(4), 211–215. https://doi.org/10.1037/a0022285

Torbert, W. R. (2014). Brief comparison of five developmental measures: the GLP, the MAP, the LDP, the SOI, and the WUSCT. http://www.williamrtorbert.com

Torbert, W. R., & Livne-Tarandach, R. (2009). Reliability and validity tests of the Harthill Leadership Development Profile in the context of developmental action inquiry theory, practice and method. *Integral Review: A Transdisciplinary & Transcultural Journal for New Thought, Research, & Praxis, 5*(2), 133–151.

Turner, N., Barling, J., Epitropaki, O., Butcher, V., & Milner, C. (2002). Transformational leadership and moral reasoning. *Journal of Applied Psychology*, *87*(2), 304–311. https://doi.org/10.1037/0021-9010.87.2.304

Van Aswegen, A. S., & Engelbrecht, A. S. (2009). The relationship between transformational leadership, integrity and an ethical climate in organisations. *South African Journal of Human Resource Management*, *7*(1), 221–229 https://doi.org/10.4102/sajhrm.v7i1.175

van den Berg, P. T., & Wilderom, C. P. (2004). Defining, measuring, and comparing organisational cultures, *Applied Psychology, 53*(4), 570–582.

Van der Hoop, J. H. (2007). *Character and the unconscious - A critical exposition of the psychology of Freud and Jung*. Read Books Ltd.

van Luijk, H. (2004). Integrity in the private, the public, and corporate domain. In G. G. Brenkert (Ed.), *Integrity and Accountability* (pp. 38–54). London: SAGE publications.

Van Vugt, M., Hogan, R., & Kaiser, R. (2008). Leadership, followership, and evolution: Some lessons from the past. *American Psychologist*, *63*(3), 182–196.

Washington, B. L., Cunningham, C. J., & Pittenger, D. J. (2010). *Research methods for the behavioral and social sciences.* Hoboken, NJ: John Wiley & Sons.

Westfall, C. (2019). Leadership development is a $366 billion industry: Here's why most programs don't work. http://www.forbes.com/sites/chriswestfall/2019/06/20/leadership-development-why-most-programs-dont-work/

Wortley D., & Amatea, E. (1982). Mapping adult life changes: A conceptual framework for organizing adult development theory. *Personnel and Guidance Journal*, *60*(8), 476–482. https://doi.org/10.1002/j.2164-4918.1982.tb00700.x

Yeoh, P. (2010). Causes of the global financial crisis: Learning from the competing insights. *International Journal of Disclosure and Governance*, *7*, 42–69.

Yukl, G. (2010). *Leadership in organisations*. Upper Saddle River, NJ: Prentice Hall.

Zaccaro, S. J., & Klimoski, R. J. (2001). The nature of organizational leadership: An introduction. In S. J. Zaccaro & R. J. Klimoski (Eds.), *The nature of organizational leadership: Understanding the performance imperatives confronting today's leaders* (pp. 3–41). San Francisco, CA, US: Jossey-Bass.

Zaccaro, S. J., Rittman, A. L., & Marks, M. A. (2001). Team leadership. *Leadership Quarterly*, *12*, 451–483.

Zullo, J. R. (1997). Leadership and adult development: Post-industrial paradigms and parallels. *Journal of Leadership Studies*, *4*(4), 118–127.

Appendix A

Descriptive Statistics

Table A21

Descriptive Statistics of Perceived Leader Integrity Scale

			Statistic	Std. Error
PLIS	Mean		35,27	0,729
	95% Confidence Interval for Mean	Lower Bound	33,79	
		Upper Bound	36,76	
	5% Trimmed Mean		34,92	
	Median		34,00	
	Variance		16,464	
	Std. Deviation		4,058	
	Minimum		30	
	Maximum		49	
	Range		19	
	Interquartile Range		6	
	Skewness		1,441*	0,421
	Kurtosis		3,214*	0,821

* The data distribution can be considered normal as skewness is between -2 to +2 and kurtosis between -7 to +7 (Hair, Black, Babin and Anderson, 2010)

Table A22

Descriptive Statistics of Individual Character Authentic Dimension

			Statistic	Std. Error
IC_Authentic	Mean		58,8087	4,14238
	95% Confidence Interval for Mean	Lower Bound	50,3488	
		Upper Bound	67,2686	
	5% Trimmed Mean		59,3601	
	Median		63,0000	
	Variance		531,939	
	Std. Deviation		23,06381	
	Minimum		8,36	
	Maximum		96,55	
	Range		88,19	
	Interquartile Range		39,75	
	Skewness		-0,233*	0,421
	Kurtosis		-0,738*	0,821

* The data distribution can be considered normal as skewness is between -2 to +2 and kurtosis between -7 to +7 (Hair, Black, Babin and Anderson, 2010)

Table A23

Descriptive Statistics of Individual Character Transforming Dimension

			Statistic	Std. Error
IC_Transforming	Mean		67,5258	3,67607
	95% Confidence Interval for Mean	Lower Bound	60,0183	
		Upper Bound	75,0333	
	5% Trimmed Mean		68,0736	
	Median		70,7100	
	Variance		418,917	
	Std. Deviation		20,46747	
	Minimum		27,93	
	Maximum		95,86	
	Range		67,93	
	Interquartile Range		39,78	
	Skewness		-0,309*	0,421
	Kurtosis		-1,261*	0,821

* The data distribution can be considered normal as skewness is between -2 to +2 and kurtosis between -7 to +7 (Hair, Black, Babin and Anderson, 2010)

Table A24

Descriptive Statistics of Individual Character Reliable Dimension

			Statistic	Std. Error
IC_Reliable	Mean		55,5568	5,11490
	95% Confidence Interval for Mean	Lower Bound	45,1108	
		Upper Bound	66,0028	
	5% Trimmed Mean		56,0619	
	Median		62,8600	
	Variance		811,028	
	Std. Deviation		28,47855	
	Minimum		4,22	
	Maximum		99,00	
	Range		94,78	
	Interquartile Range		47,17	
	Skewness		-0,279	0,421
	Kurtosis		-1,276	0,821

* The data distribution can be considered normal as skewness is between -2 to +2 and kurtosis between -7 to +7 (Hair, Black, Babin and Anderson, 2010)

Table A25

Descriptive Statistics of Individual Character Achieving Dimension

			Statistic	Std. Error
IC_Achieving	Mean		65,7568	4,34973
	95% Confidence Interval for Mean	Lower Bound	56,8734	
		Upper Bound	74,6401	
	5% Trimmed Mean		67,2141	
	Median		69,6100	
	Variance		586,524	
	Std. Deviation		24,21825	
	Minimum		7,08	
	Maximum		99,00	
	Range		91,92	
	Interquartile Range		32,95	
	Skewness		-0,864*	0,421
	Kurtosis		0,312*	0,821

* The data distribution can be considered normal as skewness is between -2 to +2 and kurtosis between -7 to +7 (Hair, Black, Babin and Anderson, 2010)

Table A26

Descriptive Statistics of Individual Character Relating Dimension

			Statistic	Std. Error
IC_Relating	Mean		39,1635	4,90802
	95% Confidence Interval for Mean	Lower Bound	29,1400	
		Upper Bound	49,1871	
	5% Trimmed Mean		38,4570	
	Median		34,5700	
	Variance		746,749	
	Std. Deviation		27,32671	
	Minimum		1,00	
	Maximum		88,80	
	Range		87,80	
	Interquartile Range		40,28	
	Skewness		0,448*	0,421
	Kurtosis		-1,013*	0,821

* The data distribution can be considered normal as skewness is between -2 to +2 and kurtosis between -7 to +7 (Hair, Black, Babin and Anderson, 2010)

Table A27

Descriptive Statistics of Individual Character Encouraging Dimension

			Statistic	Std. Error
IC_Encouraging	Mean		48,2087	5,00518
	95% Confidence Interval for Mean	Lower Bound	37,9868	
		Upper Bound	58,4307	
	5% Trimmed Mean		47,9859	
	Median		41,0600	
	Variance		776,607	
	Std. Deviation		27,86767	
	Minimum		5,17	
	Maximum		94,04	
	Range		88,87	
	Interquartile Range		50,98	
	Skewness		0,301*	0,421
	Kurtosis		-1,243*	0,821

* The data distribution can be considered normal as skewness is between -2 to +2 and kurtosis between -7 to +7 (Hair, Black, Babin and Anderson, 2010)

Table A28

Descriptive Statistics of Individual Character Compassionate Dimension

			Statistic	Std. Error
IC_Compassionate	Mean		50,1406	5,07509
	95% Confidence Interval for Mean	Lower Bound	39,7759	
		Upper Bound	60,5054	
	5% Trimmed Mean		50,5150	
	Median		48,7400	
	Variance		798,454	
	Std. Deviation		28,25693	
	Minimum		1,28	
	Maximum		92,33	
	Range		91,05	
	Interquartile Range		46,30	
	Skewness		-0,087*	0,421
	Kurtosis		-1,079*	0,821

* The data distribution can be considered normal as skewness is between -2 to +2 and kurtosis between -7 to +7 (Hair, Black, Babin and Anderson, 2010)

Table A29

Descriptive Statistics of Team Character Authentic Dimension

			Statistic	Std. Error
TC_Authentic	Mean		38,9848	3,18552
	95% Confidence Interval for Mean	Lower Bound	32,4791	
		Upper Bound	45,4905	
	5% Trimmed Mean		38,4358	
	Median		41,5610	
	Variance		314,573	
	Std. Deviation		17,73620	
	Minimum		4,99	
	Maximum		89,31	
	Range		84,32	
	Interquartile Range		25,60	
	Skewness		0,486*	0,421
	Kurtosis		0,908*	0,821

* The data distribution can be considered normal as skewness is between -2 to +2 and kurtosis between -7 to +7 (Hair, Black, Babin and Anderson, 2010)

Table A30

Descriptive Statistics of Team Character Transforming Dimension

			Statistic	Std. Error
TC_Transforming	Mean		39,5675	2,88337
	95% Confidence Interval for Mean	Lower Bound	33,6789	
		Upper Bound	45,4561	
	5% Trimmed Mean		39,3994	
	Median		37,9900	
	Variance		257,728	
	Std. Deviation		16,05391	
	Minimum		10,87	
	Maximum		72,81	
	Range		61,94	
	Interquartile Range		22,97	
	Skewness		0,114*	0,421
	Kurtosis		-0,448*	0,821

* The data distribution can be considered normal as skewness is between -2 to +2 and kurtosis between -7 to +7 (Hair, Black, Babin and Anderson, 2010)

Table A33

Descriptive Statistics of Team Character Reliable Dimension

			Statistic	Std. Error
TC_Reliable	Mean		38,5966	3,26776
	95% Confidence Interval for Mean	Lower Bound	31,9230	
		Upper Bound	45,2703	
	5% Trimmed Mean		38,5785	
	Median		37,1967	
	Variance		331,025	
	Std. Deviation		18,19409	
	Minimum		7,22	
	Maximum		72,90	
	Range		65,67	
	Interquartile Range		29,74	
	Skewness		-0,191	0,421
	Kurtosis		-0,938	0,821

Table A34

Descriptive Statistics of Team Character Achieving Dimension

			Statistic	Std. Error
TC_Achieving	Mean		40,9095	3,11637
	95% Confidence Interval for Mean	Lower Bound	34,5450	
		Upper Bound	47,2740	
	5% Trimmed Mean		40,9146	
	Median		45,1020	
	Variance		301,065	
	Std. Deviation		17,35121	
	Minimum		11,30	
	Maximum		71,67	
	Range		60,37	
	Interquartile Range		28,80	
	Skewness		-0,139	0,421
	Kurtosis		-1,114	0,821

Table A35

Descriptive Statistics of Team Character Relating Dimension

			Statistic	Std. Error
TC_Relating	Mean		32,6782	2,98886
	95% Confidence Interval for Mean	Lower Bound	26,5742	
		Upper Bound	38,7823	
	5% Trimmed Mean		32,8159	
	Median		37,0380	
	Variance		276,932	
	Std. Deviation		16,64128	
	Minimum		1,67	
	Maximum		61,56	
	Range		59,89	
	Interquartile Range		25,79	
	Skewness		-0,096	0,421
	Kurtosis		-0,919	0,821

Table A36

Descriptive Statistics of Team Character Encouraging Dimension

			Statistic	Std. Error
TC_Encouraging	Mean		34,2363	3,36520
	95% Confidence Interval for Mean	Lower Bound	27,3636	
		Upper Bound	41,1089	
	5% Trimmed Mean		33,8283	
	Median		35,5630	
	Variance		351,061	
	Std. Deviation		18,73663	
	Minimum		1,29	
	Maximum		78,36	
	Range		77,07	
	Interquartile Range		25,89	
	Skewness		0,218	0,421
	Kurtosis		-0,357	0,821

Table A37

Descriptive Statistics of Team Character Developing Dimension

			Statistic	Std. Error
TC_Developing	Mean		27,7829	2,91522
	95% Confidence Interval for Mean	Lower Bound	21,8292	
		Upper Bound	33,7366	
	5% Trimmed Mean		27,4386	
	Median		29,7522	
	Variance		263,454	
	Std. Deviation		16,23126	
	Minimum		2,54	
	Maximum		62,08	
	Range		59,54	
	Interquartile Range		25,36	
	Skewness		0,123	0,421
	Kurtosis		-0,986	0,821

Table A38

Descriptive Statistics of Team Character Compassionate Dimension

			Statistic	Std. Error
TC_Compassionate	Mean		36,5898	3,26130
	95% Confidence Interval for Mean	Lower Bound	29,9294	
		Upper Bound	43,2503	
	5% Trimmed Mean		36,6062	
	Median		38,7300	
	Variance		329,718	
	Std. Deviation		18,15813	
	Minimum		0,34	
	Maximum		72,44	
	Range		72,10	
	Interquartile Range		22,86	
	Skewness		-0,109	0,421
	Kurtosis		-0,481	0,821