

**The influence of managerial leadership on the professional performance of
educational psychologists in a few selected countries**

by

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I declare that the above dissertation/thesis is my own work and that all the sources that I have used or quoted have been indicated and acknowledges by means of complete reference.

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I wish to express my sincere thanks to:

- God, who provides me with a supportive family, opportunities and the strength.
- My husband, Andre, for his encouragement and support.
- My sons, Amhiel and Andre, who were always willing to help.
- My parents, Boet and Susara, for moulding me into the person I am today.
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UNIVERSITY OF SOUTH AFRICA**KEY TERMS DESCRIBING THE TOPIC OF A DISSERTATION/THESIS****Title of thesis:****THE INFLUENCE OF MANAGERIAL LEADERSHIP ON THE PROFESSIONAL PERFORMANCE OF EDUCATIONAL PSYCHOLOGISTS IN A FEW SELECTED COUNTRIES**

In order to address the managerial leadership challenge of the educational psychologist cohort, it seems fundamentally superficial to make direct use of conventional management theories, scientific data, and empirical evidence from managers' work practices in other contexts. The current research explored the influence of managerial leadership on the professional performance of educational psychologist in relation to service delivery models, management appointments, workload management and educational psychologists' engagement in clinical supervision. Managers need to gain better understand of the influence of managerial leadership on the professional performance of educational psychologists and use contemporary empirical and scientific data to guide their managerial leadership practice. The explanatory sequential mixed-methods research approach was best suited to the early stages of research in this arena. The research findings elucidated the influence of service delivery models, described the ideal management appointment, proposed a formal structured workload management system and provided activities for managers to encourage educational psychologists' engagement in clinical supervision.

Key terms:

Managerial leadership; Professional performance; Educational psychologists; Service delivery models; Management appointments; Workload management; Clinical supervision; Engagement in clinical supervision; Consequences of ineffective managerial leadership.

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**The influence of managerial leadership on the professional performance of
educational psychologists in a few selected countries**

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LIST OF ABBREVIATIONS

<i>Ed psyc</i>	Educational psychologist
<i>Code</i>	New Zealand Psychologists Association, 2002. Code of ethics for psychologists working in Aotearoa
TM	Traditional service delivery model
ERM	Expanded role model
Q ^m	Question for manager
Q ^{EP}	Question for educational psychologists
Whānau	Family
<i>Te Reo Māori</i>	Māori language

CHAPTER 1 INTRODUCTION TO AND ORIENTATION OF THE STUDY

1.1 INTRODUCTION TO THE STUDY

In order to address the managerial leadership challenge of the educational psychologist cohort, it seems fundamentally superficial to make direct use of conventional management theories, scientific data, or empirical data from managers' work practices in other contexts (McKenna & Maister, 2005:xxiii; Briner, 2012:325). There is a large body of scholarly literature accessible on conventional management and leadership (Zaleznik, 1997:67-78; Yukl, 1989:251; Lunenburg, 2011:1-3; Mintzberg, 2011:46; Bhamani, 2012:8; Holmberg & Tyrstrup, 2012:48; Morgeson, 2012:332; Tengblad, 2012:39; Yukl, 2013:1, 6-7). Over the years, this surfeit of data has enhanced the knowledge and understanding of the nature of management and leadership in general. Mintzberg (2011:46, 206) described it as a plethora of conjectures, and a contemporary obsession with management and leadership.

Conversely, indicators in the scholarly literature point to gaps in our understanding in four main areas: precisely what managers and leaders actually do; ways to effectively manage organisations; the correlation between managerial behaviour and effectiveness; and the influence of the context on management and leadership (Kotter, 1947:1-184; Drucker, 1993:7; Bass, 2008:651; Mintzberg, 2011:46, 206; Morgeson, 2012:332). Tengblad (2012:5, 9) suggested substituting or at the least enhancing, the stagnant and linear ways of thinking in management science, with theories derived from investigating the work behaviours of skilled managers. On the same line of thought, Drucker (1993:9) and Mintzberg (2011:9) advocated that management is distinguished as a practice that develops mainly through experience gained in a specific context. Additionally, some researchers recognised that management practice is not a science or a profession, but more specifically a social practice (Drucker, 1993:9, 11-12; Tengblad, 2012:4-5, 9; Berger & Luckman, 1966, cited by Tengblad, 2012:9).

Holmberg and Tyrstrup (2012:48-49) reflected on the evidence of a long-established mutual understanding of managerial researchers, that a paradigm shift is needed when studying management and leadership. They asserted that: ... *studies are needed that*

more explicitly take everyday work, the process-perspective, and sense making as point of departure. This view resulted in a focus on theoretical framing when investigating management and leadership topics in natural surroundings. It is suggested that it is necessary to study the common work activities of managers in an attempt to comprehend management as an empirical incident of work practices (Gordon & Yukl, 2004:360; Sveningsson, Alvehus & Alvesson, 2012:69). In order to work effectively within the rapidly changing workplace milieu, managers need to undergo a major paradigm shift (Garcia-Vazquez, Crespi & Ricco, 2010:3-341). Kaiser and Ringlstetter (MacDuffie, 1995, cited by Kaiser & Ringlstetter, 2011:106) agreed that a management paradigm shift affects performing work systems positively. Tengblad (2012:5) suggested the use of: ... *the behaviour and activities of successful, experienced, and skilful managers as the primary data for theorizing about good management. Managerial work is seen as a craft that requires experience, skill, and artistry.* The author continued to elucidate significant characteristic of managerial leadership as the way in which managers, worldwide, perform their every day managerial leadership activities.

Tengblad (2012:338) challenged the community of modern-day management researchers to re-think their naive assumptions regarding ascertaining the truth about the existence of: ... *a body of formal, universally applicable spheres of knowledge, modes of logic reasoning, and forecasting skills.* The author suggested that managerial work should be modified to better align with the ever changing and intricate organisational environments, which contemporary managers face on a daily basis. However, having said that, Tengblad (2012:5-6) acknowledged the validity of the restrictions of rational-normative management models. Tengblad (Kuhn, 1970, cited by Tengblad, 2012:338) also explained that paradigmatic changes resulted in an unbridgeable gap between empirical data and scientific explanations in management and leadership research. More specifically, there is a recognised disconnect between management research and management practice and an ever-growing lack of concurrence between the long-established management studies and contemporary management practice. By the same token, Tengblad (2012:4) recognized the divide between experienced managers and scientists' views on management. He explained that experienced managers gained their managerial knowledge and understanding from experience, whereas scientists' scientific reasoning is based on fixed values and nonfigurative reasoning. The following justification for this disconnect were documented (Tengblad, 2012:8):

- Lack of professional training programmes for managers in the past.
- Management scientists applied deductive methodology in their research based on analytical philosophy, applied mathematics, computer science, and modelling.
- No empirical research was conducted to investigate skilled and experienced managers.
- Limited application of the logic of Newtonian physics, which influenced the development of international trade, production, and market equilibrium theories, in management.

In an organisation, every employee experiences the effects of management and leadership practices, which are, therefore, important to everyone. Thus, the success and survival of any organisation is reliant on the quality of its managers and their management and leadership (Drucker, 1993:3, 5; Kaiser & Ringlstetter, 2011:6-7, 39, 89-90; Mintzberg, 2011:20). This result in a constant need for managers and leaders to stay current and improve managerial leadership practices, but in order to make these improvements, they must develop a more comprehensive understanding of managerial leadership (Mintzberg, 2011:2; Tengblad, 2012:5). These authors, defined management of professionals as a deliberate success factor, which explains the strong focus on the management and leadership of these professionals.

Kaiser and Ringlstetter (2011:vii) declared that management literature paid little notice to the topic of management of professional service organisations. The complexities and challenges portrayed in professional service organisations are evident in their unique characteristics and in the challenges they pose to management (Maister, 2003:207; Kaiser & Ringlstetter, 2011:14). Lowendahl (2005:20) discussed the characteristics that are universal across different types of organisations that deliver professional services. He acknowledged that differences exists in the clientele, the type of service it provides, and the suppliers. Broderick (2011:2) affirmed that best practices evidence on the management of professionals remain scarce for professional service organisations. This is true for the management of people in general according to Drucker's (1993:255) explanation of the basic function of management:

It has become almost a truism in American management that the human resource is of all economic resources the one least efficiently used, and that the

greatest opportunity for improved economic performance lies in the improvement of the effectiveness of people in their work. Whether the business enterprise performs depends in the final analysis on its ability to get people to perform, that is, to work. The management of worker and work is therefore one of the basic functions of management.

Related scholarly literature (Brown, Holcombe, Bolen & Thomson, 2006:486-496; AEP, 2008:1-20; Brown, 2010:12-18; Cable & O'Driscoll, 2010:12-18; Coleman & Pine, 2010:20-24; Hornby, 2010:26), personal experiences and insight, and observations in the field, drew attention to the fact that some educational psychologists function better and consistently deliver higher quality educational psychological services than others. Additionally, the AEP (2008) report stated that poor managerial leadership led to high staff turnover rates among educational psychologists. The AEP report (2008:10) advised of the risk of further deterioration in staffing levels when shortages of educational psychologists' already exist; these risks are exacerbated by inadequately jointed organisational and managerial leadership.

Studies from numerous countries explicitly lamented the lack of available information on the subjects of management and the influence of managerial leadership on educational psychology services (Jimerson, Graydon, Farrell, Kikas, Hatzichristou, Boce, Bashi & ISPA research committee, 2004:259-260, 274-276; Jimerson, Graydon, Yuen, Lam, Thum, Klueva, Coyne, Loprete, Phillips & ISPA research committee, 2006:19-21; Edwards, Annan & Ryba, 2007:263-274; Musabelliu, 2007:12; Jimerson, Graydon, Skokut, Alghorani, Kanjaradze, Foster & ISPA research committee, 2008a:18-19; AEP, 2008:3-4; Coleman & Pine, 2010:23; Curtis, Castillo & Gelley, 2012:30; Curtis, 2012:4) and management of professional services (Maister, 1993:1-374; McKenna & Maister, 2001:xxii-xxiii; Maister, 2003:xiii-xvi; Broderick; 2011:2; Kaiser & Ringlsetter, 2011:vii). A small number of prominent researchers reported on the significant relationship between managerial leadership and educational psychologists' professional performance (Jimerson et al., 2004:274-276; Jimerson et al., 2006:19-21; Children's Workforce Strategy, 2007:28-32; Edwards et al., 2007:263-274; Musabelliu, 2007:12; Jimerson et al., 2008a:18-19; AEP, 2008:3-4; Brown, 2010:14-18; Coleman & Pine, 2010:23; Soulbury Committee Report, 2010:5-7; Curtis et al., 2012:30; Curtis, 2012:4).

1.2 BACKGROUND TO THE STUDY

The researcher started her teaching career in South Africa in mainstream education, but left after one year to pursue a teaching career in special education. In 1999, she was promoted to a senior management position at an urban multi-cultural education setting for the hard of hearing. For another eight years, she continued to develop and expand her management and leadership experiences in various senior management positions. She persisted with her personal professional development journey and completed an Honours Bachelor of education degree with a specialisation in educational management at University of South Africa (UNISA).

In 2008 the researcher accepted a position in New Zealand as an advisor on deaf children (AoDC). She completed a Master of special education degree at the University of Newcastle in Australia. After three years as an advisor on deaf children, the researcher decided to return to her personal aspirations relating to a management career pathway and completed a Master of education degree, specialising in educational management and leadership at UNISA. The Master's degrees helped the researcher develop her research skills to a higher level and gave her knowledge and confidence to conduct an independent research project.

In 2011, an opportunity arose for a management position in New Zealand, where the researcher is currently managing and leading a team of professionals – educational psychologists and clinical psychologists. The combination of the researcher's personal interest in managerial leadership, exposure to international management and leadership practices, international studies (South Africa/New Zealand/Australia), management experience in South Africa and New Zealand contexts, and new management role directed her attention towards the influence of managerial leadership on the professional performance of professional groups.

The researcher carried out an initial investigation of the body of scholarly literature in order to assess the extent to which material is accessible regarding managerial leadership of educational psychologists, the influence of managerial leadership on the professional performance of this professional group, and the consequences of poor managerial leadership on educational psychologists' professional performance. Scholarly literature

and empirical data on management of professional groups and specifically educational psychologists were in short supply (Jimerson et al., 2004:259-286; McKenna & Maister, 2005:xxii-xxiii; Jimerson et al., 2006:5-32; Edwards et al., 2007:263-274; Musabelliu, 2007:12; Jimerson et al., 2008a:5-28; AEP, 2008:3-4; Cable & O'Driscoll, 2010:12-18; Coleman & Pine, 2010:23; Broderick, 2011:2; Kaiser & Ringlstetter, 2011:vii; Curtis, et al., 2012:30; Curtis, 2012:4). Goleman (2000:78) and Broderick (2011:266) reflected on the elusive nature of effective managerial leadership. They suggested that the lack of quantitative research is the cause of the insufficient data base regarding managerial leadership. Goleman (2000:78) also stressed the need to base data on qualitative research results that support and inform managerial leadership activities that will have positive results on subordinates' work performances. However, Kaiser and Ringlstetter (2011:3) optimistically declared that there is renewed interest in conducting research in the professional service organisational field. They acknowledged that managerial leadership had not previously been a key focus area for research in this field.

1.3 PROBLEM STATEMENT

The research purpose is to understand the influence of managerial leadership on the professional performance of educational psychologists. The preceding discussion leads to the formulation of the problem statement for the proposed study: **What is the influence of managerial leadership on the professional performance of educational psychologists in relation to service delivery model, management appointments, workload management, and educational psychologists' engagement in clinical supervision?** Six sub-questions emanated from the research problem:

- What are the demographic characteristics of managers of educational psychologists and educational psychologists?
- What is the influence of service delivery models on professional performance of educational psychologists?
- What is the influence of management appointments on the professional performance of educational psychologists?
- What is the influence of workload management on the professional performance of educational psychologists?
- What is the influence of managerial leadership on educational psychologists' engagement in clinical supervision?

- What are the consequences of ineffective managerial leadership, for the professional performance of educational psychologists?

1.4 PURPOSE AND OBJECTIVES OF THE STUDY

The main objectives for the current study is to discover, investigate, explore, and understand the influence of managerial leadership on the professional performance of educational psychologists in a few selected countries. From the literature review, it became evident that there is a knowledge gap, regarding the influence of managerial leadership on the professional performance of the educational psychologist cohort. The sub-questions drawn from the general purpose of the study directed the following objectives for the proposed research:

- To investigate the demographic characteristics of managers of educational psychologists and educational psychologists (to be addressed in Chapter 2).
- To investigate the service delivery models and its influence on the professional performance of educational psychologists (to be addressed in Chapter 3).
- To explore the influence of management appointments on the professional performance of educational psychologists (to be addressed in Chapter 3).
- To examine the influence of workload management on the professional performance of educational psychologists (to be addressed in Chapter 3).
- To study the influence of managerial leadership on educational psychologists' engagement in clinical supervision (to be addressed in Chapter 3).
- To explore the consequences of ineffective managerial leadership for the professional performance of educational psychologists (to be addressed in Chapter 3).

1.5 HYPOTHESIS FOR THE STUDY

The researcher believes that educational psychologists who are consistently high performers and deliver high quality professional services differ from those educational psychologists whose professional performance is deplorable and inconsistent as a result of managerial leadership. Some educational psychologists, like other professional groups,

function better as a result of managerial leadership activities; they remain in their positions and deliver consistent equitable quality services (McKenna & Maister, 2005:xxii; Edwards et al., 2007:273; Brown, 2010:12). The assumptions will be tested by administering questionnaires and conducting focus group interviews to determine the influence of managerial leadership on the professional performance of educational psychologists. The researcher transformed the stated research question into the following proposed hypothesis: **Managerial leadership influence the professional performance of educational psychologists.** The hypothesis is a supplementary instrument that is necessary to guide the research in the search for a solution to the problem (Vander Stoep & Johnson, 2010:5). The results of this research may support or refute the researcher's hypothesis.

As a social scientist, the researcher does not suggest that the empirical, descriptive, causal, and theoretic findings from the proposed study will be true in all situation and all contexts. However, she does seek replication of the results of this study in a range of context and situations where managerial leadership is provided to educational psychologists.

1.6 THEORETICAL FRAMEWORK

The theory in the current research study was applied to provide a theoretical viewpoint, guide the study, test and validate theory, and determine emerging patterns (Creswell, 2012:66). Creswell (2012:75) stated: *Mixed methods researchers use theory as a framework informing many aspects of design as they collect, analyse, and interpret quantitative and qualitative data.* The researcher's aims are to first verify and then develop theory (Creswell, 2012:55). The mixed methods research approach permits the use of deductive and inductive theory. This calculated placement of theory resulted in the distinction between theory and the other components of the research process. Consequently, the reader can better recognise and grasp the theory base (Creswell, 2009:58). A theoretical framework is based on the researcher's knowledge, existing theory and research according to Maxwell (2004:37). The framework provides the theoretical lens through which the influence of managerial leadership on the professional performance of educational psychologists is viewed. Maxwell (2004:34) emphasised that the theoretical framework incorporates different understandings of phenomena and maps the relationships between concepts.

This section continues with a discussion of the evolution of management theories, and its main contributors. Management theories can be classified as: the classical management perspective (1880-1930); the behavioural management perspective (1920-1950); and the modern contingency management perspective (Smit & Cronje, 2002:36-55; Cole, 2004:3-5; Mahmood, Basharat & Bashir, 2012:514; Chandra, 2013:4). Smit and Cronje (2002:37, 45), Cole (2004:82-83), and Mahmood et al. (2012:512), suggested that the classical management theories form the basis from which all other management theories developed. Classical management theories strove for efficiency by developing formal universal principles for managing workers and organisations. The activities that classical management theorists deemed as most important in their endeavours to achieve efficient employees and organisations are: division of labour; establishment of a hierarchy of authority (chain of command); and the span of control (Cole, 2004:14-16; Mahmood et al., 2012:514-515; Chandra, 2013:6). The two practising managers who contributed an enduring legacy to the classical management theories were Henri Fayol and F.W.Taylor (Smit & Cronje, 2002:38; Cole, 2004:4). Their efforts provided the foundation for the organisation of work activities and the organisation of people.

The classical theories comprise of the scientific school of management, the administrative school of management, and the bureaucratic school of management. F.W. Taylor who defined and led the way in the scientific management school, is described in the literature as the father of scientific management (Smit & Cronje, 2002:38). His interest was directed towards the connection between employees and the tasks they performed in order to improve the efficiency of work processes (Cole, 2004:16-17). The improvement of an individual worker's performance was at the core of the scientific school of management. Taylor proposed the following four principles of scientific management, which he described as being revolutionising (Cole, 2004:17):

- Develop a scientific approach towards all aspects of the job in order to eliminate personal opinions and rule-of-thumb rules.
- Verify the exact time and process for each activity based on scientific evidence, and then train and develop each employee accordingly.
- Establish collaborative working practices, and hold individual employees accountable for the implementation of scientifically developed methods.
- Ensure that work is equally divided between managers and employees in order to make sure that managers apply scientific management principles

when planning the activities, and that subordinates perform the tasks assigned to them.

Taylor's key areas of focus included supervision, task performance, and motivation of staff. Two managerial practices that originated in Taylor's work were the piece-rate-incentive system and the time and motion study (Cole, 2004:20). Taylor's contributions were further expanded and refined by Frank and Lillian Gilbreth (a husband and wife team), and Henry Gantt. Although Gantt agreed with most of Taylor's scientific management concepts, it was his view that Taylor neglected the individual employee (Cole, 2004:20). Gantt, who was concerned with productivity, developed the Gantt chart, and implemented the bonus system, also known as the *wage incentive programme* (Smit & Cronje, 2002:38-39; Cole, 2004:20-21). Frank Gilbreth's contribution was based on Taylor's idea of the principles of scientific management. This resulted in the time and motion studies in which Frank Gilbreth investigated the most efficient ways to carry out assignments and simplify the allocation of labour. By investigating the work activities of bricklayers, he was able to reduce an 18-step process into a five-step procedure (Smit & Cronje, 2002:39; Cole, 2004:19). As a consequence, the bricklayers increased their productivity by 200 per cent. He then developed the *therbligs* and *process charting* recording techniques representing the basic elements of on-the-job motions. The therbligs are described by Cole (2004:19) as: ... *a standardised basis for recording movements*. Lillian Gilbreth however, was concerned with the working conditions on the one hand, and productivity and efficiency on the other.

Henri Fayol (1841-1925) is acknowledged as the most prominent administrative management theorist (Smit & Cronje, 2002:39-41; Cole, 2004:13-16). He identified five management functions that he proposed would enable managers to efficiently manage internal activities in their organisations (Drucker, 1993:343-346; Smit & Cronje, 2002:40; Cole, 2004:14; Chandra, 2013:6). The five management functions are:

- Planning.
- Organising.
- Commanding.
- Coordinating.
- Controlling.

Fayol expanded on these five management roles, resulting in the 14 principles of management (Smit & Cronje, 2002:40; Cole, 2004:14-16; Chandra, 2013:11). Fayol's principles of management refute the notion that management skills are something one is born with, and cannot be learned (Smit & Cronje, 2002:40-41). Cole (2004:15) provided a concise summary of the 14 principles of management, together with an explanation of Fayol's thinking on each of the principles, as shown in Figure 1.1.

Table 1.1. Fayol's management principles (Cole, 2004:15).

PRINCIPLE	EXPLANATION
1. Division of work	Reduces the span of attention or effort for any one person or group. Develops practice and familiarity.
2. Authority	The right to give orders. Should not be considered without reference to responsibility.
3. Discipline	Outward marks of respect in accordance with formal or informal agreements between firm and its employees.
4. Unity of command	One man one superior.
5. Unity of direction	One head and one plan for a group of activities with the same objective.
6. Subordination of individual interests to the general interest	The interest of one individual or one group should not prevail over the general good. This is a difficult area of management.
7. Remuneration	Pay should be fair to both the employee and the firm.
8. Centralisation	It always present to a greater or lesser extent, depending on the size of company and quality of its managers.
9. Scalar chain	The line of authority from the top to bottom of the organisation.
10. Order	A place for everything and everything in its place; the right man in the right place.
11. Equity	A combination of kindness and justice towards employees.
12. Stability of tenure of personnel	Employees need to be given time to settle into their jobs, even though this may be a lengthy period in case of managers.
13. Initiative	Within the limits of authority and discipline, all levels of staff should be encouraged to show initiative.
14. Esprit de corps	Harmony is a great strength to an organisation; teamwork should be encouraged.

According to Cole (2004:16) it is questionable whether all Fayol's management principles should be incorporated into the ever-changing conditions of the modern era with an increase in collaborative decision-making practices and flat organisational structures. The reality today is that managers are unable to maintain the formal authority as presumed by the administrative approach to management (Smit & Cronje, 2002:41; Cole, 2004:16). Other classical management theorists, namely Urwick and Brech, promoted Fayol's 14 principles of management in their work (Cole, 2004:15). Urwick advanced ten principles that embodied a code of good practice. The ten principles originated from Urwick's understanding of the essential components and procedures present in organisational structures. Urwick's work prompted a shift of focus towards improving the organisational system, whereas Fayol's principals of management were more concerned with morale and remuneration (Cole, 2004:22-23). Brech concurred with Urwick on the importance of developing management principles, but he also drew attention to the advancement of people within an organisation. Cole (2004:24) explicated that: *He saw management as a process, a social process, for planning and regulating the operations of the enterprise towards some agreed objective, and carried out within the framework of an organisation structure.*

Max Weber's (1864-1920) idea of bureaucracy developed at the same time as Fayol and Taylor advanced their management thoughts (Cole, 2004:25). Whereas Fayol and Taylor were practicing managers, Weber was an academic, and was also described as a socialist. He paid close attention to organisational systems and specifically focussed on the management systems within these organisations, also described as authority structures (Smit & Cronje, 2002:41). Weber's objective was to investigate why authority figures in organisations are obeyed by other people. His investigation resulted in the discovery of three types of justifiable authority, namely: rational-legal, traditional, and charismatic authorities (Cole, 2004:25). Rightful authority is not synonymous with the concept of power. It is imperative to understand that legitimate authority is concerned with: ... *the acceptance of rule by those over whom it is to be exercised* (Cole, 2004:25). Legitimate authority is the only one of the three that is still prevalent in today's organisations, which Weber officially branded as *bureaucracy*. Smit and Cronje (2002:42) stated that: *Weber's approach to management has stood the test of time relatively well*. These authors suggested that Weber's ultimate bureaucracy is founded on legal authority. According to the bureaucracy management school of thought, the foundation of bureaucratic management in an organisation depends on a firm set of rules, well-defined policies and procedures, a predetermined fixed hierarchy and a clear distribution of labour.

In the past, the previously described management schools of thought from the classical management perspective – scientific, administrative, and bureaucratic, neglected the individual characteristics of employees. They honed in on the procedural aspect of work activities, on worker's productivity, on functions of management, and on the overall organisational systems (Smit & Cronje, 2002:43). According to Smit and Cronje (2002:43), these approaches focussed on the technical characteristics of the job, and ignored the importance of human behaviour when developing a management style. This resulted in a change of focus for managers during the 1930's. In an attempt to solve the challenges of productivity, managers turned their attention to human relationships and the behaviour of individuals at the work-place (Smit & Cronje, 2002:43). Mayo, Maslow, McGregor, and Follett were well-respected behavioural scientists whose contributions are associated with the behavioural approach to management.

Mayo aimed to better understand the correlation between psychological and social procedures on the one hand and the work-place on the other, and how this interaction affects the performance of workers. Mayo and his associates conducted the Hawthorne studies during the 1930s, and used scientific methods to make major contributions to the investigation of productivity challenges. For the period 1924-1933, these studies explored the correlation between lighting conditions and the productivity of employees at work (Smit & Cronje, 2002:43). The results provided interesting insights such as: an improvement in the lighting conditions led to an improvement in productivity. However, Mayo obtained similar results even when the lighting conditions were reduced to a poorer quality. Thus, according to Mayo and his associates, increases in worker productivity were not related to the quality of light at the workplace, but rather were the result of managers or supervisors paying attention to the welfare and wellbeing of their employees. As a consequence, this series of activities were referred to as the *Hawthorne effect* (Smit & Cronje, 2002:43).

Maslow, another prominent behavioural scientist, studied human motivation and developed a hierarchical model (Cole, 2004:35-36). Maslow's hierarchy of needs theory put forward that there are five levels of needs, ranging from the lowest level (basic-needs) to the highest order of needs, as illustrated in Figure 1.2 (Smit & Cronje, 2002:44; Cole, 2004:35-36).

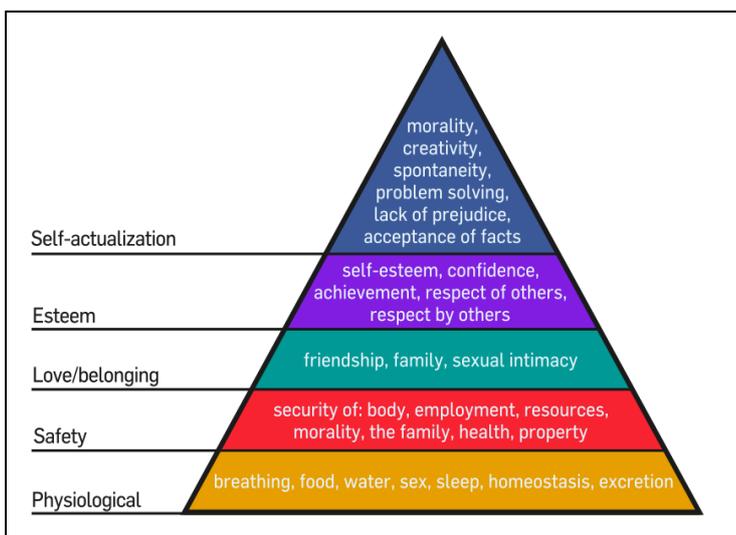


Figure 1.2. Maslow's hierarchy of needs (Source unknown).

Maslow's hierarchy of needs suggested that needs are satisfied systematically, and that the lowest level of needs has to be satisfied before a person can progress to the next level of needs. People advance by starting from the bottom of the hierarchy with the basic physiological needs (needs for food, sleep, sex, and so on), then move up to needs for safety (needs for a stable environment relatively free from threats), followed by needs for social relationships (needs related to affectionate relationships with others, and status within a group), followed by the needs for self-esteem (needs for self-respect, self esteem and the esteem of others), and finally, reaching the highest level, need for self-actualisation (need for realising personal potential and self-fulfilment) (Smit & Cronje, 2002:44; Cole, 2004:35-36). Managers used Maslow's theory as a framework to interpret workers' needs and motivation in the workplace. Smit and Cronje (2002:44) stipulated that: *Managers can facilitate this process and attain the organisational goals by removing obstacles and encouraging behaviours that satisfy both the needs of the worker and the organisation.*

McGregor, also a well-respected behavioural scientist, proposed two assumptions that managers make about the behaviour workers exhibit when they advance their work (Smit & Cronje, 2002:44; Cole, 2004:36-37). McGregor called these assumptions Theory X and Theory Y. Theory X managers and Theory Y managers hold distinctively different assumptions about the behaviour of their workers. According to Theory X managers, workers are naturally lethargic, avoid work, are in constant need of coercion and control (Smit & Cronje, 2002:36), and need to be *coaxed* (Cole, 2004:44). Cole (2004:44) stated that these workers experience work as unpleasant and need praise, monetary rewards, or motivation by force. Managers assume that workers dislike their jobs, avoid them if possible, and will only work if threatened with punishment. Theory X managers also assume that workers do not have any ambition. In contrast, Theory Y managers presume that workers who are dedicated to organisational goals enjoy their work, and find pleasure in carrying out their work activities. Workers see the work activities as a lever to develop and grow their skills and talents (Smit & Cronje, 2002:39-37; Cole, 2004:44). In addition, Theory Y managers believe that workers perceive their work as a natural activity and, that the workers can self-direct and self-control. Both Theory X and Theory Y management approaches acknowledge workers as human beings, and incorporate the assumptions of both behavioural science and the human relations.

Other researchers and scientists who made notable contributions to perspectives on behavioural management included the following (Cole, 2004:37-41):

- Follett developed the four principles of coordination.
- Herzberg's motivational-hygiene theory.
- Likert also focussed on the motivation of workers at work. He was responsible for the Michigan studies.
- Argyris was initially curious about, and studied the connection between, the needs of people and those of organisations. He put forward the immaturity-maturity theory.

The systems and contingency approaches to management developed from the classical approaches that were discussed in the preceding section. Classical theorists directed most of their effort towards efficiency in the workplace, but neglected to include the complexities of the organisation, and the organisation's relationship with the environment within which it functions. Smit and Cronje (2002:45) suggested that this led to a one-dimensional understanding of the organisation. Cole (2004:82) concurred and explained that the systems theory evolved to compensate for the oversights of the classical theories. Cole (2004:82) proposed that the systems and the contingency approaches to management cannot easily be set apart. The results from the systems theory to management formed the building blocks of the contingency theory to management. The author asserted:

A systems approach highlights the complexity of the interdependent components of organisations within equally complex environments. A contingency approach builds on the diagnostic qualities of the systems approach in order to determine the most appropriate organisational design and management style for a given set of circumstances.

The systems approach is a general scientific approach, and organisations that believe in it consist of clusters of multifaceted interconnected parts inside intricate environments, with the goal of preserving organisational stability (Smit & Cronje, 2002:46; Cole, 2004:82). On the other hand the contingency approach to management advocates, when addressing the design of an organisation and style of management, the most appropriate combination from the variables – human skills and motivation, external environment, and technological factors - need to be selected in each specific situation (Smit & Cronje, 2002:45; Cole, 2004:4, 82). Smit and Cronje (2002:46) described the contingency approach to

management as one: ... *to direct the available techniques and principles of various approaches to management towards a specific situation to realise the goals of the organisation as productively as possible.* Thus, managers can implement the principles and techniques of scientific approaches, bureaucratic approaches, administrative approaches, behavioural approaches, and quantitative approaches to management either separately or in combination. Cole (2004:3-4) proposed that contingency theorists gave serious consideration to any situation, and looked for the most suitable approach to manage a situation in order to meet their organisational needs: thus the consequence of any one variable on people depends on the variables connection with other variables, namely: environment, task, structure, technology.

The selection of a single or a combination of approaches to management depends on the situation that management faces. Every situation, every environment, every organisation, and every department, is different, and each one calls for unique approaches to management. Smit and Cronje (2002:47) provided an example of the different management approaches required in two wards in the same hospital. The management approach required by nursing staff in the children's wards is quite different from the unique management approach essential to medical specialists in the intensive care unit. To summarise, the contingency approach to management proposes that there are multiple ways to manage at all times – there is no single best way to manage in all situations. It does not attempt to develop a general direction and standard of management activities. In essence, it is a situational style, deals in a relative manner rather than an absolute manner, and advocates that there is no single method of management that will prove effective in all situations.

The main contributors to the contingency theories of management were Lawrence and Lorsch, Woodward, Burns and Stalker, and the Aston group (Smit & Cronje, 2002:47; Cole, 2004:82-88). Lawrence and Lorsch focussed on two main variables – organisational structure and environment - in an attempt to find out what type of organisation will be able to handle a range of market and economic circumstances (Cole, 2004:83). The main outcomes of their study were documented by Cole (2004:84), as follows:

- *The more dynamic and diverse the environment, the higher the degree of both differentiation and integration required for successful organisation.*

- *Less changeable environments require a lesser degree of differentiation, but still require a high degree of integration.*
- *The more differentiated an organisation, the more difficult it is to resolve conflict.*
- *High-performing organisations tend to develop better ways of resolving conflict than their less effective competitors. Improved ways of conflict resolution lead to states of differentiation and integration that are appropriate for the environment.*
- *Where the environment is uncertain, the integrating functions tend to be carried out by middle and low-level managers; where the environment is stable; integration tends to be achieved at the top end of the management hierarchy.*

Burns and Stalker are well-known for their investigation of the environment-structure relationship. These two researchers focussed on the effect of rapidly shifting external environments on the management systems in organisations, which were originally structured to deal with relatively stable conditions (Cole, 2004:84). As a result of their research, Burns and Stalker defined two unique management systems: mechanistic systems and organic systems. Mechanistic systems are suitable when the external environment is stable, whereas organic systems are more suitable for changing conditions. Burns and Stalker argued that there are specific characteristics associated with mechanistic system and organic systems. For mechanistic systems, they proposed (Cole, 2004:84):

- *A specialised differentiation of tasks, pursued more or less in their own right.*
- *A precise definition of rights, obligations and technical methods of each functional role.*
- *A hierarchical structure of control, authority and communication.*
- *A tendency for vertical interaction between members of the concern.*
- *A tendency for operations and working behaviour to be dominated by superiors.*
- *An insistence on loyalty to the organisation and obedience to superiors.*

For organic systems, Burns and Stalker suggested the following specific features (Cole, 2004:85):

- *Individual tasks, which are relevant to the entire situation of the concern, are adjusted and re-defined through interaction with others.*
- *A network structure of control, authority and communication, where knowledge of technical or commercial aspects of tasks may be located anywhere in the network.*
- *A lateral rather than vertical direction of communication through the organisation.*
- *Communication consisting of information and advice rather than instructions and decisions.*
- *Commitment to the organisation's tasks seen to be more important than loyalty and obedience.*

Woodward started her investigation by studying manufacturing firms. She wanted to determine: firstly, whether or not classical approaches to management influence the practices at these firms; and secondly, to what extent the classical approaches to management contribute to the success of these firms (Cole, 2004:85-87). Later, Woodward turned the focus of her research to technological data gathered during the research. She also explored the correlation between organisational characteristics and technology. The results of this investigation indicated that organisational structures were influenced by the role of technology as a key variable (Cole, 2004:86). She selected three groups to classify the technology used by organisations: unit and small batch production, large batch and mass production, and process production. According to Cole (2004:86), she matched organisations with their corresponding classification, and then evaluated them against their organisation and operation. This resulted in the appearance of distinct patterns, and the emergence of a correlation between organisational characteristics and technology. Additionally the researcher studied the relationship between organisational characteristics and technology and the impact on business accomplishments (profitability, growth, cost reductions achieved etc.). The outcomes of Woodward's research recommended: *... not only was the system of production a key variable in determining structure, but that also there was a particular form of organisation which was most suited to each system.*

The Aston group studied technology, environment, and a range of characteristics of the organisational structure (Cole, 2004:87). In contrast to Woodward's earlier research, the Aston group split technology into separate variables and collected information on different aspects of technology, such as: line control of the workflow, operating unpredictability, and workflow incorporation (Cole, 2004:87). The Aston group concluded that there must be a correlation between the impact of technology on the structure of an organisation and the size of an organisation. Cole (2004:87) stated that the main contribution of the Aston group was the assumption of the multi-dimensional approach to organisational and contextual variable. They put forward the idea of an organisational mix. The consequence of applying the organisational mix to an organisation at an exact moment in time may produce a successful result for organisations. Cole (2004:87) asserted that: *This essentially contingency approach has provided the basis for further research into what presents the ideal structure for an organisation in light of a particular group of circumstances.*

As a result of their research, the Aston groups classified six main variables of structure, which they measures against various contextual variables. The results of the research by the Aston group made it clear that the data collected with reference to the contextual variables can provide a reasonably precise indication of the structural profile of an organisation (Cole, 2004:88). According to Cole (2004:87-88) these six structural variables that were applicable in various contexts (origin and history/ownership/organisational size/charter/technological features/interdependence) were:

- Specialisation (of functions and roles).
- Standardisation (of procedures and methods).
- Standardisation of employment practices.
- Formalisation (extends of written rules, procedures and so on).
- Centralisation (concentration of authority).
- Configuration (shape of organisation).

Before continuing, it is necessary to define the concepts of management, leadership, and managerial leadership in context of the theoretical and conceptual frameworks of the current study. Kotterman (2006:13) stated that it is fundamental to delineate the concepts of management and leadership in order to enable the sustained hiring and promotion of managers and leaders, as well as allowing the assessment, testing, and measurement of management and leadership. The terms and concepts of management and leadership can

be confusing since many academics use them interchangeably, and there is an ongoing debate about the distinction between these two terms (Lunenburg, 2011:1; Mintzberg, 2011:8-9; Tengblad, 2012:27; Yukl, 2013:6). On the one hand, there is a school of thought that views these concepts as interconnected, and not to be viewed as separate (Mintzberg, 2011:8; Tengblad, 2012:37; Northouse, 2013:14). On the other hand, there is a view that management and leadership are distinctly different concepts that are not synonymous but complementary (Kotter, 2001:85; Bass, 2008:653-654). Mintzberg (2011:8) and Holmberg and Tyrstrup (2012:49) acknowledged that, although it is not difficult to conceptualise the distinction, in practice it is not so easy to understand the difference. The reality is that people can be managers without leading, or lead without being managers (Yukl, 2013:7). Mintzberg (2011:8) challenged the implications of distinguishing between management and leadership in organisational life. Both roles are important and Lunenburg (2011:1) stated that it should not be assumed that all managers lead or that all leaders exercise leadership. The fact remains that not all managers are automatically good leaders and vice versa (Bass, 2008:651).

Smit and Cronje (2002:39-41) stated that management is not an isolated activity, but includes a range of activities performed by managers or a wider team known as management. Drucker (1993:6-7) described management as the groups of people in charge of an organisation and called them *the boss*. Management is responsible to manage by taking action and make sure that organisational objectives are researched (Drucker, 1993:11). Similarly, Mintzberg (2011:13) defined a manager as a person who is in charge of an organisation, or parts of an organisation. The author explained that a manager is given the task of motivating subordinates in order to enable them to: ... *know better, decide better, and act better*. These activities, to which Smit and Cronje (2002:39-41) referred, originated from Fayol's (2013:5-6) five managerial activities (see Par. 3.1.1): planning, organising, commanding, coordinating, and controlling (Northouse, 2013:12). The relevance of these management actions is that Smit and Cronje (2002:40) described commanding as the activity of leading people. Fayol (2013:8) viewed the concepts of command and management as being related and stated: *Most principles of command are principles of management...*, consequently providing additional data in support of the view that management and leadership are closely linked and complementary concepts. Tengblad (2012:8), on the other hand, questioned the relevance of these managerial

activities and suggested that these formalised managerial techniques are outdated when he stated: ... *lost popularity in the 1970's*.

In a study of 29 executive managers, Mintzberg (1997) developed the classification of ten management/managerial roles, as depicted in Figure 1.3 (Cole, 2006:10-11; Bass, 2008:670-672; Tengblad, 2011:37-38; Yukl, 2013:29). Mintzberg utilised the ten management roles to code the content of the activities revealed by the data from his study. The classification demonstrated advantages, among other things, the justification for all the observed managerial activities to be included under at least one of the roles, if not more than one (Yukl, 2013:29-31). Some researchers described Mintzberg's model of ten management roles (see Fig. 1.3), as being dynamic, inclusive of both internal and external organisational activities, and as being relevant for all managers at all levels (Cole, 2006:7; Bass, 2008:670; Yukl, 2013:29-34).

Table 1.3. Mintzberg's managerial roles (Mintzberg, 1973:59; Smit & Cronje, 2002:15-17; Cole, 2006:7; Mintzberg, 2011:45; Yukl, 2013:29-34).

Information Processing Role
<ul style="list-style-type: none"> • Disseminator • Monitor • Spokesperson
Decision-Making Roles
<ul style="list-style-type: none"> • Entrepreneur • Disturbance handler • Resource allocator • Negotiator
Interpersonal Roles
<ul style="list-style-type: none"> • Liaison • Figurehead • Leader

Mintzberg's (1997) classification placed leadership within the interpersonal role indicating that leadership is interconnected with, and complementary to, management. Yukl (2013:6, 23) concurred that the leadership role is a key component of the managerial role, and that it is a part of all managerial activities. Correspondingly, Drucker (1993:13) explained that: ... *leadership is given by managers and effective primarily within management*. Fourteen years later, with reference to the development of the ten managerial roles in 1997, Mintzberg (2011:43-46) still persisted with the notion that management cannot be seen to consist of isolated elements of an incorporated whole, or as a list of detached elements. Fayol focussed his efforts on controlling, Peter's persisted that managing is about *doing*, Porter stressed thinking - in particular analysing as the most important managing aspect, Bennis concentrated on the aspect of leading, whereas Simon focussed on decision

making (Mintzberg, 2011:43-46). Mintzberg's (2011:43-46) model of the manager's working roles incorporates all these parts, when he explained that: *Managing is not one of these things but all of them: it is controlling and doing and dealing and thinking and leading and deciding and more, not added up but blended together.*

Kotter (2001:3) described management and leadership as distinctive and complimentary system of activities, with separate functions and distinctive actions (see Fig. 1.4). The distinguishing functions of management are to deal with complexity and encourage stability, order and control; while the characteristic functions of leadership focus on change, and being comfortable in times of chaos (Northouse, 2013:12-13). Kotter's (2001:3-4) well documented fundamental analysis of management and leadership remains relevant even today: *Managers promote stability while leaders press for change, and only organisations that embrace both sides of that contradiction can thrive in turbulent times.* The distinguishing functions that form the foundation for the unique actions of management and leadership are: ... *deciding what needs to be done* (creating an agenda), *creating networks of people and relationships that accomplish an agenda* (developing a network for achieving the agenda), *and then trying to ensure that those people actually do the job* (executing the agenda), (Kotter, 2001:4). In management, these unique functions are carried out in a manner that is distinctly different from the way in which they are carried out in leadership, according to Kotter (1990) (Bratton, Grint & Nelson, 2005:7-10, cited in Kotter, 1990).

Table 1.4. Management and leadership compared (Bratton, Grint & Nelson, 1990, cited in Kotter, 2006:7-10).

Functions	Management	Leadership
Creating and agenda	<i>Plans and budgets:</i> Establishes detailed steps and timetables for achieving set results and allocates the necessary resources.	<i>Establishes direction:</i> Develops a vision of the future and strategies for achieving that future.
Developing a network for achieving the agenda	<i>Organises and staffs:</i> Establishes structure for achieving the plans, assigns staff, delegates, develops policies to guide subordinates, and design control systems.	<i>Aligns people:</i> Communicates direction and duties to all whose cooperation is needed so as to create teams and coalitions that understand the vision and strategies and accept their validity.
Executing the agenda	<i>Controls and solves problems:</i> Monitors results against plans, identifies deviations, and then organises to close any gaps.	<i>Motivates and inspires:</i> By satisfying basic human needs, energised people to overcome barriers to change.
Outcomes	Produces a degree of predictability and order. Has the potential to produce key results expected by stakeholders.	Produces change, often to a dramatic degree. Has the potential to produce extremely useful change (e.g. new products)

It is apparent that the concepts of management and leadership show similarities and differences but managers and leaders are not necessarily separate or different people. According to Yukl (2013:6), the ways in which management and leadership are defined largely depend on the scholar's focus. He asserted:

Defining management and leading as distinct roles, processes, or relationships may obscure more than it reveals if it encourages simplistic theories about effective leadership. Most scholars seem to agree that success as a manager or administrator in modern organisations also involves leading.

In context of the theoretical framework and the preceding discussions, it can be concluded that both management and leadership roles are pertinent, and that there is always a degree of overlap. The degree of overlap depends on the context and situation at hand. For this research project, this leads to the adoption of the concept of managerial leadership, as illustrated in Figure 1.5. Managerial leadership refers to the roles and activities that managers engage in when providing managerial leadership to those who report directly to them, with the aim of realising organisational goals and objectives. Generally accepted definitions of the act of management and managerial leadership will be provided (see Par. 1.10), in order to clarify the meaning of these terms in relation to the current study.

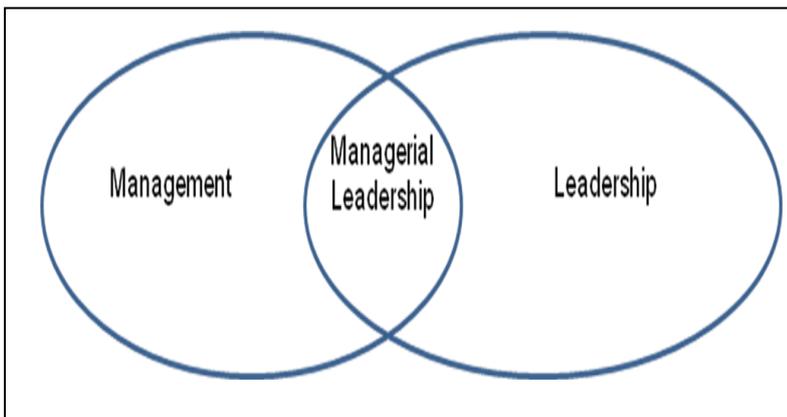


Figure 1.5. Managerial leadership model.

1.7 CONCEPTUAL FRAMEWORK

The focus of the current study is to gain understanding of the influence of managerial leadership on the professional performance of educational psychologists with relation to variables highlighted in the scholarly literature as being most effected by and requiring

managerial leadership. After identifying these factors, the researcher adopted a conceptual framework and developed a visual model (see Appendix 1) portraying the relationship among these variables (factors/predictor variables/intermediate variables/criterion variables). The predictor variables and associated factors were listed on the left. Intermediate variables were listed in the middle, and the dependent variables with related factors were listed on the right (see Appendix 1). The researcher's conceptual framework captures possible influence of managerial leadership on educational psychologists' professional performance. The conceptual framework illustrates the distinction between variables by temporal order and their measurement (Creswell, 2009:50; Creswell, 2014:52). The first concept, managerial leadership, is the predictor variable that precedes the criterion variable. The predictor variable explains or causes the differences in the criterion variable. Creswell (2014:42) stated: *... one variable affects or causes other variables, though a more accurate statement would be that one variable probably causes another.* The second concept, professional performance of educational psychologists, is defined as the criterion variable. The criterion variable represents the outcomes.

Tengblad (2012:6-7) cautioned that analytical and conceptual frameworks, which are created by management scholars, may provide managers and researchers with a false sense of understanding of current management trends and methods. However, conceptual frameworks are described as imperative to managers. These conceptual frameworks can help managers gain conceptual perspective and elucidate contemporary management practices in need of attention.

1.8 RESEARCH METHODOLOGY

1.8.1 Introduction

The researcher conducted a widespread search of various written sources and published works, which included: scholarly literature, documents and artefacts, pamphlets, journals, official documents, dissertations and theses, notes from seminars and forums, internet sources, Government publications, conference papers, and Power Point presentations from lectures and forums. The first objective in conducting this search of printed information was to determine the extent to which information is available on the topic under investigation. It became apparent that there are insufficient empirical and scientific

data on the managerial leadership of educational psychologists. Limited data on managerial leadership activities that influence the professional performance of educational psychologists and inadequate transferable data from the subject fields of management of professional service organisations and educational psychology exist. The researcher wanted to look at the research problem from an empirical and pragmatic perspective and practical applications. Her managerial leadership experience gave her insight into the need to understand the influence of managerial leadership on the professional performance of educational psychologists.

In conclusion, the objective is to search for knowledge to provide possible solutions to the research problem and to contribute to the knowledge base. As Badewi (2013)(<http://misresearchmethodologies.blogspot.co.nz/2013/03/first-seesion-research-paradox.html>, cited on 16/04/13) put it, there are no copy-and-paste solutions to address the contextual and value dependent needs of different organisations. Maister (2003:289-299) and Broderick (2011:239), strongly supported the fact that no particular management model or theory is relevant across all organisations and all settings.

1.8.2 Research approach, paradigm and underlying philosophies of the study

Researchers use a wide range of terminology to describe the basic set of beliefs that guide inquiries, namely worldview (Creswell & Plano Clark, 2007:21; Creswell, 2009:6; Galt, 2009:4), paradigm (Lincoln, Lynham & Guba, 2011:99), broadly envisaged research methodology (Neuman, 2000, cited by Creswell, 2009:6), philosophical assumptions, and alternative knowledge claims (Galt, 2008:5; Creswell, 2009:6). Creswell (2009:6) and Galt (2009:4) preferred the term worldview, in contrast to the researcher, who uses the term paradigm throughout the current study. A paradigm is described by Galt (2009:4-5) as the framework of beliefs and assumptions through which the researcher gives meaning to the world and how he/she interrelates with it. These paradigms are viewpoints about the nature of reality (ontology), how knowledge about what we know is created (epistemology), the role of values (axiology), the research method (methodology), and language used during research (rhetoric) (Creswell & Plano Clark, 2007:23-24; Creswell, 2009:6; Galt, 2009:5; Creswell, 2013a:19-22). Creswell and Plano Clark (2007:21) suggested that researchers: ... *may not realise that behind each study lies assumptions the researcher makes about reality, how knowledge is obtained, and the methods of gaining knowledge.*

The main research paradigms documented in the body of written works are: the positivist research paradigm (post-positivist), science method, empirical science, interpretivist or constructivist research paradigm (social constructivist paradigm), critical research paradigm, transformative research paradigm, advocacy and participatory paradigm, and the pragmatic research paradigm (Creswell & Plano Clark, 2007:22; Creswell, 2009:6-11; Galt, 2009:6). These paradigms lead researchers to investigate occurrences in different manners to find answers to research problems and questions.

The focus of this research requires the pragmatic paradigm that arise out of actions, situations, and consequences, instead of antecedent situations (Creswell, 2009:10). The focus of the pragmatic paradigm is the research problem, to discover what works, and to find explanations or answers to the research question (Creswell, 2009:10). The pragmatic paradigm is usually connected to the mixed methods research approach (Creswell & Plano Clark, 2007:23). Quantitative and qualitative research approaches are both utilised during the present research study in order to gain an enhanced understanding of the problem under investigation. Creswell and Plano Clark (2007:5) maintained that the pragmatic paradigm - quantitative and qualitative research approaches – should be employed to offer a more satisfactory understanding of the research problem when neither qualitative nor quantitative research approach can provide it on their own.

The mixed methods approach allows the use of the quantitative research approach as the main research approach and the qualitative research approach as the secondary research method in this study. The outcomes of the quantitative research will be explained and explored in more detail during the qualitative research phase. This process is defined as the explanatory sequential mixed method approach. The collection of a broad set of data, by this multi-method approach, will provide more comprehensive information on the topic under investigation when both sets of data are synthesised (Creswell, 2014:14-17, 215-240). The different research approaches will be used at different stages of the study to maximise the benefits and to minimise costs for the research project (Vander Stoep & Johnson, 2010:25-26). The strengths of both research methods are used to reinforce the study and the limitations of each method are counterbalanced by employing the mixed methods approach. Additional benefits of the mixed methods approach are that it provides a more comprehensive range of evidence, affords answers to questions, supports collaboration with other disciplines, and provides the opportunity to use research methods

in a practical manner. The explanatory sequential mixed methods procedure that encompasses the correlation design and focus group interviews will further strengthen the research and will be discussed in Chapter 4.

In the first phase of the research, the quantitative research paradigm or positivist approach (epistemology) to knowledge is used (Killiam, 2011:11; <http://misresearchmethodologies.blogspot.co.nz/2013/03/first-session-research-paradox.html>, cited on 16/04/13). The positivist beliefs, which is the most commonly practiced approach in social research (Creswell, 2013b), are anchored in the realist ontology. It is consequently the ontology that is based in the quantitative approach, according to Killiam (2011:10). Realists believe there is truth to be discovered and also argue that there is only a single reality to be discovered. This single reality resides in the minds of the people who are being studied in this case, managers of educational psychologists.

The positivist belief not only explores the social reality of managers, but in order to obtain an objective truth, also involves the testing of the following hypothesis: **Managerial leadership influence the professional performance of educational psychologists.** This objective truth will be measurable in numbers that are derived from the analysis of the questionnaires. Positivists believe that reality is objective and measurable and they approach knowledge discovery from an etic viewpoint (Killiam, 2011:11). Killiam argued that the etic perspective refers to a situation in which the researcher endeavours to find an objective measure to the topic. It is believed that reality is external to the researcher and that the researcher is invisible to the study when she disassociates herself from the research. In the quantitative data gathering stage, the researcher is objective, detached, and attempts to increase the social distance between herself and the subject being researched. The goal is to discover the truth. The quantitative approach is also referred to as objectivism. The researcher uses a deductive approach and a high degree of structure when administering the questionnaires to managers and educational psychologist cohorts. Quantitative data will be analysed (SPSS) and presented statistically, using tables and figures.

During the second phase of the research, the researcher draws on the qualitative research approach and interpretivist beliefs (epistemology) about the nature of knowledge and reality in an attempt to address the human uniqueness within the study. The interpretivist belief is founded on the relativist ontology. The relativist ontological beliefs in this study are based on multiple realities as seen by participating managers. The researcher believes that reality is changeable, not fixed, and therefore aims to understand the different contexts and people. These realities are constructed by participants and need to be interpreted by the researcher. This leads to subjective data gathering by conducting the focus group interviews with six purposefully selected managers. The focus group interview questions were formulated after the analysis of the quantitative data, and the researcher developed a set of open-ended questions based on the five focus areas addressed in the questionnaire. The focus areas are: demographic characteristics, management appointments, workload management, and educational psychologists' engagement in clinical supervision.

The second qualitative data collection phase differs from the first instance in that it involved the collection of subjective data during the focus group interviews. The researcher acknowledges that people do not all approach knowledge in the same way and implemented an emic perspective (Killiam, 2011:11) which uses an insider's approach to knowing. The researcher uses an inductive approach and also decreases the social distance between the researcher and the participants. The inductive approach uses the qualitative data to generate new theory, and to implement research questions to narrow the scope of the research. Data analysis appears in phases as the researcher becomes emerged in the culture of the participants. Findings are presented in narrative format. As a result of using both main research approaches in this study, knowledge is known (epistemology) through both the objective perspectives of managers and the subjective experiences reported by individual managers. The quantitative and qualitative data gathering approaches yielded both statistical data and lead to themes that were derived from the data. The final stage involved the analysis of how the qualitative findings help explain the quantitative results as illustrated in Appendix 2.

1.8.3 Population and sampling

The present study is concerned with two distinctive populations of interest: managers of educational psychologists and educational psychologists. One of the objectives of this research is to generalise the results from this study to the groups of interest. As expected, it is not possible to sample the entire population of the population of managers of educational psychologists or population of educational psychologists, due to the size of the populations, lack of resources, access to both populations, and the response rates. Thus, the data for this study were collected from sample groups (managers of educational psychologists/educational psychologists) from Finland, India, Ireland, South Africa (SA), Switzerland, Sweden, and New Zealand in various settings and organisations. Both samples were purposefully selected (McMillan & Schumacher, 2001:169, 175-176) based on their roles, qualifications, and employment setting. Purposeful sampling is based on the researcher's knowledge of the population and which participants would be the most knowledgeable and informative and the most representative of the entire population. McMillan and Schumacher (2001:169) and Vander Stoep and Johnson (2009:26), stated that sampling is imperative during a research study because it incorporates an entire population in a study. The sampling plan and process for the current study will be discussed in depth in Chapter 4.

The identified study population of managers represents a huge population of managers who are managing educational psychologists across the globe in various settings - various sectors and organisations, namely government agencies, departments of education, private practice and corporate organisations. The sample frame or survey population comprises the eligible members of the population that encompass managers of educational psychologists working for various agencies, different organisations, and in private practices across the world.

1.8.4 Instrumentation

Quantitative and qualitative data will be collected sequentially in the proposed study by firstly administering two questionnaires, using Lime Survey, a web-based survey program, and secondly conducting focus group interviews. These questionnaires will gather data from managers who manage educational psychologists and educational psychologists.

The questionnaires will focus on five areas, namely: demographic characteristics, service delivery models, management appointments, workload management, and educational psychologists' engagement in clinical supervision. Secondly, qualitative information will be congregated from a group of six purposefully selected managers who will participate in focus group interviews.

Questionnaires are considered the most suitable method for gathering sufficient, reliable and valid data in this research project (Kwak & Radler, 2002:257-274; Shih & Fan, 2008:249-271). The purpose of the questionnaires is to elicit reactions, demographic data, beliefs, views, and attitudes from participants with relation to the research objectives (McMillan & Schumacher, 2001:40). Questionnaires are economical to administer, and the researcher can ensure anonymity for all participants in the study. During phase two, interview questions for the focus group interviews will be developed based on data analysis from the questionnaires in order to explain, verify and clarify findings.

The questionnaire was developed by following the steps described by McMillan and Schumacher (2001:258): Justification, defining the object, writing questions and statements, review items, construct general format, pre-test, and revision (McMillan & Schumacher, 2001:258). Lime Survey is a powerful web-based tool that will support the researcher during this study and has the following features:

- Easy to create surveys on web-based tool.
- Can customise questionnaire.
- Collect data by email and send surveys by using email manager.
- Analyse survey and responses.
- Enhanced security and anonymity.
- Economical.

1.8.5 Data analysis and interpretation

Quantitative data will be analysed by using Statistical Package for Social Scientists IBM SPSS (Version 23) (SPSS). SPSS permits the researcher to execute any of the following basic and advanced options: access data set; view spreadsheet in data view or variable view; include types of variables; create variable labels; provide values; descriptive statistics, inferential statistics. The researcher furthermore aspires to understand all data

collected qualitatively during focus group interviews by using a set of systematic procedures (McMillan & Schumacher, 2001:232), namely:

- Step 1: Reading and rereading all data.
- Step 2: Making a preliminary list of themes arising from the data.
- Step 3: Read data again to confirm the themes.
- Step 4: Link themes to quotes and notes.
- Step 5: Look through the categories of themes to give an interpretation.

1.9 CONTRIBUTION OF THE STUDY

1.9.1 Introduction

Research is read, used and valued not only by university and college academics, but also by educational psychologists, principals, schools' boards of trustees, adult educators, college administrators, and graduate scholars (Creswell, 2012:3). Most of these groups were identified as the target audience for the study. The main reasons for conducting research is to describe an occurrence, to predict the incidence of a phenomenon, to describe occurrence in depth, to elucidate a phenomenon, to add to the existing knowledge base, to improve practice, and to inform policy. The current research study shows a strong relationship and correlation with the three most important reasons for conducting research as proposed by Creswell (2012:3-7):

- Research adds to knowledge.
- Research improves practice.
- Research informs policy debates.

1.9.2 Research adds to our knowledge base

The purpose of the present research study is to understand the influence of managerial leadership on the professional performance of educational psychologists. The scholarly literature review indicated that the influence of managerial leadership on the professional performance of educational psychologists have received insufficient study and consideration compared to other topics relating to the field of educational psychology and managerial leadership. The present study can add to the knowledge foundation and body of research concerning the influence of managerial leadership on the professional

performance of educational psychologists. There is little information to support contemporary, empirical, or scientific managerial leadership data that can influence the professional performance of educational psychologists.

Numerous academic studies acknowledged and raised concerns regarding the managerial leadership challenges but neglected to provide solutions and empirical data to the managerial conundrum. Furthermore, the results may contribute to the existing body of literature regarding effective managerial leadership activities that work, or suggest improved managerial leadership activities that other managers can implement in their organisations. The results from this research study may contribute to the fields of management and leadership, management of professional services, and educational psychology. The study may add to existing knowledge by increasing its audiences' understanding and the knowledge base of the topic under investigation (Creswell, 2012:4).

1.9.3 Research improves practice

Conducting this study may improve the researcher's personal managerial leadership practice when answers to the research questions become available. The research will expand her existing knowledge base and develop a deeper understanding of the influence of managerial leadership on the professional performance of educational psychology, management and leadership, and management of professional services. Drucker (1993:9) suggested that managers can improve their overall management performance by engaging in research through a: ... *systematic study of principles, the acquisition of organised knowledge and the systematic analysis of his own performance in all areas of his work and job and on all levels of management*. Results may also influence the professional performance of various other professional groups, including:

- Managers responsible for providing managerial leadership to educational psychologists in various organisations.
- Educational psychologist cohort.
- University faculty members responsible for educational psychological training programmes.
- Schools and educational facilities that employ educational psychologists.
- National psychological associations and societies.
- Professional services organisations.

- Boards of trustees.

Managers who are tasked with providing managerial leadership for educational psychologists will be exposed to new ideas and evidence-based empirical data that have emerged from the research findings. These ideas can be integrated into their managerial leadership practice or used to evaluate their current managerial leadership roles and approaches. Additionally, these results will provide professionals with another set of empirical and scientific data that can be evaluated or used to help establish connections with other professionals in the field of management and/or educational psychology, and add to their existing knowledge database relating to the managerial leadership influences on the professional performance of educational psychologists.

1.9.4 Research inform policy debates

The current study will develop a new management framework to improve managerial leadership of managers as well as the professional performance of educational psychologists. The research data can provide valuable empirical, relevant and contemporary information regarding managerial leadership that influence the professional performance of educational psychologists and also policy makers. Creswell (2012:6) noted that regional government employees, state workers, local board of trustee members, and local administrators are some of the main policy makers.

The study may yield data to develop a managerial leadership framework that positively influence the professional performance of educational psychologists. Vander Stoep and Johnson (2009:12) stated:

Social science researchers seek replication-demonstration of the same findings of a study in a different place or with a different group of people. That is, they hope to repeat their findings in their own research and that of other researchers who are exploring the same question. As evidence that confirms, disconfirms, or modifies the initial findings is discovered or collected, researchers shape their understanding of what they are studying.

Furthermore, the results from this study may offer insights into managers' perspectives on their managerial leadership role and the perceived influence they have on the professional performance of educational psychologists. The existing scholarly literature contains no

information on managers' perspectives, and this research elicits data from managers themselves. The empirical data collected from the practical experiences of managers of educational psychologists may provide answers to the research questions, and will elucidate which managerial leadership activities influence the professional performance of educational psychologists.

1.10 RELIABILITY, VALIDITY, AND TRUSTWORTHINESS OF THE RESEARCH

McMillan and Schumacher (2001:166) referred to reliability of research as credibility of research. The reliability of a study can be described as the accuracy or consistency of how well the measuring instrument consistently quantifies what the research set out to measure. The researcher's objective is to be transparent, consistent, unbiased and precise through all activities during the research project to provide results that are deemed reliable and credible, (McMillan & Schumacher, 2001:166). Vander Stoep and Johnson (2009:62) described reliability as: *... the extent to which a measure yields the same scores across different times, groups of people, or version of the instrument.* The reliability of this research study will be increased through the use of both the quantitative and qualitative research methods that are questionnaires and focus group interviews. This mixed methods approach will provide a more holistic view of the issues under investigation. Possible causes of error that might weaken the quality of the proposed research study or influence the outcomes will be identified and diminished. Triangulation of the different data sources will be used to further increase the reliability and validity of the research.

Validity refers to the degree to which the account of the observable fact matches the realities of the world (McMillan & Schumacher, 2001:207). The researcher will employ a combination of the following strategies to enhance the data gathered in the research:

- Focus group interviews.
- Participant language and verbatim accounts.
- Low inference descriptors.
- Mechanically recorded data.

This study will be limited to managers of educational psychologists and educational psychologists. The study will be narrowed down and only focus on a selection of specific areas in need of managerial leadership that emanated from the scholarly literature, namely (see Par. 3.2 and 3.3):

- Demographic characteristics of managers of educational psychologists and educational psychologists.
- Educational psychologists' service delivery models.
- Management appointments.
- Workload management.
- Educational psychologists' engagement in clinical supervision.
- Consequences for the professional performance of educational psychologists when they are not effectively managed.

1.11 PLANNING OF THE STUDY

1.11.1 Chapter 1: Introduction to the study

Chapter one provides the motivation, orientation and background to the study concerning the influence of managerial leadership on the professional performance of educational psychologists. The research problem is stated, and an outline of the research objectives is integrated. Clear descriptions of the theoretical framework and research methodology that focuses on the research approaches are provided. The population, sample, instrumentation, and data collection techniques, which will be implemented, are briefly described. Reliability and validity including the limitations of the study are summarised in Chapter 1. Additionally, an outline of Chapters 1 to 6 is presented with a list of definitions of key concepts.

1.11.2 Chapter 2: The demographics, roles, responsibilities, training and professional regulation of educational psychologists: A global perspective

This chapter explicates the background to the study and offers a review of the body of international data. Chapter two focussed on aspects regarding educational psychologists in general across the world: demographic characteristics, roles, and responsibilities are addressed and presented. In addition, the chapter offers information pertaining to the

training and professional regulation of educational psychologists. This data is paramount to the current research, which aim to provide insight into the influence of managerial leadership on the professional performance of educational psychologists.

1.11.3 Chapter 3: The management of educational psychologists: A scholarly literature review

The scholarly literature review carried out in Chapter 2, continues in Chapter 3. Specific managerial leadership aspects that influence the management of professionals in professional service organisations and specifically educational psychologists are investigated and communicated. This chapter also focuses on the influence and role of managerial leadership on the professional performance of educational psychologists in four specific areas, namely: ideal service delivery models, management appointments, workload management, and educational psychologists' engagement in clinical supervision. In this chapter, the researcher also reviewed and documented the consequences for the professional performance of educational psychologists when they do not receive effective managerial leadership.

1.11.4 Chapter 4: Research methodology

Chapter 4 addresses the research design of the study. The research paradigm and the rationale for choosing the mixed methods explanatory sequential research approach are portrayed. Quantitative and qualitative research approaches are described individually in great detail. The chapter focuses on the topics vital to each of the two research approaches. The population and sampling techniques, ethical considerations, validity and reliability, are discussed in this chapter. The researcher described the data collection measures and instrumentation that were employed in the research project. The procedures for data analysis, interpretation, and presentation were presented for the quantitative and qualitative data.

1.11.5 Chapter 5: Presentation, analysis and interpretation of data

Chapter 5 is an accumulation, deconstruction, analysis, and interpretation of the data obtained from the questionnaires and focus group interviews. Firstly, quantitative data and finding are discussed and presented. Secondly qualitative data and results are elucidated

and presented. Finally, an analysis of how qualitative findings explain quantitative results lead to the conclusion of Chapter 5.

1.11.6 Chapter 6: Summary, findings, conclusions and recommendations

Chapter 6 will commence with a summary of the research project and research findings. This summary will be followed by the research conclusions that are illustrated in conclusion models. Recommendations with respect to the influence of managerial leadership on the professional performance of educational psychologists will be offered in this chapter. Chapter 6 includes avenues for further research and the limitations of the research project. The researcher will conclude the research project with a personal reflection on her experience, personal enrichment and the significance of the study in Chapter 6.

1.12 DEFINITIONS OF KEY TERMS

To develop a more comprehensive understanding of the research aims, the terms management, managerial leadership, professionals, professional service organisation, and educational psychologists, needed to be defined.

1.12.1 Management

An easy first step was to review The Encarta dictionary (English UK) to find a definition for management. These definitions of management (noun) included:

Administration of business – the organizing and controlling of the affairs of a business or a sector of a business; Handling of something successfully – the act of handling or controlling something successfully; Skill in handling or using something – the skilful handling or use of something such as resources.

Management as an activity has no commonly acknowledged definition and Fayol's definition or general statement about management is still valid and accepted today. Cole (2006:6) affirmed that Fayol's general statement was made over 80 years ago, and continues to be adapted in contemporary works by current writers. The author quoted the original statement from Fayol in 1916 (Fayol, 1916, cited by Cole, 2006:6): *To manage is*

to forecast and plan, to organise, to command, to coordinate and to control. Additionally, Cole (2006:6) referenced a number of other traditional definitions of *management* that are still valid, namely: *Management is a social process... the process consists of... planning, control, coordination, and motivation* (Brech, 1957, cited by Cole, 2006:6); *Management is an operational process initially best dissected by analysing the managerial functions... The five essential managerial functions (are): planning, organising, staffing, directing and leading, and controlling* (Koontz & O'Donnell, 1984, cited by Cole, 2006:6). Peters defined management in 1988, by stating:

Five areas of management constitute the essence of proactive performance in our chaotic world: (1) an obsession with responsiveness to customers, (2) constant innovation in all areas of the firm, (3) partnership – the wholesale participation of and gain sharing with all people connected with the organisation, (4) leadership that loves change (instead of fighting it) and instils and shares an inspiring vision, and (5) control by means of simple support systems aimed at measuring the “right stuff” for today’s environment. (Peters, 1988, cited by Cole, 2006:6).

In recent times, Akrani's (2010:1-8) post echoed these efforts to define management when he stated that managers are compelled to be leaders that lead, command, influence, direct, and motivate followers to achieve organisational objectives ([http://kalyan-city.blogspot.com /2010/07/managerial-leadership-leader-quantities.html](http://kalyan-city.blogspot.com/2010/07/managerial-leadership-leader-quantities.html), cited on 10/02/15). Another review by Stewart (Stewart, 1994, cited by Cole, 2006:7) confirmed the elusive nature of a succinctly formulated but still comprehensive definition of management. The search for a single definition for the concept of management continues today according to Cole (2006:7). Correspondingly, Kotter (1994:18-19) and Kotterman (2006:14) described the confusion in defining management and leadership as an ongoing struggle, as observed in most organisation. In summary, management is conceived as the actions of the manager to plan, direct, organise, and control subordinates and organisational conduct to realise organisational goals.

1.12.2 Managerial leadership

Kotterman (2006:16) stated that in Yukl's (1989) research, management and leadership were not segregated but defined as complementary and the term managerial leadership was adopted. Managerial leadership is defined as the manager's activities by which the behaviour of his subordinates is influenced in order to reach organisational objectives (Akrani, 2010:1-2, <http://kalyan-city.blogspot.com/2010/07/managerial-leadership-leader-quantities.html>, cited on 10/02/15). Sveningsson et al. (2012:69) asserted that managerial leadership discussions in the modern context encompass a broad view, and stated:

There seem to be no limits concerning managers' responsibility for influencing (and improving) their followers' well-being, values, attitudes towards change, job satisfaction, and work performance. We accept managers to practice leadership by formulating visions, initiating change, and motivating followers...There is, however, an increasing interest in recognising more everyday managerial actions – talking, listening, and informally walking around – as expressions of leadership.

The majority of management activities, listed in Sveningsson et al. (2012:69) preceding quotation relate to the leadership role and/or are indicative of the leadership role, which is an important part of all management activities. Collins (2002:7) explained that managerial leadership refers to conventional management and leadership conduct, which are described as complementary but not synonymous. Managerial leadership incorporates both managerial and leadership attributes, namely: knowledge, official authority, instinct, intelligence, skills, tenacity, hard work, and courage (Sourcie, 1994:3, cited by Collins, 2002:7).

1.12.3 Professional service organisations

Scholarly literature makes a distinction between the concepts of firms and organisations. Lowendahl (2005:24) explained that firms are subdivisions of organisations. Governmental groups, most schools, non-profit organisations, municipalities/town councils, and hospitals are classified as organisations rather than as firms (Lowendahl, 2005:24). It was evident in the scholarly literature that educational psychologists work mainly in schools, government groups, educational psychology services, or health and social (Curtis, 2002; Curtis et al.,

2004:343; Brown et al., 2006:487; Edwards et al., 2007:265; Coleman & Pine, 2010:20; Costello, 2010:5; NASP, 2010:1; Curtis, 2012:4; Curtis et al., 2012:28-30; Merrell et al., 2012:103-104) (see Par. 2.3.2). Lowendahl (2005:34-35) stated that the three main features of a professional service organisation are: *highly qualified people, idiosyncratic client services, and subjective quality assessments.*

1.12.4 Professional services

Lowendahl (2005:20) differentiated between professional services and other services. He argued that professional services must be delivered by professional individuals and stated that these services must be delivered in accordance with a set of professional norms or a code of conduct. He also defined professional services as the unselfish delivery of services to customers or clients and listed the following characteristics of professional services (Lowendahl, 2005:22):

- *It is highly knowledge intensive, delivered by people with higher education, and frequently closely linked to scientific knowledge development within the relevant area of expertise.*
- *It involves a high degree of customization.*
- *It involves a high degree of discretionary effort and personal judgement by the expert(s) delivering the service.*
- *It typically requires substantial interaction with the client firm representatives involved.*
- *It is delivered within the constraints of professional norms of conduct, including setting client needs higher than profits and respecting the limits of professional expertise.*

Kaiser and Ringlstetter (2011:3, 5) concurred that professional service organisations offer knowledge-intensive services to their clients. Professional services that are provided by educational psychologists demonstrate all of the above-mentioned characteristics of professional services. This reveals the transferability of the data from the field of management of professional services to the professional services delivered by educational psychologists. Lowendahl (2005:23) pointed out that there are some features that define professional services from other general knowledge intensive services. These are: customising services, practising in accordance with ethical code of conduct, providing

quality service, not focussing on profits, and strictly adhering to the professional standards of a client-centred approach.

1.12.5 Educational psychologists

The word psychology originated from two Greek words, namely psyche and logy. Firstly psyche means souls, mind, and self and secondly, logy refers to the study and investigation. Thus, psychology is the study or investigation of the mind and how it (mental processes) manifests in the social behaviours of humans and animals. Psychologists hold different scopes of practice. The New Zealand Psychologists Board - *Te Poari Kaimātai Hinengaro o Aotearoa* (2012:12-13) states that there are four different vocational scopes of practices. Psychologists can acquire one of the following scopes of practice depending on their area of specialist training:

- Psychologist within a general scope.
- Educational psychologist.
- Clinical psychologist.
- Counselling psychologist.

The New Zealand Psychologists Board - *Te Poari Kaimātai Hinengaro o Aotearoa* (2012:12-13) provided clear descriptions and definitions of each of the different areas of specialist training. It is important to have a broad understanding of the field of psychology and the different areas. Most important for the purpose of the current study is defining what educational psychologists are.

A range of definitions for educational psychologists are provided within the literature. According to Merrell et al. (2012:1-3), it is logical to consider the questions: *What is school psychology? What is an educational psychologist?* Most definitions share the common idea that educational psychologists or school psychologists are professionals who are trained in the field of education and psychology who provide specialist support to school-aged students, families, parents, schools, and educators. There seems to be less consistency about the shared understanding of the roles and responsibilities, ratio of educational psychologists to children, and context of services delivery. The definition of the term school psychologist has not changed dramatically over the past decade but there appears to be a change in the application, responsibilities and service delivery globally.

New Zealand Psychologists Board - *Te Poari Kaimātai Hinengaro o Aotearoa* (2012:12) defined educational psychologists as follows:

Educational Psychologists apply psychological knowledge and theory derived from research to the area of learning and development, to assist children, young persons, adults and their families regarding their learning, academic performance, behavioural, social and emotional development, by using psychological and educational assessments and applying interventions using systemic, ecological and developmental approaches. Such practice is undertaken within an individual's area and level of expertise and with due regard to ethical, legal, and Board-prescribed standards.

A similar definition is presented by Costello (2012:2):

Educational psychologists deal with the psychological and educational development of people in the education system. This may include students of any age, their parents or guardians and the people who work with them. Their work can involve both assessments and intervention within the education setting. They are also likely to be involved in training and research on related topics.

The NZMOE's job description for educational psychologists included the following in-depth definition (www.minedu.govt.nz/jobdescription/6268.doc, cited on 02/04/12):

The purpose of the educational psychologist is to provide effective, efficient and equitable psychological services in accordance with the goals, objectives and policies of the Ministry of Education.

Nature and scope: *The educational psychologist provides specialist psychological services to children and young people, their families/whānau, educational providers and other agencies.*

The educational psychologist has an in-depth knowledge of human development, learning and behaviour, family and social systems, pedagogy, Te Whaariki (Early childhood curriculum) and the New Zealand Curriculum Framework, assessment, analysis and intervention frameworks, and planning and evaluation processes.

Educational psychologists, or school psychologists as they are called in the United States (Garcia-Vazquez et al., 2010:3-12) and United Kingdom (Merrell, Erwin & Peacock, 2012:1-17), provide a variety of services that include assessment, consultation, intervention, prevention, research and advocacy (Garcia-Vazquez et al., 2010:4; Jimerson et al., 2008:3). Merrell et al. (2012:2-3) define school psychologists as people who:

... help children and youth succeed academically, socially, behaviourally, and emotionally. They collaborate with educators, parents, and other professionals to create safe, healthy, and supportive learning environments that strengthen connections between home, school, and the community for all students.

Educational psychology is described in the AEP position paper (AEP: 2008:5) as:

... a small and discrete profession providing specialist, but essential, services to all children especially to our most vulnerable children. The very nature, intensity and sensitivity of the work that educational psychologists undertake, at individual, systems and strategic levels, requires them to have a high level of training and qualification.

The NASP Model of Comprehensive and Integrated School Psychological Services (NASP, 2010) offer the following comprehensible description for school psychologists:

School psychologists provide effective services to help children and youth succeed academically, socially, behaviourally, and emotionally. School psychologists provide direct educational and mental health services for children and youth, as well as work with parents, educators, and other professionals to create supportive learning and social environments for all children. School psychologists apply their knowledge of both psychology and education during consultation and collaboration with others. They conduct effective decision making using a foundation of assessments and data collection. School psychologists engage in specific services for students, such as direct and indirect interventions that focus on academic skills, learning, socialization, and mental health. School psychologists provide services to schools and families that enhance the competence and well-being of children, including promotion of effective and safe learning environments, prevention of academic and

behaviour problems, response to crises, and improvement of family-school collaboration.

The ISPA (http://ispaweb.org/Documents/deinition_fulldoc.html, cited on 10/07/12) compiled a definition but states that the definition is advisory in nature and should be seen as the minimal requirements:

The term school psychology is used in a general form to refer to professionals prepared in psychology and education and who are recognised as specialists in the provision of psychological services to children and youth within the context of schools, families, and other settings that impact their growth and development. As such, the term is meant to include educational psychologists and others who display qualities that document associates with school psychology.

Another general description of school psychologists were provided by Jimerson, Oakland and Ferrell (2007:1) as:

The speciality of school psychology has been characterised as one that collectively provides individual assessment of children who may display cognitive, emotional, social, or behavioural difficulties; develops and implement primary and secondary intervention programs; consults with teachers, parents and other relevant professionals; engages in program development and evaluation; conducts research; and helps prepare and supervise others.

The common thread flowing through the definitions of the term educational psychologists globally can be summarised in the following definition – educational psychologists are highly trained professionals who provide specialist psychological and educational knowledge and services to children and young persons of any age, who are vulnerable and/or have special educational needs with regard to their learning, mental health, academic progress, social-emotional development, behaviour, developmental delays, family and social systems. Educational psychologists work collaboratively with parents, guardians, caregivers, people who work with them, educational providers, educators, other relevant professionals and specialists, and other appropriate agencies. These specialist services can be provided at the educational facility, home or any other appropriate place. Educational psychological services comprise a range of activities and professional

practices that may include: specialist assessments and evaluations; direct and indirect therapeutic interventions; provide training for parents and educators; conduct research, make resourcing recommendations; engage in program development and evaluation; work at individual, systems, and strategic level; support the professional preparation and supervision in the field.

1.13 SUMMARY

This chapter introduced the background to the proposed research project regarding the influence of managerial leadership on the professional performance of educational psychologists. The focus will be limited to four areas documented in scholarly literature as most influenced by managerial leadership: service delivery models, management appointments, workload management, and educational psychologists' engagement in clinical supervision. The research problem, questions, and objectives, were introduced. The researcher considered, discussed, developed, and presented the theoretical and conceptual frameworks for the study. A précis of the research methodology and research plan are described in Chapter 1. This included a description of the population, samples, instrumentation, and data collection techniques. An outline of chapters of the thesis and the definitions of key concepts were included. This leads into Chapter 2, the scholarly literature review and global perspective, in which the researcher provides background information to the study. The demographic characteristics, roles responsibilities, training, and professional regulation of educational psychologists are presented.

CHAPTER 2

THE DEMOGRAPHICS, ROLES, RESPONSIBILITIES, TRAINING AND PROFESSIONAL REGULATION OF EDUCATIONAL PSYCHOLOGISTS: A GLOBAL PERSPECTIVE

2.1 INTRODUCTION

Chapter 1 provided the preamble, background, and theoretical perspective to the research relating to the influence of managerial leadership on the professional performance of educational psychologists. The problem statement, the purpose, objectives of the study, the hypothesis for the study, and the research methodology were explored. Additionally, a brief synopsis of the six chapters and definitions of the key terms were encapsulated. Chapter 2 elucidates the background to the study by presenting data from a comprehensive scholarly literature review regarding the field of educational psychology. The demographics, roles, purposes, responsibilities, training, and professional regulation of educational psychologists are discussed in Chapter 2.

2.2 DEMOGRAPHIC CHARACTERISTICS OF EDUCATIONAL PSYCHOLOGISTS

2.2.1 Introduction

The appraisal of scholarly literature revealed that different titles are used to describe the professionals who provide specialist educational and psychological services in educational settings to students who have cognitive, academic, emotional, behavioural, and social concerns. These professionals are generally referred to as school psychologists or educational psychologists in scholarly literature. Jimerson, Oakland, Renshaw, Fraser and Ruderman (2010a:1) uncovered other titles that are used to refer to this cohort of professionals, namely: psycho-pedagog, counsellor, professional of educational psychology, psychologists in education, and psychologist in the school. Educational psychologist is the term that appeared consistently in the scholarly literature from United Kingdom, Ireland, South Africa, and New Zealand. The researcher uses the term educational psychologist for the purpose of this study to refer to the mentioned professional group. The following explanation provided by ISPA

(<http://ispaweb.org/Documents/definition-fulldoc.html>, cited on 23/07/12) clarifies and supports the use of the term educational psychologist:

The term school psychology is used in a general form to refer to professionals prepared in psychology and education and who are recognized as specialists in the provision of psychological services to children and youth within the contexts of schools, families, and other settings that impact their growth and development. As such, the term also refers to and is meant to include educational psychologists and others who display qualities this document associates with school psychology.

The biographical characteristics of educational psychologists have been extensively researched and documented in most research studies in the field of educational psychology. Literature pertaining to two noteworthy longitudinal studies (Curtis, Hunley & Grier, 2002:30-42; Jimerson et al., 2004:259-286; Jimerson et al., 2006:5-32; Jimerson et al., 2008a:5-28; Curtis, et al., 2012:1, 28-30) conducted over decades, provided valuable insight into developments, changes, commonalities, differences, and challenges facing educational psychologists around the world. Since 1989, the National Association of Educational Psychologists (NASP) has conducted a national study of the educational psychology arena in the United States of America. Curtis et al. (2012:1) reported that the initial study began with data on the 1989-1990 school years and, to stay abreast of any developments in the field, was repeated every five years thereafter, covering: 1994-1995, 1999-2000, 2004-2005, and 2009-2010. Active NASP members were randomly selected to participate in the study by completing a survey that focuses on the following demographic characteristics: ethnicity, age, years of experience in school psychology, professional association membership, gender, primary position, classroom teaching experience, levels of participation, and credentials.

The second longitudinal endeavour, conducted by the International School Psychology Association (ISPA), influenced the present study relating to understanding the influence of managerial leadership on the professional performance of educational psychologists. The ISPA study is the only international study of its kind that the scholarly literature search yielded. The ISPA developed the International School Psychology Survey (ISPS) based on the NASP survey layout during 2001-2002 (Jimerson et al., 2004:259). The International School Psychology Association International School Psychology Survey (ISPA ISPS) was

developed to build an international knowledge database in relation to educational psychology services. The ISPA administered the ISPA ISPS in 13 different countries since 2001 (Jimerson et al., 2004:258-286; Jimerson et al., 2006:5-32; Jimerson et al., 2008a:5-28). The participating countries were Albania, Australia, China, Cyprus, Estonia, Germany, Georgia, Greece, Italy, Northern England, Russia, Switzerland, and the United Arab Emirates.

The first ISPA ISPS was administered in Albania, Cyprus, Estonia, Greece, and Northern England during 2004. The second replication of the ISPA ISPS was administered in Australia, China, Germany, Italy, and Russia during 2006, and the latest reiteration was carried out during 2008 in Georgia, Switzerland, and the United Arab Emirates. The ISPA ISPS obtained data from approximately 2000 educational psychologists with regard to their research interests, characteristics, challenges, training and regulations, and roles and responsibilities. The participants were also asked to make recommendations on possible future contributions of ISPA in the educational psychology arena (Jimerson et al., 2004:258). This database advances understanding of international trends and developments of research interest, training, challenges, roles and responsibilities, and characteristics of educational psychologists.

Jimerson et al. (2008a:21) suggested that the demographic characteristics of educational psychologists are comparable around the world. The authors discovered a consistent profile for educational psychologists across the participating countries. In contrast, Curtis et al. (2004:431) raised concerns based on their review of previous research on the position of educational psychology and the implications of a major shortage in the field of educational psychology. The authors proposed that the field of educational psychology has changed and will continue to change in relation to the number and characteristics of school psychologists as well as their professional practice.

Castillo et al. (2012a:6) and Castillo (2012:1) recommended further investigation into educational psychologists' demographic characteristics and the context for their professional practice and the relationships therein. The data provide a clear indication that not enough relevant empirical evidence-based data is available on either the demographic characteristics or the context for the professional performance of educational psychologists. Curtis et al. (2004:432) stated: *The field of school psychology is constituted*

largely of Caucasian female school psychologists with specialist-level preparation who are employed in school settings. Current data suggest that this general description of the field is not likely to change in the next 10 years. The common threats from the two longitudinal studies and other relevant research pertaining to the demographic characteristics of educational psychologists will be discussed under the following subheadings: gender, age, ethnicity, language, certification and legislation, experience practicing as an educational psychologist, classroom teaching experience, and qualification levels.

2.2.2 Gender

A range of studies reported that the field of educational psychology is dominated by females, and an even higher female representation has been recorded over recent years (Curtis et al., 2002:32, 35; Curtis et al., 2004:432; Jimerson et al., 2004:277; Jimerson et al., 2006:21; Brown et al., 2006:488; Worrell, Skaggs & Brown, 2006:143; Jimerson et al., 2008a:24; Curtis et al., 2012:2; Merrell et al., 2012:112). Researchers reported on a constant increase in the numbers of female educational psychologists and noted the continuous feminisation (Curtis et al., 2012:2) of the profession of educational psychology. During his presentation at the 2002 Future of School Psychology Conference, Curtis (2002) shared that the earliest study concerning the gender of educational psychologists was carried out by Farling and Hoedt during the 1969-1970 school years. Worrell et al. (2006:142) concurred that the changes in the educational psychology arena were marked by the increase in the percentage of women in the field.

Brown et al. (2006:486) provided data that aligned with previous findings showing greater female educational psychologists' participation compared to male educational psychologists' participation. Curtis et al. (2004:432) and Merrell et al. (2012:113) concurred that the over-representation of females in the field of educational psychology was not always the trend. Contrary to previous views, these authors found data reporting on male dominance in the past: *Throughout the early history of the field, the majority of school psychologists were male. As recently as the early 1980s, 54% of the field was reported to be male* (Smith, 1984, cited by Curtis, 2004:432). They described a gradual increase in the number of females in the field in the earlier years. The scale was tipped between 1999 and 2000 when they found evidence that 70.0 per cent of all educational psychologists were female.

In the first of three reiterations of the ISPA studies, administering the ISPA ISPS, Jimerson et al. (2004:277) confirmed the global trend showing that the majority of practicing educational psychologists was female. The percentage of females ranged from 63.0 per cent to 100.0 per cent in these participating countries. The percentage of female educational psychologists in Northern England was 63.0 per cent but the entire sample from Albania was reported to be women. A possible explanation for this female domination is the increasing number of females training in the field of educational psychology (Jimerson et al., 2004:266). The second set of data from the ISPA study by Jimerson et al. (2006:11) resonated with the earlier results concerning the demographic characteristics of educational psychologists and was consistent with the global profile. Data confirmed that the field of educational psychology in Australia, China, Germany, Italy, and Russia was also dominated by females. The gender distribution in Germany showed a deviation reflecting an almost even spread between males and females. Curtis et al. (2006:24) attributed the higher proportion of female educational psychologists in these countries to a link between female dominance and age. Germany has an older workforce and hence a lower percentage of females in the sample.

The latest reiteration of the ISPA study was administered in Georgia, Switzerland, and the United Arab Emirates (Jimerson et al., 2008a). Data from the ISPA ISPS in Georgia was consistent with results from earlier ISPA ISPS studies. The field of educational psychology was over-represented by women in Georgia parallel to the data from Albania, 100.0 per cent of the participants were female. Data from Switzerland showed quite the opposite, the majority of educational psychologists were male in Switzerland. Jimerson et al. (2008a:9, 21) proposed that the higher percentage of males corresponds with the high status of educational psychologists in Sweden along with higher salary scales in contrast to other fields in psychology. Only 56.0 per cent of the educational psychologists in the United Arab Emirates were female. While this is one of the smallest percentages of female presentation in educational psychology from all 13 countries, these numbers are similar to data obtained in Germany (Jimerson et al., 2008a:21). Through administering the survey, developed on behalf of the National Association of School Psychology to examine the relationships between the demographic characteristics of educational psychologists and their professional, Curtis et al. (2002:32) acknowledged the momentous change in gender representation of educational psychologists in the USA. The gender discrepancy affected

employment conditions and professional activities but did not affect the delivery of educational psychological services.

The gender representation of New Zealand educational psychologists align with the international data that indicate an over-representation of women in the field of educational psychology (Curtis et al., 2002:32, 35; Curtis et al., 2004:432; Jimerson et al., 2004:277; Brown et al., 2006:488; Jimerson et al., 2006:21; Worrell et al., 2006:143; Jimerson et al., 2008a:24; Curtis et al., 2012:2; Merrell et al., 2012:112; NZPB, 2013). Similarly, the national (New Zealand) registered educational psychologist cohort are currently composed of 53 male registered educational psychologists and 136 female registered educational psychologists according to NZPB - *Te Poari Kaimātai Hinengaro o Aotearoa* (NZPB, 2013). The gender representation data for the national New Zealand educational psychologists' cohort are illustrated in Figure 2.1, depicting the over-representation or feminisation of educational psychologists in New Zealand.

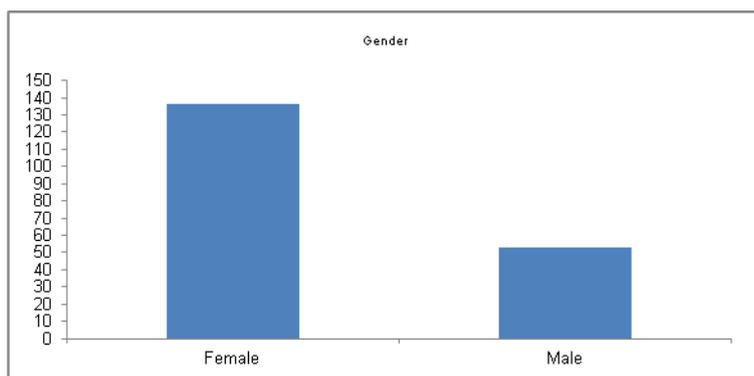


Figure 2.1. Gender representation (NZPB, 2013).

2.2.3 Age

Data from a variety of critical studies in the field of educational psychology suggested that the age range of educational psychologists is steadily increasing (Curtis et al., 2004:433; Faulkner, 2007:24-25; Merrell et al., 2012:113) and implies a greying workforce (Faulkner, 2007:24-25; Curtis et al., 2012:1). In the same way, the people crisis was raised by Maister (2003:189-204) in the field of professional service organisational management. Demographic data from the USA indicated that the population growth in developed countries, increased from 17.0 to 23.0 per cent between 1965 and 1985. The “baby boomers” traditionally opted to enter into professional work sector. They were typically university graduates and preferred professional careers. Pham, Bosak, Miyake, Case and Gil (2011:5) agreed that the “baby boomers” showed a preference for careers that are

challenging and innovative. The trend reached a turning point when this professional and well educated group of baby boomers reached their twenties (Maister, 2003:189-190). Additional data from all developed countries indicated a similar shrinkage in the size of the 25-34-year-old cohort since 1985 (Maister, 2003:189-190; Pham et al., 2011:1-38). The reality of this decline in the provision of professionals has been compared to the 1970s oil crisis when there was a meagre five per cent decrease in the labour force, as documented by Maister (2003:190). Thus, the shortage of professionals across all industries and in all developed countries poses a real threat and the impact will be detrimental.

The data from the longitudinal studies predicted that the educational psychology workforce will continue to exhibit an increase in the number of older educational psychologists across the world. Curtis et al. (2004:433) examined the changes in the age ranges of educational psychologists over a ten-year time span and found that the mean age of educational psychologists increased from 38.8 years to 42.2 years in the USA. Curtis et al. (2012:1-6) found similar trends in the NASP membership surveys conducted years later. The authors reported on evidence of a 1.2 per cent increase in the mean age of educational psychologists over the last four years, signifying a mean age of 47.4 years. This result implies a 2.2 per cent increase in age over the last 10 years in the USA. Consequently, results showed that 17.8 per cent of the participants were 60 years of age or older. Worrell et al. (2006:143) found comparable data during 2010 in their study of educational psychologists' job satisfaction in the USA. Approximately half of the educational psychologists who participated in the study reported that they were 50 years of age or older.

Data from the three reiterations of the ISPA ISPS (Jimerson et al., 2004:266, 277; Jimerson et al., 2006:6, 11, 24; Jimerson et al., 2008a:9, 21) provided meaningful insight into the demographic characteristic of educational psychologists with reference to their ages from 13 countries around the world. Results varied greatly between the different countries. The age range of educational psychologists reflects how long educational psychology has been acknowledged as a profession in certain countries. Albania had the youngest population of educational psychologists. The data matched the trend of an older work force reported in USA where the profession of educational psychology is well established. The results from the longitudinal studies disclosed the following mean ages for educational psychologists in the respective participating countries: Albania – 24;

Estonia – 39; Greece – 35; Northern England – 42; Cyprus – 49; Australia – 47; Germany – 53; China – 31; Italy – 36; Russia – 32; Georgia – 34; United Arab Emirates – 33; Switzerland – 47 (Jimerson et al., 2004:265; Jimerson et al., 2006:12; Jimerson et al., 2008a:10). The mean age of educational psychologists in Albania was the lowest of all the participating countries. Thus, making Albanian educational psychologists significantly younger than their colleagues in other countries. The mean age of participants in China, Italy, the United Arab Emirates, Georgia, Greece, and Estonia were all relatively low and ranged between 31 and 39. This age range reflects a younger work force. In contrast, the mean age of educational psychologists in Northern England and Cyprus corresponded with the data from the USA that reflects an aging population of educational psychologists. The highest mean age was documented for educational psychologists in Australia, Switzerland, and Germany. Germany had the oldest group of educational psychologists.

Jimerson et al. (2004:266, 277), Jimerson et al. (2006:6, 11, 24) and Jimerson et al. (2008a:21) implied that the age range of educational psychologists corresponds with the following questions:

- How long have the training programmes for educational psychology been running in particular countries?
- How long has educational psychology existed as a profession in a specific country?
- How many educational psychologists are enrolled to study educational psychology courses?
- What is the demand for educational psychologists?

One feared and documented consequence of a greying educational psychologist population is an educational psychologist shortage (Worrell et al., 2006:143; Ysseldyke, Burns, Dawson, Kelley, Morrison, Ortiz, Rosenfield & Telzrow, 2006:10). Researchers foresaw the educational psychologist shortage as they calculated the retirement age of the cohort educational psychologists participating in their studies (Curtis, 2002; Curtis et al., 2004:433; Jimerson et al., 2004:266-277; Jimerson et al., 2006:6, 11-12; Worrell et al., 2006:142; Jimerson et al., 2008a:21; Merrell, 2012:113). Ysseldyke et al. (2010:10) estimated that 15,000 vacant and unfilled educational psychologist positions would exist between 2003 and 2020. Research had led to recommendations for actions to negate an educational psychologist shortage across the world. The national cohort of registered

educational psychologists in New Zealand are born between the years 1937 and 1985, according to data obtained from the NZPB - *Te Poari Kaimātai Hinengaro o Aotearoa* cited on 22/01/13. This data suggests an age distribution for the national workforce of educational psychologists between 28 and 76 years of age. The pending shortage of educational psychologists that is predicted in the literature (Curtis, 2002; Jimerson et al., 2004:266, 277; Curtis et al., 2004:433; Jimerson et al., 2006:6, 11; Worrell et al., 2006:143; Ysseldyke et al., 2006:10; Jimerson et al., 2008a:21; Merrell et al, 2012:113) is evidently a reality across the globe.

2.2.4 Ethnicity

Research concerning the diversity of ethnic representation among educational psychologists has gained momentum in recent years (Curtis, 2002; Curtis et al., 2004:49-66; NASP, 2005; NASP, 2009; Chandler, 2011:99-127; Griffin & Muniz, 2011:57-76; Merrell et al., 2012:114; Curtis et al., 2012:1, 28, 30; Bocanegra, 2012:1-5). These studies on the subject of ethnic diversity among educational psychologists are not novel. Thus, they are ethnically representative of the diverse ethnical client groups they service. University-based psychology departments, colleges, national educational psychology associations, educational psychology societies, and organisations around the world advocate for increasing the ethnic diversity of educational psychologists. This would significantly diversify the field of educational psychology in order to provide equitable professional specialist services to an emerging and growing culturally diverse school-aged population.

NASP membership surveys from the 2004-2005 school years revealed a definite lack of representation of minority groups in the field of educational psychology in the USA. Data obtained from NASP members who participated signified the lack of diversity in the field with reference to the following cultural groups respectively: African American – 1.9 per cent; Caucasian – 92.6 per cent; Native American/Alaska Native – 0.8 per cent; Asian/Pacific Islanders – 0.9 per cent; Hispanic – 3.0 per cent; other – 0.8 per cent. Huge discrepancies exist between the minority cultural groups, namely: American African, Native American/Alaska Natives, Asian/Pacific Islanders, Hispanic, and the Caucasian group. Interestingly, the NASP surveys from the 2009-2010 school years did not show a significant improvement in the representation of ethnical diversity in the USA.

The comparative data for the cultural groups in the second reiteration of the NASP survey are: African American – 3.0 per cent; Caucasian – 90.7 per cent; Native American/Alaska Native – 0.6 per cent; Asian/Pacific Islanders – 1.3 per cent; Hispanic – 3.4 per cent; other – 1.0 per cent. The data show no significant increases in the number of educational psychologists representing the minority groups – African American, Asian/Pacific Islanders, Hispanic, and other cultural groups. The number of African American educational psychologists demonstrates the biggest growth with a 1.1 per cent increase. An increase of 0.4 per cent was reported for both the Asian/Pacific Islanders and the Hispanic minority groups. However, this increase is not significant when compared to the growth of the general Hispanic population in USA.

A decline in the number of educational psychologists in the Caucasian and Native American/Alaska Native groups is evident. Curtis (2002) concurred that these are not dramatic changes and stated that an assertive effort is needed to address the need for developing an educational psychology workforce that is culturally diverse. According to Curtis, nine out of ten educational psychologists still identified themselves as Caucasian in 2010. The demographic makeup of the US population is changing quickly and reflects the ever-changing diversification of the population of students, youth, and their families. Minority ethnic groups in the USA are growing at a steady rate and are becoming a growing majority. Consequently, educational psychologists must replicate and reflect these demographic changes in their representation of the changing population and school systems in which they work. Data from the US Bureau of the Census 2010 were captured by Merrell et al. (2012:41) as evidence of this fast growing diversification of the countries' demographic representation. Latinos are the largest non-European ethnic group, comprising almost 15.8 per cent of the population, and they exceed the African American, or black population, of 12.9 per cent, Asian American/Pacific Islanders are 4.8 per cent, and American Indian/Native Alaskans constitute 1.0 per cent of the US population.

Bocanegra (2012:1-2) proclaimed that an imbalance of racial and ethnic diversity still exists today and attributed this imbalance to two reasons: lack of understanding about the significance of diversity and its influence on diversity recruitment practices and the lack of direction. A lack of awareness about the educational psychology profession is also mentioned by NASP and Rogers and Molina (2006:143) as a reason for the imbalance. NASP, national organisations, state organisations, and training programmes continue to

develop strategies and recommendations to ensure the development of an educational psychology workforce that is culturally diverse and able to meet the demands of a diverse school-aged population in the USA.

Maton, Kohout, Wicherski, Leary, and Vinokurov (2006) summed up the need for further research by stating that the diverse minority communities in psychology continue to be underrepresented. These authors attributed the disproportionately low representation of minority groups to the lack of sufficient research presenting the viewpoint of the target groups to address the challenge of underrepresentation. New Zealand's national workforce of registered educational psychologists consists predominantly of New Zealand residents, of which 174 are registered New Zealand educational psychologists, representing 92.0 per cent of this workforce (NZPB, 2013). The rest of the national registered educational psychologists' workforce are represented by eight British educational psychologists (four per cent), four South Africans (two per cent) and two Americans (one per cent). Only one Czechoslovakian professional is registered as an educational psychologist in New Zealand, representing less than one per cent of the national educational psychologist workforce (NZPB, 2013). New Zealand residents embody a range of ethnicities that consist of New Zealand European, New Zealand Māori, other European, African, other European Australian, Chinese, Samoan, Cook Island Māori, Tongan, Pasifika, Asian, South African, British, American, Indian, and others (New Zealand Human Rights Commission, 2013).

Data extracted from the Ministry of Health's (MOH) Psychologists Health Workforce Annual Survey in 2010 revealed that educational psychologists in New Zealand represent nine different ethnic groups: African, Indian, New Zealand European, New Zealand Māori, other, other European, other European Australian, other European British, and Irish (MOH, 2010:1-11). The MOH health workforce survey gathered data from psychologists by including the survey in each invoice that was sent to the psychologists for their Annual Practising Certificate (APC). A total of 1,345 (69.5 per cent) out of 1,936 psychologists who received the MOH health workforce survey with their APC invoices responded that they were actively working in the field of psychology. Another 56 psychologists (2.9 per cent) responded that they were not actively working, and 535 others (27.6 per cent) did not respond at all. These psychologists included educational psychologists, counselling psychologists, clinical psychologists, psychologists within a general scope, and intern

psychologists. The workforce survey captured a greater variety of ethnic groups that provides deeper insight into the different ethnic groups that are represented by the national educational psychologists' workforce.

A noticeable imbalance of ethnic diversity is apparent in the data from MOH (2010:1-10). This imbalance is not representative of the population they (educational psychologists) serve. The underrepresentation of Pasifika and Māori ethnic groups are posing a great challenge for New Zealand generally. More Māori and Pasifika educational psychologists are needed to enter the field in order to ensure an equitable culturally responsive service to the targeted priority learners, namely Māori learners, Pasifika learners, learners from low socio-economical backgrounds, and learners with special educational needs.

2.2.5 Language

Most educational psychologists in Albania, China, Cyprus, Estonia, Georgia, Germany, Greece, Italy, Switzerland, and the United Arab Emirates reported to be predominantly multilingual (Jimerson et al., 2004:266; Jimerson et al., 2006:11-13; Jimerson et al., 2008a:21). The countries where educational psychologists stated they are mainly monolingual were Northern England, Australia, and Russia. Jimerson et al. (2008:21) stated that only two per cent of the educational psychologists in Northern England reported to be fluent in a language other than English. In Australia, only eight per cent of the respondents reported to be fluent in a language other than English. Russian was the only language the educational psychologists reported to use in Russia. English was reported as the most commonly used second language in most countries with the exception of Russia (Jimerson et al., 2008a:21). It is assumed that all participating educational psychologists are fluent in their national language because they were all able to complete the ISPA ISPS in their national language. ISPA facilitated the translation of all ISPA ISPS to the national languages of the countries in which the surveys were administered. English and French were identified as the two most frequently used second languages in which educational psychologists communicated in and read professional literature (Jimerson et al., 2004:266; Jimerson et al., 2006:11-13; Jimerson et al., 2008a:21).

English is no longer the most spoken language in the USA and 17.9 per cent of the US population speaks other languages (US Bureau of the Census, 2010b, cited by Merrell et al., 2012:115). Curtis (2012:2) concurred that even if only 33.3 per cent of the respondents

responded to the NASP survey question: *What language(s) do you speak fluently other than English?* The results indicated that 47.6 per cent of the NASP members reported that they can speak a language other than English. English is also the language predominantly used for communication and writing in New Zealand. English is also generally used in the courts, parliament, in the education system, and by the wider public system according to the Human Rights Commission - *Te Kāhui Tika Tangaia* (HRC, 2013). New Zealand has three recognised official languages: English, New Zealand Sign Language, and Māori. Special status has been granted to Māori and New Zealand Sign Language under New Zealand law granting people the right to use and communicate in Māori or New Zealand Sign language. These official languages can be used in all legal proceedings with the support of an interpreter. Not only is *Te Reo Māori* (Māori language) taught as a language subject in most New Zealand schools, Māori immersion schools also exist in New Zealand. Many other languages are spoken as a result of the growing immigration population, and a small number of the educational psychologists are multilingual.

2.2.6 Classroom teaching experience

No consistent international pattern pertaining to the number of years of classroom teaching experience for educational psychologists was uncovered in the scholarly literature. The number of years of classroom teaching experience ranged from none to less than a year to 13 years of classroom teaching experience across. The discrepancy in the number of years of classroom teaching experience of educational psychologist across countries reflects that not all countries require educational psychologists to have teaching experience prior to entering the profession. The only countries with the prerequisite for a national teaching qualification or previous classroom teaching experience were Australia and Northern England (Jimerson et al., 2004:265; Jimerson et al., 2006:11). The Soulbury Report (2010:4) specified that educational psychologists are required to have extensive relevant experience with working with children in education or children's services.

Countries that did not have any national requirement for teaching experience, included: Albania, China, Cyprus, Estonia, Germany, Greece, Italy, Russia (Jimerson et al., 2004:266; Jimerson et al., 2006:11-12; Jimerson et al., 2008a:10), Ireland (Costello, 2010:5) and New Zealand (Edwards et al., 2007:368). Educational psychologists in Italy reported an average of ten years of classroom teaching experience, which is one of the

highest numbers of years of classroom teaching experience across all 13 countries who participated in the ISPA ISPS. Moreover, Estonian educational psychologists reported an average of 13 years of classroom teaching experience.

Jimerson et al. (2004:266) noted that historical habits in Estonia consisting of teaching prior to entry into the field of educational psychology can contribute to the greater number of years of classroom teaching experience. Some educational psychologists practicing in Estonia also teach psychology classes at secondary schools while practicing as an educational psychologist. The following average numbers of years of classroom teaching experience were documented for the other countries: Albania – two years, Cyprus – less than one year, Greece – three years, Northern England – seven years (Jimerson et al., 2004:265), Australia – six years, China – three years, Germany – two years, Russia – four years (Jimerson et al., 2006:12), Switzerland – six years, United Arab Emirates – one year and four months, and Georgia – four years (Jimerson et al., 2008a:10). Results from various research studies were consistent with the tendency of educational psychologists to have some experience as classroom teachers even in the absence of a national requirement, a teaching qualification or required prior classroom teaching experience, of the country they work in. Teaching experience is considered to be a very good foundation for an educational psychology job (MOE, 2012) but not a prerequisite.

2.2.7 Experience practicing as an educational psychologist

A relationship exists between the age of educational psychologists and their years of experience practicing as an educational psychologists around the world (Curtis et al., 2004:433; Jimerson et al., 2004:266; Jimerson et al., 2006:11; Jimerson et al., 2008a:21). Years of experience practicing as an educational psychologist are also reflective of how long the profession of educational psychology has existed in a specific country. The NASP survey revealed the greying educational psychologist workforce with data reflecting a larger proportion of educational psychologists in the older age range with more years of experience than their younger counterparts (Curtis et al., 2004:433). The authors cautioned against the growing shortage of educational psychologists when revealing data of these critical factors: higher age range and greater number years of experience. This trend can be attributed to the dramatic growth in the profession of educational psychology in the 1970s when the federal legislation called the Education of All Handicapped Children

Act of 1975 (EHC) was passed. The cohort of educational psychologists who began practicing as educational psychologists in the late 1970s (1978-1980) will currently have 30 or more years of experience as educational psychologists. The correlation between years of experience and the age range of educational psychologists is consequently present in the USA due to the long existence of the profession and field of educational psychology.

Data from the three ISPA ISPS's support the findings from the NASP survey that the numbers of years of experience of educational psychologists are reflective of their ages (Curtis et al., 2004:433; Jimerson et al., 2004:266; Jimerson et al., 2006:11; Jimerson et al., 2008a:21). Participants in the ISPA ISPS in Albania reported the least number of years of experience practicing educational psychology. These Albanian educational psychologists also have the lowest age range, making them the youngest cohort of educational psychologists of the fourteen countries. The data clearly reflects the strong correlation between age and years of experience. Another contributing factor to the low number of years of experience of the educational psychologists in Albania is that the field of educational psychology has only recently been established as a profession. Educational psychologists in China, Georgia, Greece, Italy, Estonia, Russia, and the United Arab Emirates, reported similar low numbers of years of experience based on similar reasoning as their colleagues in Albania. More years of experience were reported by educational psychologists in Switzerland, which reflected their higher age range and the fact that the profession of educational psychology has been in existence in Switzerland for an extended time. Curtis et al. (2004:433), Jimerson et al. (2004:266), Jimerson et al. (2006:11), and Jimerson et al. (2008a:21) suggested that connections exist between the number of years of experience as an educational psychologist, how long the profession of educational psychology been practiced in a specific country, and the age of the educational psychologist.

2.2.8 Summary

The preceding international collaborative efforts to advance understandings of educational psychology demonstrate that educational psychologists' demographic characteristics are diverse. Some demographic characteristics correspond while others are different and show discrepancies. The aforementioned section focussed on the gender, age range,

ethnicity representation, language proficiency, work experience in the field of educational psychology, classroom teaching experience, and the highest qualification level.

The field of educational psychology is characterised by an over-representation of women who are getting older and nearing their retirement age, which does not reflect the minority ethnic groups or the ever-changing diversification of the population they serve. The educational psychologists are predominantly multilingual with English as the most common second language. The high age ranges of educational psychologists are reflected in the greater number of years of experience as an educational psychologist. Most educational psychologists have some classroom teaching experience, although such experience is not a national prerequisite in all countries.

2.3 MAIN ROLES AND RESPONSIBILITIES OF EDUCATIONAL PSYCHOLOGISTS

2.3.1 Introduction

Jimerson et al. (2004:259-286) and Jimerson et al. (2006:5-32) noted a period of rapid development in the field of educational psychology. The ISPS focussed on five important areas that are related to the field of educational psychology. This initial data formed the basis for future understandings of the field of school psychology internationally and include: training, roles and responsibilities, characteristics, challenges, and the research interests of educational psychologists (Jimerson, 2004:259-262). Evidently, distinct similarities, differences, and diversity between the roles and responsibilities, practices of educational psychologists, and training exist in different countries. The diversity is revealed in how different countries use different terminology, namely school psychologist versus educational psychologist.

Ysseldyke et al. (2006:2) reflected on the development and changes in the field of educational psychology and concluded:

Much has transpired in the past nine years in both the United States and internationally. New federal laws - No Child Left Behind (NCLB) and the Individuals With Disabilities Education Improvement Act of 4004 (IDEA 2004) - were enacted and have increased the emphasis on accountability, high stakes

testing, evidence-based practice, and integration and consistency between general and special education.

Jimerson et al. (2004:260), Jimerson et al. (2006:6), and Jimerson et al. (2008a:6) acknowledged that only a small number of recent endeavours have systematically collected information regarding educational psychology practices and training around the world. These authors stated: *... little comparative information is available about the training, roles and responsibilities of school psychologists or the contrasting context in which they work* (Jimerson et al., 2004:259; Jimerson et al., 2006:6). Jimerson et al. (2004:281) reported that participating educational psychologists agreed that research is very important to their professional practice and performance. *However, no respondents to this survey noted spending a portion of their time on research-related activities*, according to Jimerson et al. (2004:281) and Jimerson et al. (2006:28). Brown (2010:12) asserted that there is a lack of empirical research but recognized that university research in the field of educational psychology seemed to be strong. The author also noted that research, practice, and policy development showed a steady decline over recent years. The lack of research in the field of educational psychology may be the reason for the lack of empirical data pertaining to managerial leadership of educational psychologists. Jimerson et al. (2008a:5) expanded the knowledge base with the third reiteration of the ISPA ISPS. The data provided the researcher with valuable insight and information regarding factors that affect the field of educational psychology in general.

The researcher's view corresponds with data from longitudinal studies (Jimerson et al., 2004:259; Jimerson et al., 2006:6; Jimerson et al., 2008a:5-6) and other related scholarly literature (Brown et al., 2006:47-57; Edwards et al., 2007:273; Guzzo et al., 2007:34; Papacosta; 2007:69; Zhou, 2007:58; Brown, 2010:14-15; Coleman & Pine, 2010:13, 23; Hill, 2010:1-123; Hornby, 2010:26), stating that more research is required: *Additional information such as that collected from the ISPS should help new and established school psychological services to plan future developments* (Jimerson et al., 2004:284; Jimerson et al., 2006:30). The evolution of the fields of educational psychology and managerial leadership necessitates contemporary empirical research be conducted to keep abreast of educational psychologists' characteristics, training, roles, responsibilities, challenges and research interests (Jimerson et al., 2008a:5). The AEP Report (2008:3) concurred that changes in the organisation of service provision through Children's Services Authorities

significantly affected management and the role of educational psychologists in the UK. The lack of recent published research on the phenomenon confirmed that gaps in the knowledge base.

2.3.2 Context and employment settings of educational psychologists

Educational psychologists are employed by a range of employers such as national educational psychology service; state departments of education, health, social welfare; mental health clinics; universities and other academic institutions; and private practices. The employment settings may include public schools, private schools, hospitals, medical practices, special schools and units, and community based facilities. Curtis et al. (2004:343) documented the representation of educational psychologists across the main settings in which educational psychologists work: public schools – 77.5 per cent; private schools – 6.8 per cent; universities – 6.3 per cent; private practices – 4.3 per cent; hospitals and medical settings – 0.9 per cent; state departments – 0.8 per cent; other – 3.5 per cent. Merrell et al. (2012:103-104) reported numbers that correspond with previous percentages: public school settings – 83.1 per cent; universities and colleges – 6.5 per cent; private practices – 4.1 per cent; faith-based – 2.1 per cent; hospital and medical settings – 1.3 per cent; state departments of education – 0.8 per cent; other – 2.8 per cent. Public schools are the main employment setting in the USA (Curtis, 2002; Curtis et al., 2004:343; Curtis et al., 2012:28, 30; Curtis, 2012:4; Merrell et al., 2012:103-104). These authors investigated the public school settings further and broke it down into rural school districts, suburban school districts, and urban school districts, to better understand where educational psychologists work. They found that 30.5 per cent of the educational psychologists working in public schools work in urban school districts. Another 25.3 per cent work in public schools in rural districts and 44.3 per cent of educational psychologists work in suburban districts.

Results from research by Curtis et al. (2002:32), and Curtis (2002), Brown et al. (2006:487), Costello (2010:5), and NASP (2010:1), strongly supported the previous findings, which state that the primary work setting for educational psychologists is in public schools in urban, rural, and suburban districts. Costello (2010:12) showed that the main employers and employment settings for educational psychologists practicing in Ireland were the National Educational Psychological Service (NEPS), which includes work in

schools; Health Service Executive (HSE), which includes work either in child guidance or disability services, special schools, special units in schools, or multi-disciplinary teams; education and library boards and other statutory and voluntary settings; voluntary agencies (such as St Michael's House/Brothers of charity), which includes work in schools, the community, with parents, or part of a multi-disciplinary team; private practice, which may involve contract work in schools; and academic institutions.

Educational psychologists in New Zealand are predominantly employed by the NZMOE (Edwards et al., 2007:265; Coleman & Pine, 2010:20; MOE, 2012) and are based in the 16 district offices across New Zealand (MOE, 2013). According to the scholarly literature review conducted by Miller et al. (2008:680), the school environment has a significant influence on the people working at the school. The authors provided data regarding the influence of what they called *positive institution*. The results and data from their literature review lead to suggestions on how to adapt the organisational environment to influence the employees' (educational psychologists') level of job satisfaction, which highlights the need to investigate how the organisational environment can positively influence the professional practice of educational psychologists.

2.3.3 Roles and activities of educational psychologists

Educational psychologists are defined as professionals who are professionally qualified and trained in the field of psychology and education and who work mostly in educational settings to support students, families/whānau, other specialists, and educators. They provide specialist educational psychological services to students who have or who are at risk of having academic, social, emotional, and behavioural problems and challenges in a school setting. Internationally, educational psychologists report variations and similarities in the times to spend on certain activities. The AEP position paper (2008:12) cautioned that the way educational psychologists' services have been structured and delivered to vulnerable children in the past has changed fundamentally. These changes and developments must be reflected in the services educational psychologists deliver to vulnerable children, families, and schools.

The most commonly found roles and activities included in the specialist services of educational psychologists globally will be discussed in the next section to provide an overview of their main responsibilities, which include assessment and evaluation, counselling students, group counselling, providing direct intervention, systems-level services, participating on teams focussed on intervention development for general education, providing primary prevention programmes, consultation cases, conducting training programmes, delivering presentations, delivering in-service programmes, networking, administrative responsibilities, attending meetings, writing reports, and diagnosing students (Watkins, Crosby & Pearson, 2001:64; Farrell, 2010:581-598; MOE, 2012).

2.3.4 Assessment and evaluation

One of the main roles and responsibilities of educational psychologists are to conduct assessments and evaluations (Curtis 2002; Jimerson et al., 2004:269-273; Jimerson et al., 2006:17-19; Brown et al., 2006:492-493; Idsoe, 2006:46-72; Jimerson et al., 2008a:12-17; Costello, 2010:15; Farrell, 2010:581-598; ISPA, 2012; MOE, 2012; Castillo, 2012:1-3; Castillo et al., 2012:5; Merrell, 2012:106-109). The passing of Individual with Disabilities Education Improvement Act, 2004 (IDEA, 2004), No Child Left Behind, 2002 (NCLB, 2002), Response to Intervention (RTI), and the NASP Practice Model (2010) greatly influenced the amount and type of assessment practices. The 2002 Futures Conference participants (an international group of participants) participated in an activity that identified the practice of educational psychologists as one of the areas needing support. They proposed a strategy to ensure the assessment practices of educational psychologists are empirically linked to strategies that will ultimately improve the outcomes for vulnerable children.

According to the ISPA ISPS, psycho-educational evaluations are one of two activities (the other is counselling) on which educational psychologists spend the greatest percentage of their time. The Northern England (30.0 per cent) and Russian (32.0 per cent) educational psychologists' cohorts reported spending the highest percentage of their time doing psycho-educational assessments. Other countries that participated in ISPA ISPS reported the same trend of spending most of their time since 2004 on conducting assessments. Participant from Greece (23.0 per cent), Cyprus (23.0 per cent) (Jimerson et al.,

2004:271), Australia (22.0 per cent), China (23.0 per cent), and Germany (28.0 per cent) (Jimerson et al., 2006:16) as well as educational psychologists from Georgia (23.0 per cent) and Switzerland (29.0 per cent) (Jimerson et al., 2008a:12) testified to the high percentage of time they spend on psycho-educational evaluations. These educational psychologists spend a reasonably similar percentage of their time on conducting assessments and evaluations. Educational psychologists from Albania reported that conducting psycho-educational assessments is the activity on which they spend the second largest percentage of their time.

The Swedish educational psychologists reported the highest percentage (29.0 per cent) of time spent on psycho-educational assessments. Correspondingly, Norwegian educational psychologists reported that the educational psychology services in Norway were mainly focussed on assessments in the past (Idsoe, 2006:46). According to Costello (2010:15), educational psychologists in Ireland are expected to conduct assessments. These assessments can include psychometric assessments, assessments of attainment, and assessments of developmental milestones reached.

The ISPA ISPS (Jimerson et al., 2004:269-273; Jimerson et al., 2006:17-19; Jimerson et al., 2008a:12-17) included a section focussed on the quantity of specific educational psychology responsibilities executed over the period of one month. The results revealed the following data relating to educational psychology assessments and evaluations for participating countries: Cyprus (19), Estonia (19) (Jimerson et al., 2004:270); Germany (39) and Russia (33) (Jimerson et al., 2006:17), and Georgia (33) (Jimerson et al., 2008a:15). These countries revealed that they conducted the highest numbers of psycho-educational assessments per month. Educational psychologists in Germany conduct on average 39 assessments per month, which is the highest reported quantity in the research projects.

Although respondents in Georgia and Estonia reported high numbers of psycho-educational assessments conducted in one month, the reported data is not in accordance with the reported time spent on doing psycho-educational assessments. The high numbers of psycho-educational assessments, reported by German and Russian educational psychologists, correspond with the high percentage of their time they spend on conducting psycho-educational assessments. Albanian (four) educational psychologists reported the

lowest number of psycho-educational assessments conducted in a month. Educational psychologists from the south-eastern United States who were participants in the research study by Brown et al. (2006:488) and who worked in school settings completed 45 or fewer psycho-educational evaluations and attention deficit hyperactive disorder (ADHD) assessments over a period of 12 months.

In their studies, Curtis (2002), Castillo et al. (2012:5), and Castillo (2012:1-3), made a clear distinction between initial special education evaluations and special education re-evaluations. Participants reported an average number of 27.3 initial evaluation and 33.3 re-evaluation activities. A comparison of the results from three studies completed every ten years in 1989-1990, 1999-2000, and 2009-2010 on the number of initial evaluations and re-evaluations completed by educational psychologists in the US revealed a drop in the number of initial evaluations and re-evaluations since the 1989-1999 data.

The decline in the number of initial evaluations and re-evaluations carried out by educational psychologists in the USA does not indicate that educational psychologists spend less time on these activities. American educational psychologists continue to spend 47.4 per cent of their work time conducting initial special education evaluations and re-evaluations according to Castillo et al. (2012:5) and Castillo (2012:6). Edwards et al. (2007:271) recognised that assessments are routinely carried out by educational psychologists in the New Zealand. Educational psychologists do not perform psycho-educational assessments for individuals in isolation. Edwards et al. (2007:271) noted that assessments are only conducted within the context of ongoing work with clients who meet criteria for full service.

2.3.5 Counselling students

Counselling students is a well-documented activity in which educational psychologists engage (Curtis 2002; Jimerson et al., 2004:269-273; Jimerson et al., 2006:17-19; Jimerson et al., 2008a:12-17; Costello, 2010:16; Castillo et al., 2012:4-6; Castillo, 2012:1-6). Counselling is one of the two main activities (the other activity is assessments) reported in the ISPA ISPS by educational psychologists from Georgia (25.0 per cent), Switzerland (16.0 per cent), and the United Arab Emirates (26.0 per cent) (Jimerson et al., 2008:12); Australia (29.0 per cent), China (17.0 per cent), Germany (14.0 per cent), Italy (80.0 per

cent), and Russia (17.0 per cent) (Jimerson et al., 2006:16); and Cyprus (14.0 per cent), Albania (51.0 per cent), Estonia (34.0 per cent), Northern England (14.0 per cent), and Greece (30.0 per cent) (Jimerson et al., 2004:271). Consequently, respondents spend the highest percentage of their time on counselling activities. Albanian educational psychologists reported the greatest amount of time spent counselling students (51.0 per cent), as did Estonian (34.0 per cent) and Greek (30.0 per cent) educational psychologists. The average number of individual counselling sessions reported by Cyprus educational psychologists is 35, which demonstrates that they counsel more students per month compared to the other countries, as depicted in Table 2.2.

Table 2.2. Number of students who received counselling in respective countries (Jimerson et al., 2004:268-270; Jimerson et al., 2006:16-17; Jimerson et al., 2008a:14-15).

COUNTRY	NUMBER OF INDIVIDUAL COUNSELLING SESSIONS
Albania	18
Cyprus	35
Estonia	22
Greece	21
Northern England	20
Australia	29
China	10
Germany	13
Italy	5
Russia	14
Georgia	22
Switzerland	11
United Arab Emirates	15

Australian participants revealed an equally high average number of individual counselling activities in the 2006 ISPA ISPS administered by Jimerson et al. (2006:16). The high average number of individual counselling sessions matches the high percentage of time spent on counselling activities as reported by educational psychologists in Australia. Student-level services and interventions (ISPA, 2012; Castillo et al., 2012:4-6; Castillo, 2012:1-6; Merrell et al., 2012:106-109) are the descriptors used by various international researchers to refer to individual counselling activities.

Castillo et al. (2012:4) and Castillo (2012:1) assessed student-level services in a national study in 2010. This NASP 2009-2010 survey included individual students counselling, which is provided in accordance with the practice domains of the NASP Practice Model. Participants from the United States reported a similar number of average individual counselling sessions (10.4) compared to their counterparts in Switzerland and China. These participants allocated 5.8 per cent of their time to the counselling of individual

students, which is notably lower than the percentage of time spent on this activity by their international colleagues. These low results reflect that 32.3 per cent of the participants do not engage in individual student counselling. The same tendency occurs in Ireland, where counselling is part of the range of activities expected of Irish educational psychologists (Costello, 2010:16; Costello, 2011:16). As in Ireland, student counselling is only provided if the NZMOE educational psychologist finds that the evidence supports it as part of the intervention strategies of an individual client.

2.3.6 Group counselling

Researchers report that educational psychologists also conduct group counselling sessions (Castillo, 2012:1-6; Castillo et al., 2012:4-6). In the longitudinal study by Jimerson et al. (2004), participating countries reported similar average numbers of between one and three group counselling sessions per month. The number of group counselling sessions recorded by educational psychologists in Australia, Germany, and Italy were consistent with previous data of an average of between one and three groups counselling sessions per month. Participants from Georgia and the United Arab Emirates showed analogous data regarding equally high numbers of group counselling activities of eight and six respectively, which parallel the equally high percentages of their time spent in group counselling activities (Jimerson et al., 2008a:16).

Castillo et al. (2012:4) and Castillo (2012:2) reported a different tendency in the United States where the majority of the participating educational psychologists disclosed that they do not make use of student groups in their practices. Student groups may focus on academics, mental health, and behavioural needs. Only 1.4 student groups were reportedly facilitated, 67.2 per cent of the educational psychologists in the USA facilitated no groups that focussed on behavioural needs and concerns, and 80.0 per cent to 90.0 per cent reported conducting no student groups that focussed on either academic or mental health issues. Educational psychologists reportedly conducted 0.5 or fewer student groups to support students with academic or mental health issues.

2.3.7 Providing direct intervention

Educational psychologists internationally engage in direct intervention to a lesser degree compared to the percentage of time spent on psycho-educational evaluations and individual student counselling activities (ISPA, 2012; Castillo et al., 2012:4-6; Castillo, 2012:2; Merrell et al., 2012:106-109). However, some countries continue to allocate a significant amount of their time to providing direct intervention. For example, Russian educational psychologists typically spend 22.0 per cent of their work time on this activity. Participants from Greece and Northern England devote between 16.0 per cent and 18.0 per cent of their time providing direct intervention. A comparable percentage of time is assigned to the development and delivery of intensive direct individual intervention in the USA (Castillo et al., 2012:1; Castillo, 2012:2). The authors found that these educational psychologists spend 16.1 per cent of their work time on developing intensive direct individual interventions and 7.1 per cent of their time delivering these interventions. Brown et al. (2006:293) established that educational psychologists in the south-eastern United States preferred spending their time on direct interventions by using the Wilcoxon test.

2.3.8 System-level-services

A growing international trend calls for educational psychologists to move towards more systemic-level service models (Castillo et al., 2012:4-6; Castillo, 2012:2; Ministry of Education, Educational Psychologist brochure: Working in special education-Psychology in education, 2012:2). The systems-level service model of practice is captured in the current NASP Practice Model (2010) in the USA. Academic, behavioural, and social-emotional learning, preventative and reactive services, and services encouraging family-school collaboration are part of the school-wide practices that are called for. American educational psychologists state that school-wide services account for one-fifth of their work time. In particular, promoting school-wide efficient academic curricula and education account for 12.0 per cent of the work time and promoting school wide social-emotional support account for 10.8 per cent of the work time (Castillo et al., 2012:4; Castillo, 2012:2). The authors presented a summary of their results on student-focussed, group-focussed and system-level focussed practices of educational psychologists who participated in the NASP 2009-2010 survey (see Table 2.3).

Table 2.3. Student-focussed, group-focussed and system-level focussed practices (Castillo et al., 2012:5).

FOCUS	MEAN NUMBER OF CASES	PERCENTAGE REPORTING NO CASES	PERCENTAGE OF TOTAL WORK TIME
Individual students	39.2	4.0	10.44*
Groups	14.7	18.8	
System/Organisational	8.0	24.7	5.84

*The percentage of total time reported for individual and group consultation

2.3.9 Participation on teams focussed on intervention development for general education

Literature reported on educational psychologists' participation on teams focussed on intervention development for general education (Costello, 2010:16; Costello, 2011:16; Castillo et al., 2012:4-6; Castillo, 2012:1-6). Results from the NASP 2009-1010 survey administered by Castillo (2012:2) and Castillo et al., (2012:1) showed that participating American educational psychologists spend up to 8.1 per cent of their work time participating on teams that are focussed on developing intervention strategies for the general education population. These are typically multi-disciplinary teams with representatives from various disciplines, including educational psychologists, school management teams, medical staff, educators, and social welfare workers.

2.3.10 Provision of primary prevention programmes

Data collected from educational psychologists in most countries revealed that a limited portion of their work time is devoted to primary prevention programmes (Jimerson et al., 2004:269-273; Jimerson et al., 2006:17-19; Jimerson et al., 2008a:12-17; Costello, 2010:16; Jimerson et al., 2010:1-6; ISPA, 2012). Consequently, a few primary prevention programmes are conducted during a month: Estonia – 2, Greece – 2, Northern England – 3 (Jimerson et al., 2004:269); Australia – 1, China – 1, Germany – 2, Italy – less than one, and Russia – 3 (Jimerson et al., 2006:16); Switzerland – 1 and the United Arab Emirates – 3 (Jimerson et al., 2008a:14). The highest average numbers of primary prevention programmes are reportedly carried out by educational psychologists in Albania – 6, Cyprus – 5, and Georgia – 5. Interestingly, Georgian educational psychologists are the only group whose data from the percentage of time spent on the mentioned activity aligns with the number of primary prevention programmes conducted monthly.

Data showing inconsistencies between the percentage of time spent and the number of activities completed per month were made known by Greece, Northern England, China, Russia and the United Arab Emirates. Educational psychologists practicing in the United States contribute 9.5 per cent of their time to encourage early intervention practices and 3.7 per cent of their work time to the delivery of early intervention practices. These strategies and services are intended to provide early identification and intervention for at-risk students. Similar intervention programmes are designed and implemented educational psychology in Ireland (Costello, 2010:16). These educational psychologists enable educators to implement interventions to better support the at-risk cohort.

2.3.11 Consultation cases

Consultation is defined as the supply of educational psychology services to students, educators, other educational personnel, governmental departments, parents, families, paraprofessionals, and community groups in a collaborative approach to address challenges by means of indirect service delivery methods (ISPA, 2012). Consultation cases comprise one of the main roles of an educational psychologist (Curtis, 2002; Jimerson et al., 2004:269-273; Jimerson et al., 2006:17-19; Jimerson et al., 2008a:12-17; Jimerson et al., 2010:1-6; Costello, 2010:14; ISPA, 2012; Castillo, 2012:1-6; Castillo, 2012:4-6; Merrell et al., 2012:106-109). The consultation activity can be further unpacked into two more specific activities, that is, consulting with educators and school staff and consultation with parents and families. Data regarding the percentage of the educational psychologists' work time spent on consulting with teachers, school staff, parents, and families were consistent across all the countries that participated in the longitudinal study by the ISPA. The average percentage of time recorded for educational psychologists consulting with educators and school staff ranged from 11.0 per cent to 21.0 per cent. Data provided by educational psychologists who completed the NASP 2009-2010 survey reported spending 16.0 per cent of their time on consultation. This percentage of time falls into the same range as reported by the international cohort (Castillo, 2012:3; Castillo et al., 2012:4-5).

Much lower average percentages relating to work time spent on consulting with parents and families were documented by educational psychologists (Jimerson et al., 2004:269-273; Jimerson et al., 2006:17-19; Jimerson et al., 2008a:12-17). Participants from the

United Arab Emirates and Estonia reported spending on average nine per cent of their time on consulting with parents and families. Greek respondents reported the highest percentage for this activity, stating that they spend 19.0 per cent of their work time in activities relating to consultation with families and parents. Educational psychologist participants recorded in the NASP 2009-2010 survey that more than 96.0 per cent of them conducted student-focussed consultation. They continued to state that they carry out fewer group-focussed consultations compared to student-focussed consultation activities (Castillo, 2012:3; Castillo et al., 2012:4-5).

The number of consultation cases completed by educational psychologists in Albania, Cyprus, Estonia, Greece, Northern England, Australia, China, Germany, Italy, Russia, Georgia, Switzerland, and the United Arab Emirates over the period of one month ranged from four to 20 cases on average per month (Jimerson et al., 2004:269-273; Jimerson et al., 2006:17-19; Jimerson et al., 2008a:12-17). Most countries participating in these studies reported less than ten consultation cases per month on average. The four countries that documented participating in more than ten consultation activities were Cyprus – 20, Northern England – 15, Australia – 18, Estonia – 11, and China – 11. Generally, consultation work is part of the Irish educational psychologists' practice in addition to providing support and guidance to educators to equip them with the necessary skills to provide the appropriate intervention for students who are at-risk (Costello, 2010:14). Irish educational psychologists are required to participate in multi-disciplinary teams to develop Individual Educational Plans (IEP) for students.

2.3.12 Conducting training programmes, delivering presentations and in-service programmes

Conducting training programmes, delivering presentations, and in-service programmes are part of the role and responsibilities of educational psychologists in various parts of the world (Curtis, 2002; Jimerson et al., 2004:269-273; Brown et al., 2006:492-493; Jimerson et al., 2006:17-19; Jimerson et al., 2008a:12-17; Costello, 2010:14; Jimerson et al., 2010:1-6; Costello, 2011:14; Castillo et al., 2012:4-6; Castillo, 2012:1-6). An evenly balanced and relatively consistent picture is observed for the number of training programmes, presentations, and in-service programmes delivered by educational psychologists per month, according to ISPA ISPS data (Jimerson et al., 2004:269-273;

Jimerson et al., 2006:17-19; Jimerson et al., 2008a:12-17). The numbers of training programmes, presentations, and in-service programmes are not high and vary between one and seven activities per month across the 13 participating countries. The numbers of in-service training programmes conducted by educational psychologists in the USA correspond with the aforementioned numbers of between one and seven (Castillo, 2012:2; Castillo et al., 2012:4-5). American educational psychologists conduct on average three in-service programmes. This mean number accounted for 18.0 per cent of participants who reported doing five or more in-service courses and 29.7 per cent who replied that they conducted no in-service training programmes. Educational psychologists in Estonia reported conducting the most training programmes, presentations, and in-service programmes per month, namely seven (Jimerson et al., 2004:269-273; Jimerson et al., 2006:17-19; Jimerson et al., 2008a:12-17).

All other educational psychologists participating in the longitudinal study reported delivering five training programs, presentations and in-service programmes for the most part. The percentage of work time spend on delivering training programmes, presentations, and in-service programmes correlate predominantly with these numbers, ranging from a low of four per cent reported by Estonia to the highest percentage of work time provided by Northern England with 20.0 per cent. American educational psychologists reported in the NASP 2009-2010 survey that they spend 2.8 per cent of their work time conducting in-service programmes. The researchers reported that the low percentage of time spent on delivering in-service programmes show that educational psychologists do not regularly engage in these valuable opportunities to provide much needed training for other education personnel (Castillo, 2012:2; Castillo et al., 2012:4-5).

Similar low levels of engagement are reported by American educational psychologists for providing presentations to parents. Participants reported delivering an average of 0.8 presentations to parents, with no more than 4.3 per cent of the participants declaring they conducted five or more parent presentations and with 69.4 per cent stating they delivered none. Accordingly, educational psychologists spent only 0.8 per cent of their work time on presenting to parents. Delivering in-service programmes with groups of teachers occur regularly in the field of educational psychology in Ireland (Costello, 2010:14). Costello (2010:14) stated that Irish educational psychologists support educators and other

education personnel at schools to develop policies relating to anti-bullying, critical incident management, and behaviour management programmes.

2.3.13 Networking

The Wilcoxon test results reveal data that indicated significant x scores for participating educational psychologists (Brown et al., 2006:492-493). These results are a sign of the preference of educational psychologists in the south-eastern USA to network more, according to Brown et al. (2002:493). Thus, these educational psychologists prefer to spend a significant amount of time networking with other agencies.

2.3.14 Administrative responsibilities

Jimerson et al. (2004:269-273) and Brown et al. (2006:492-493) reported that educational psychologists engage in administrative activities on a regular basis. Even though all participants in the ISPS reported spending a percentage of their time carrying out administrative activities, Cyprus had the highest percentage of their time recorded for administrative responsibilities in comparison to other participating countries. The educational psychologists from Northern England reported that administrative responsibilities are one of the two activities that consume most of their time (the other activity is psycho-educational assessments). Administrative activities account for 27.0 per cent of Northern England's educational psychologists' work time. A relatively low and realistic percentage of time ranging from four per cent to 15.0 per cent is consumed by administrative responsibilities according to educational psychologists practicing in Albania (10.0 per cent), Estonia (4.0 per cent), and Greece (9.0 per cent) (Jimerson et al., 2004:269); Australia (15.0 per cent), China (13.0 per cent), Germany (11.0 per cent), and Russia (10.0 per cent) (Jimerson et al., 2006:16); and Georgia (8.0 per cent), Switzerland (5 per cent), and the United Arab Emirates (7.0 per cent) (Jimerson et al., 2008a:14).

2.3.15 Meetings

Educational psychologists meet regularly with clients (children), parents, educators, and other professions in conducting their work. Curtis (2002) and Brown et al. (2006:492-493) reported that educational psychologists spend a significant amount of their work time

attending meetings. Meetings form an integral part of educational psychologists' practice and provide the platform for openness, transparency, and collaboration.

2.3.16 Report writing

Report writing is a commonly accepted activity conducted by educational psychologists internationally (Curtis, 2002; Idsoe, 2006:46-72). Historically, writing reports was one of the main activities conducted by educational psychologists employed by the Norwegian School Psychology Services (Idsoe, 2006:46). Curtis (2002) concurred in his address that American educational psychologists also spend a great deal of their work time writing reports. *Section 504 plans* (Curtis, 2002; Castillo, 2012:1-6; Castillo, et al., 2012:4-6; <http://www.hhs.gov/ocr/civilrights/resources/factsheets/504.pdf>, cited on 12/11/12) are specific reports that are written. The US Department of Health and Human Services describes section 504 of the Rehabilitation Act and the Americans with Disabilities Act in the fact sheet as (HHS, 2012):

Section 504 of the Rehabilitation Act of 1973 is a national law that protects qualified individuals from discrimination based on their disability. The non-discrimination requirements of the law apply to employers and organizations that receive financial assistance from any Federal department or agency, including the U.S. Department of Health and Human Services (DHHS). These organizations and employers include many hospitals, nursing homes, mental health centres and human service programs.

Section 504 forbids organizations and employers from excluding or denying individuals with disabilities an equal opportunity to receive program benefits and services. It defines the rights of individuals with disabilities to participate in, and have access to, program benefits and services.

The introduction of section 504 plans influenced the practice of educational psychologists in the USA. These educational psychologists reported to assist in developing an average of 6.6 section 504 plans. A low percentage of their time (2.8 per cent) is dedicated to this activity according to the NASP 2009-2010 survey (Castillo et al., 2012:5; Castillo, 2012:5).

2.3.17 Diagnosis

Educational psychologists around the world spend some percentage of their time on the diagnosis of various disorders of at-risk students (ISPA, 2012). The ISPA provides an informative description of the educational psychologists' main goal in assessing students as:

... to accurately describe intellectual, academic, affective, social, personality, temperament, adaptive, language, psychomotor, vocational, and neuropsychological development and status as well as values. Other important goals of assessment are to assist in determining the etiology of disorders, in planning and evaluating interventions, and in preventing the onset of disabling conditions.

2.3.18 Summary

In conclusion, data from the ISPA about educational psychologists' roles globally point to the following trends around the world (ISPA, 2012):

- Educational psychologists provide individual counselling to between zero and 120 students monthly.
- Educational psychologists provide guidance for, on average, between zero and 200 students in groups counselling (one country reported significantly higher numbers of group counselling activities for 400 to 500 students).
- Educational psychologists provide on average one to six formal programmes and presentations to staff and parents, with one country reported to deliver 16 per month.
- Educational psychologists provide, on average, between one to 12 preventative programmes monthly.
- Educational psychologists from 33 countries reported that they spend some percentage of their work time on consultation activities. Whereas two countries reported that they do not engage in consultation activities with parents and families, most other countries spend, on average, five to ten per cent of their work time on consultation activities.

- Nine countries revealed that they do not spend any amount of their time on research or professional writing activities. The highest percentage of time spent on research and professional writing activities was 20.0 per cent.

The roles and responsibilities assigned to NZ based educational psychologists are comparable to the roles and responsibilities in other countries but also show some distinct differences. The range of services that these NZ educational psychologists provide has not changed significantly since Edwards et al. (2007:271) proclaimed that educational psychologists employed by NZMOE provide services that mainly fall into three areas that include individual services, system-level interventions, and third party contracts.

2.4 TRAINING AND PROFESSIONAL REGULATION OF EDUCATIONAL PSYCHOLOGISTS

2.4.1 Introduction

The training and professional regulation of educational psychologists are not directly related to the study of the influence of managerial leadership on the professional performance of educational psychologists but still contribute to our background knowledge. Knowledge regarding the training programmes and qualification levels and types can lead to a more comprehensive understanding of educational psychologists' capabilities and background. Data can provide insights into the interface between the educational psychological field and the management field. In addition, perspectives and insights into appropriate management strategies can be developed that align with the educational psychologists' needs.

2.4.2 Training and preparation programmes for educational psychologists

In the study of the prevalence and characteristics of educational psychology preparation programmes around the world, Jimerson et al. (2010:1-6) administered the School Psychology International Survey (ISPA) in 2008 in 48 countries. The following participating countries had educational psychology programmes: Austria, Belize, Brazil, Canada, Canary Islands, Colombia, Croatia, Cyprus, the Czech Republic, Denmark, England, Finland, France, Germany, Grazina, Greece, Grenada, Hong Kong, Hungary, Iceland,

India, Ireland, Jamaica, Lebanon, Malta, the Netherlands, New Zealand, Norway, Pakistan, Portugal, Puerto Rico, Romania, Scotland, Seychelles, the Slovak Republic, South Africa, Suriname, Switzerland, Turkey, the United States, Venezuela, Vietnam, and Zimbabwe.

Countries that reported, in the mentioned study, they did not have school psychology professional preparation programmes included Belgium, Estonia, Indonesia, Trinidad and Tobago, and the United Arab Emirates. Additionally, another study by Jimerson et al. (2010b:137) reported the following countries to also have university programmes that prepare educational psychologists or provide doctoral-level qualifications: Albania, Algeria, Andorra, Argentina, Australia, Belgium, Botswana, Chile, China, Costa Rica, Cuba, Dominican Republic, Ecuador, Egypt, Eritrea, Estonia, Iran, Israel, Italy, Japan, Jordan, Lithuania, Mexico, Namibia, Nigeria, Peru, the Philippines, Russia, Saudi Arabia, South Korea, Spain, Sweden, Tanzania, Thailand, Ukraine, and Scotland. The second study by Jimerson et al. (2010b:137) reported that university programmes that prepare educational psychologists exist in Belgium and Estonia. The data differ from data obtained from Jimerson et al. (2010a:4). Of the 48 participating countries in the latter mentioned research, half of them reported six levels of training that existed in each of the countries as summed up in Table 2.4 by Jimerson et al. (2010:5).

Table 2.4. Qualification levels (Jimerson et al., 2010:5).

LEVEL OF TRAINING	PERCENTAGE OF COUNTRIES WITH AT LEAST ONE PROGRAMME AVAILABLE	RANGE NUMBER OF PROGRAMMES FOR ALL COUNTRIES
Three-year Bachelor	20.0	1-95
Four-years Bachelor	14.0	1-95
Bachelor's with one-year specialisation	16.0	1-180
Master	55.0	1-200
Specialist	27.0	1-210
Doctoral	20.0	1-102

These educational psychology training programmes are offered at public universities (n=33), private universities (n=12), professional schools (n=3), or other institutions (n=3) as depicted in Table 2.5 by Jimerson et al. (2010:5).

Table 2.5. Training programme providers (Jimerson et al., 2010:5).

LOCATION	NUMBER OF COUNTRIES WITH PROGRAMMES				
	0%	1-25%	26-50%	51-75%	76-100%
Public University	15	2	2	5	24
Private University	36	7	3	0	2
Professional School	45	1	1	0	1
Other Institution	45	0	0	0	3
Institution with two or more programmes	18	3	4	3	20

Croatia, Hungary, and Cyprus offer all the professional training programmes for educational psychologists at public universities in contrast to the practices in Denmark, where all programmes are offered at private universities. Lebanon, Jamaica, and Belize offer all their educational psychology training programmes at other institutions of learning. Furthermore, the data revealed that most countries offered professional educational psychology training courses at several locations, namely public universities, private universities, and professional schools. Therefore, an assortment of educational psychology training options and preparation programmes are available around the world. The training options and courses for educational psychology that are offered in each country are unique to each individual country.

A first degree in psychology followed by a subsequent doctorate degree in educational psychology is the prerequisite for entry into the field of educational psychology in the United Kingdom (UK) (AEP, 2008:5; Soulbury Report, 2010:4). Individuals in the UK who are interested in entering the educational psychology domain are also required to have prior experience working with children before they are allowed to begin their applied psychology training. Six years of training are required to fully qualify as an educational psychologist. Merrell et al. (2012:98) noted that after an educational psychologist completes graduate school, they must complete a specialist level degree – an EdS degree, MA degree, MS degree, or Med degree that consists of 60 credit hours, and a doctoral degree in school psychology, to enter the field of educational psychology. All prospective educational psychologists are required to complete a full internship during the final stage of postgraduate studies in the USA.

Similar training options are available in Ireland – an MA in Educational Psychology (two-year course), Doctorate in Education, Child, and Adolescent Psychology, and a PhD for existing practitioners (Costello, 2010:5). The author outlined the path for potential candidates to enter the field of educational psychology: first, obtaining a primary degree in psychology, followed by a post-graduate qualification in educational psychology. Prior experience in teaching, working with young people in an educational setting, and working with learners with special educational needs could be advantageous when applying for a place on a course but is not a precondition in Ireland. A doctorate in Educational, Child, and Adolescent Psychology is offered in Ireland and was approved in September 2006 by the British Psychological Society for the training of educational psychologists. The

doctorate in Educational, Child, and Adolescent Psychology course replaces the MSc in Developmental and Educational Psychology.

Dawson et al. (2004:118) highlight the need to keep training programmes current when they state:

School psychologists are the best-trained professionals working in schools today. However, the 2002 Futures Conference made clear that the practice of school psychology needs to change to meet the needs of today's world. Both the content and the methodology of training must support these changes, using technology, for instance, to reach people where they live and work...

The Australian Psychological Society (APS) clearly illustrates their pathway for obtaining registration as a psychologist in Australia in Figure 2.6 (APS, 2015).

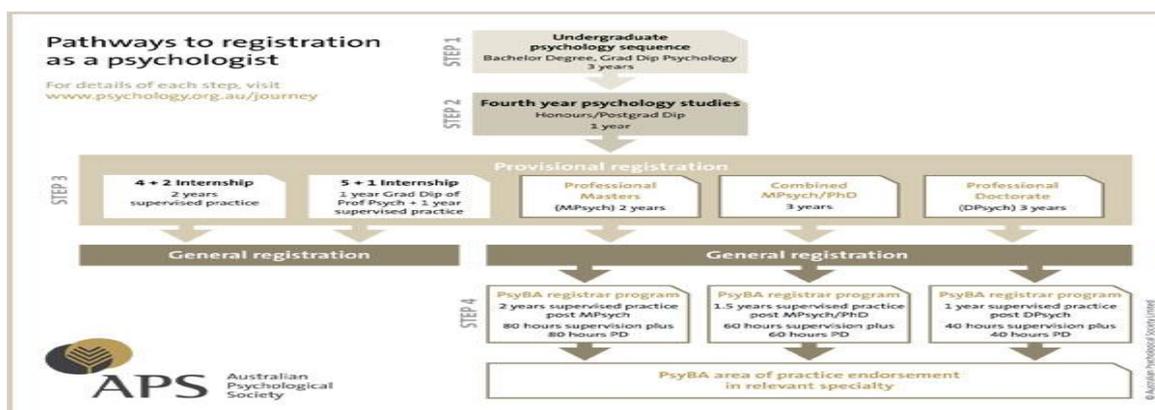


Figure 2.6. Registration pathway (APS, 2015).

All psychologists are trained in the general scope of practice and are required to complete a Masters degree in Psychology in the general scope of practice at an accredited educational provider as a minimal requirement in New Zealand (Edwards et al., 2007:266). Additionally, the NZPB – *Te Poari Kaimātai Hinengaro o Aotearoa* requires an approved practicum or internship of 1,500 hours of supervised practice to qualify for registration as a Psychologist in the general scope of practice (Edwards et al., 2007:266; NZPB, 2012:12) - master's degree of Psychology (general scope of practice), followed by an accredited Postgraduate Diploma in Educational Psychology (or equivalent qualification) – Post Graduate Diploma in Educational Psychology (PGDipEdPsych). Similarly, Maister (2003:155-157) concurred on the importance of completing internships in professional

service organisations. It was suggested that professional internships provide professionals with an indispensable opportunity to learn the art of their profession. Maister (2003:156) stated that professional service organisations must ensure that they have efficient and robust internship processes.

The course of study for the Post Graduate Diploma in Educational Psychology is offered at two universities in New Zealand: Massey University, which is accredited and Victoria University of Wellington, which is provisionally accredited according to NZPB – *Te Poari Kaimātai Hinengaro o Aotearoa* Annual report to the Minister of Health (2012:12-14). Prior classroom experience is not a requirement to enter into study in the field of educational psychology in New Zealand. Edwards et al. (2007:268) stated that students must have completed an undergraduate degree that consists of foundation courses in both education and psychology. The authors also stipulated that some students may be approved for the Massey University's Educational Psychology training programme if they have completed some or all requirements for a master's degree in education or psychology.

2.4.3 National certification and licensure

Educational psychologist not only must complete their graduate degree or certificate in an educational psychology course followed by an internship, they must also secure the appropriate licensure, certification, and credentialing. State education agencies, or similar state agencies with the appropriate statutory authority, regulate and establish credentialing requirements for the professional practice of educational psychologist internationally. These regulations oblige educational psychologists to be licensed, registered, or credentialed before they can practice in the field of educational psychology. The process of obtaining the required licences is described by Merrell et al. (2012:92):

However, in many cases, the process is more complex and in some instances downright intimidating. A more lengthy application process, a rigorous transcript evaluation, a challenging written exam, and in some cases an oral exam with licensing board members may all be required.

Not all educational psychologists are required to register, have a licence, or be credentialed in all countries around the world. Jimerson et al. (2010b:138) stated that: *In some countries, registration or qualifications are voluntary, thus, there is considerable*

variation in the quality and preparation of professionals providing in such countries. Countries that have regulations or laws requiring school psychologists to be licensed, registered, or credentialed include Australia, Austria, Brazil, Canada, Cyprus, Ecuador, Estonia, Finland, France, Germany, Greece, Hungary, Israel, Japan, Lithuania, Luxembourg, New Zealand, Romania, Slovakia, South Africa, South Korea, Spain, Sweden, Syria, Scotland, the United States, Venezuela, and Zimbabwe (Jimerson et al., 2010b:137). Educational psychologists who completed the modified version of the 1977 Long Form of the Minnesota Satisfaction Questionnaire (MSQ) in the school psychologists job satisfaction study by Worrell et al. (2006:134-136) in the USA reported that 53.0 per cent of them were certified as National Certified School Psychologists and 38.0 per cent were licensed as educational psychologists.

In the study regarding role function and job satisfaction of school psychologists practicing in an expanded role model, Brown et al. (2006:287-488) surveyed educational psychologists in the south-eastern USA. The entire cohort of educational psychologists reported that they are licensed as educational psychologists. Certification in other disciplines, namely, school counselling, social work, and teaching, was reported by 32 of the 74 participants. The AEP position paper of 2008: The management of educational psychology services and the role of principal educational psychologist clearly outlined the requirements in the United Kingdom in the following phrase:

The government has understood the intense nature of work of educational psychology and the need to ensure the public is protected from unqualified “practitioners” by placing educational and other applied psychologist high on its priority list for statutory regulation. Statutory regulation not only ensures that all those working as educational psychologists will be properly and professionally qualified, but that they continue to demonstrate their fitness to practice through, among other things, continuing professional development.

Merrell et al. (2012:118) claimed that similar legal and ethical statutes guide the practice of educational psychologists in the United States. The authors described the general credential processes for educational psychologists in the United States: the state Department of Education certification and licensure, national certified school psychologist credential, state board of examiners in psychology license, and speciality credentials.

The NZPB – *Te Poari Kaimātai Hinengaro o Aotearoa* is held accountable by the Health Practitioners Competence Assurance Act 2003 (HPCAA) to lay down the qualifications that are required for each of the scopes of practice within the field of psychology (HPCAA, 2003, Edwards et al., 2007:266; NZPB, 2012). Additionally, the NZPB – *Te Poari Kaimātai Hinengaro o Aotearoa* is also responsible for the accrediting and monitoring the education providers and courses of study in New Zealand (*Aotearoa*) (NZPB, 2012:12-13). The New Zealand Psychologists Board - *Te Poari Kaimātai Hinengaro o Aotearoa* is the regulatory authority appointed under the Health Practitioners Competence Assurance Act 2003 (HPCA Act, 2003) with regard to the profession of psychology (NZPB, 2012). The accreditation process is conducted in a collaborative effort between the NZPB – *Te Poari Kaimātai Hinengaro o Aotearoa*, appropriate university department heads, the New Zealand College of Clinical Psychologists, and the New Zealand Psychological Society, which culminates in a comprehensive set of standards and processes for accrediting of qualifications that will ensure the registration of a psychologist. Careful consideration is always given to align the training and practice of psychologists in New Zealand with the ideals and worldviews of the partners to the Treaty of Waitangi (*te Tiriti o Waitangi*).

All psychologists who seek to practice in New Zealand must register with the New Zealand Psychologists Board - *Te Poari Kaimātai Hinengaro o Aotearoa* and must have a current practising certificate. NZPB - *Te Poari Kaimātai Hinengaro o Aotearoa* allows psychologists to gain practising certificates under different scopes of practice, namely Psychologist (Psychologist within a general scope), Trainee or Intern Psychologists, Clinical Psychologists, Counselling Psychologist, and Educational Psychologist (Edwards et al., 2007:266; NZPB, 2012:12-16). Register Psychologists, practising in any scope of psychology, are required to adhere to the registration and current practising certification prescribed under the HPCA Act by the NZPB - *Te Poari Kaimātai Hinengaro o Aotearoa* (NZPB, 2012:12-16). The NZPB - *Te Poari Kaimātai Hinengaro o Aotearoa* set up these vocational scopes to ensure public protection and safety. Consequently, psychologists are free to practice in any of the vocational scopes that can easily be recognised by the public as specialist fields of training in clinical psychology, educational psychology, and counselling psychology. The NZPB must ensure that a practitioner is proficient to practice in New Zealand before registration.

Furthermore, an annual practicing certificate (APC) must be issued to practitioners who maintain the prescribed standard of competence. All active practicing psychologists must renew their APC annually. Practitioners are required to declare their ongoing active participation in the Continuing Competence Programme (CCP). The CCP objectives provide a framework to assist individual practitioners to address the ongoing challenge of monitoring and maintaining competence, while also giving the Board a mechanism to check that individual practitioners are meeting their professional obligations to actively engage in doing so (NZPB, *The Continuing Competence Programme for Psychologists Practicing in Aotearoa New Zealand: A Guide for Participants*, 2012:1-20).

1.14 SUMMARY

The purpose of this chapter was to present data obtained from a rigorous literature review that pertains to the two main concepts in this study – management practices and educational psychologists. Firstly, detailed background data were presented to elucidate the demographic characteristics of educational psychologists, define their main roles and responsibilities, and explore the training and professional regulation of educational psychologists across the world. The professional practice of educational psychologists proved to be complex. The layers of interrelated complexities were presented in an attempt to provide a deeper understanding of these professionals, their qualification levels, the realms of their specialist knowledge, where they practice, and what their roles and responsibilities entail. A large body of research provided rich and precise descriptions of the field of educational psychology.

The outcomes from the literature review indicate that the educational psychologist cohort is a dynamic group of specialists who have experience in both the education and psychology fields and hold high levels of qualification. The majority of educational psychologists have prior classroom experience before they begin to practice as educational psychologists. They have a range of roles and responsibilities that they carry out in accordance with various regulatory bodies. Only a small number of educational psychologists enter into private practice.

CHAPTER 3

MANAGEMENT OF EDUCATIONAL PSYCHOLOGISTS: A SCHOLARLY LITERATURE REVIEW

3.1 INTRODUCTION

Chapter 2 provided background information on the field of educational psychology to the current study. An extensive scholarly literature search was carried out regarding the field of educational psychology in general. This was necessary to facilitate enhanced understanding. It was believed that it is appropriate to study data that included general aspects regarding the fields of management and educational psychology. Consequently, Chapter 2 followed a line of investigation on the current literature pertaining to the demographic characteristics of educational psychologists, their main roles, purposes, and responsibilities of educational psychologists, and the professional regulation of educational psychologists. The exploration and analysis of scholarly literature on the above-mentioned topics shaped the researcher's understanding.

Chapter 3 expands on the scholarly literature review started in Chapter 2, with a focus that shifts more specifically towards management of professional organisations and managerial leadership of educational psychologists. This chapter reviews, summarises and presents data relating to managerial leadership, management of professional service organisations, and the influence of managerial leadership on the professional performance of educational psychologists. The lack of data relating to the biographic characteristics of managers of educational psychologists was obvious. The researcher aims to elucidate, understand, and draw parallels between the data in the literature regarding the management of professional service organisations and the influence of managerial leadership on the professional performance of educational psychologists. Specifically, relating to the management of service delivery models, management appointments, workload management, engagement in clinical supervision, coaching and mentoring practices, and organisational management structures. Chapter 3 also investigates the consequences of ineffective managerial leadership for the professional performance of educational psychologists.

3.2 MANAGEMENT OF PROFESSIONALS

3.2.1 Introduction

The exploration of the body of scholarly literature in the fields of managerial leadership and educational psychology generated insufficient contemporary, empirical, or scientific data. Cited data were deemed inadequate in terms of providing clarity or affording promising rationalisation for the research questions. The cited research topics included the following themes: role function; job satisfaction; supervision; professional satisfaction and fulfilment; professional practices; training; professional development; intervention; assessment models; demographic characteristics; educational psychologist shortages; training models; employment conditions; best practice; concerns and challenges, management, leadership, organisational leadership, management practice, and management of professional service organisations (Stewart, 1988:1-166; Covey, 1990:1-360; Covey, 1991:1-335; Drucker, 1993:v-xii, 1-404; Kotter, 1999:1-184; Curtis, 2002; Smit & Cronje, 2002:v-xii, 1-514; Maister, 2003:v-xvi, 1-376; Jimerson et al., 2004:259-286; Cole, 2004:v-xvii, 1-481; Bratton, Grint & Nelson, 2005:v-xix, 1-361; Drucker, 2005:vii-xix, 1-235; McKenna & Maister, 2005:xv-xxvii, 1-290; Hardison, Bolen & Walcott, 2006:486-496; Chair, Burns, Dawson, Kelley, Morrison, Ortiz, Rosenfield & Telzrow, 2006:1-32; Idsoe, 2006:46-72; Jimerson et al., 2006:5-32; Thielking, Moore & Jimerson, 2006:405-414; VanVoorhis & Levinson, 2006:77-90; Worrell et al., 2006:131-145; Brown, Hardison, Bolen & Walcott, 2007:47-57; Edwards et al., 2007:263-274; Bass, 2008:v-xix, 1-1516; Jimerson et al., 2008a:5-28; Jimerson et al., 2008b:1-23; Miller, Nickerson, Chafouleas & Osborne, 2008:679-692; Jimerson, et al., 2010:1-6; Castillo, Curtis & Gelley, 2010:4-6; Costello, 2010:1-16; Costello, 2011:1-16; Broderick, 2011:xi-xiii, 1-250; Kaiser & Ringlsetter, 2011:vii; Mintzberg, 2011:ix-xii, 1-306; Castillo, 2012:1-6; Bartolo, 2012:3; Curtis, 2012:1-6; Curtis, Castillo & Gelley, 2012:1, 28-30; Merrell et al., 2012:1-380; Smith, 2012:1-3; Fayol, 2013:110; Northouse, 2013:xiii-xviii, 1-485; Tengblad, 2013:xi-xviii, 1-365; Yukl, 2013:1-448).

The limited number of published works and academic studies, available on the topic of the influence of managerial leadership on educational psychologists' professional performance over the past five years, necessitated the inclusion of literature produced in earlier years. Literature from the field of management of professional service organisations was

discovered by the researcher during the study of the body of academic works. These academic works were scrutinised and included in an attempt to find relevant data. This extended literature study yielded valuable data from the field of management of professional service organisations (Maister, 1993:xi-xiii, 1-250; Maister, 2003:3-376; McKenna & Maister, 2005:xv-xxvii, 1-290; Lowendahl, 2008:20; Kaiser & Ringlstetter, 2011:i-xvii, 1-208; Broderick, 2011:1-297; Fullerton, 2015). The researcher is of the opinion that it is essential to amalgamate data from the fields of management and leadership, educational psychology, and management of professional service organisations. Including data from these fields will help provide more comprehensive insight into the topic under investigation. Strong relationships with the influence of managerial leadership on the professional performance of educational psychologists were discovered. Connections to the research questions emerged from all three before mentioned fields.

McKenna and Maister (2005:xxii) hypothesised that managers are challenged when they are tasked with providing managerial leadership for staff who hold extensive academic qualifications. This view is also strongly supported by Broderick (2011:9), who suggested that highly qualified people prefer to be influenced instead of managed (McKenna & Maister, 2005:xxii; Broderick, 2011:9). Broderick (2011:239) found that professionals preferred to practice independently and in a flexible environment in which the organisational structure and management model supports their autonomy. Maister (2003:207-208, 291) concurred that professionals are well qualified people who prefer to work independently and be self-directed in their professional practice, but did recognise the positive impact that managerial leadership has on their professional performance. Skilled managers are able to provide guidance, direction, and positively influence the skills, talents, and performance of professionals. Similarly, McKenna and Maister (2005:xx) stated that professionals are known for being strongly opposed to being managed because they believe they are knowledgeable, sceptical, and discerning.

Maister (2003:168-169, 219, 291) raised the same issue while discussing the matter of management of professionals. Specifically, he asked: *Do they (professionals) need to be managed (and motivated) in special ways?* He affirmed that, based on his extensive experience, it was the case that a typical professional who chose a professional career, functions differently than other workers due to their psyche (Maister, 2003:168).

Many organisations bought into this notion that professionals cannot be managed due to the challenges they encountered when managing these professionals, as indicated by McKenna and Maister (2005:xxii). As a result, organisations relinquish the task and turn their efforts to administrative matters instead of providing managerial leadership for professionals. Maister (2003:291) referred to this as the unmanageability of professionals, which is generally observed in professional service organisations (law, medical, architecture) and caused by some powerful influence of professional role. Maister (2003:291) introduced an appealing argument that elucidates the unmanageability of professionals, specifically, that professionals are known for being experts in their fields. Professionals construct an environment of supremacy (omnipotence) and the idea that they have unlimited knowledge (omniscience), which appear in all areas of their professional conduct. Maister (2003a:291) stated that this aura of superiority and dexterity leads professionals to believe that they are capable of managing themselves. As a consequence, some professionals are of the opinion that they are the only ones who know how to provide managerial leadership for the professional service organisation and insist on being part of all decision making activities. McKenna and Maister (2005:xxii) advised that the results of providing managerial leadership for professionals far outweighs the challenges it poses to managerial leadership practices. Drucker (1993:330) alerted to the fact that he had been confronted with organisations' concern of how to properly organise these professionals. He reflected on the article he wrote, *Management and the professional employee*, in the Harvard Business Review, in May-June, 1952. This article was his attempt to afford possible explanations for organisations and individuals to their repeated questions: *How can we manage the professional specialist?*

3.2.2 Management of organisational structures and service delivery models

Drucker (1993:193-194) revealed the importance of the organisational structure for managers early on. He affirmed that the organisational structure is an essential means that directly influences organisational performance. Maister (2002:3-6) explained that an organisational structure is based on a couple of levers, namely the expertise essential for its business, and the composition of the different levels of tasks of the core business. Designing and implementing an incorrect organisational structure can have detrimental effects on organisational performance and eventually lead to its destruction. An important link exists between professionals and the design of the organisation structure (Kaiser &

Ringlsetter, 2011:7-8). The author proposed three activities, which should be carried out meticulously, to determine the most ideal organisational structure to ensure organisational success, namely: activities analysis, decision analysis, and relations analysis (Drucker, 1993:193-201). Cole (2004:184) stated that the study of organisational structure is an emerging but important field that was of great interest to Weber and Mintzberg's theories. Broderick (2011:237-263) agreed with the other researchers on the significance of organisational structure (design, style, and governance) and management model in professional service organisations and defined it as the internal architecture of an organisation. Organisational structures not only maintain the organisation's day-to-day business but also sustain its strategic direction and implementation (Broderick, 2011:237). Broderick (2011:237-238) argued that the organisational success and the performance and practice quality of professionals may be directly influenced by the design of an organisation.

Furthermore, Broderick (2011:239) stated that professional service organisations require organisational structures, similar to those of traditional corporate businesses, to enable them to provide valuable support and guidance to professionals and to manage service delivery efficiently. Variations in size, culture, range of professional practices, and geographical span directly influence and determine the structure of a professional service organisation. Lean organisational structures that minimise hierarchical practices and bureaucracy are preferred by the high-performing organisations that participated in the research conducted by Broderick (2011:244). Various studies have acknowledged that a diverse range of organisational structures exist across different sectors, but that a general classification can be made based on the professional pyramid (Maister, 2003:3-6; Broderick, 2011:237-238; Kaiser & Ringlsetter, 2011:8). The professional pyramid can show a vertical or horizontal structure (Kaiser & Ringlsetter, 2011:8-9). The vertical structure has three levels, usually based on the seniority of professionals, whereas the horizontal structure is fundamentally based on professionals' skill set and/or specialisation field (Kaiser & Ringlsetter, 2011:8-9). Thus, the horizontal structure enables professional service organisations to meet the client demands more efficiently and allows for flexibility in a changing market place (Maister, 2003:4).

Additionally, organisational levels and management structures are demarcated by an organisational structure, whereas governance refers to the leadership style and the systems, processes and guidelines of an organisation. Data from Broderick's (2011:238) study implied that organisational structure and management model was not a topic of great interest for participants.

The challenge for professional service organisation managers is to operate in an organisational model that balances professional autonomy and bureaucracy, which leads to professional creativeness in a secure and balanced environment. Again, it has been documented that there is no suitable unique strategy to developing a professional service organisational structure (Broderick, 2011:239). Organisational structures evolve over time in response to organisational changes and development, but it is essential to manage the organisational structure lever (Broderick, 2011:239). To provide managers of professional service organisations with some support and guidance, Broderick documented the seven characteristics that participants in her study reported as the essential features in developing an effective organisational structure:

- Promote a one-firm culture.
- Transparent and collaborative decision making.
- Provide professionals with leadership training to prepare them for management and leadership roles.
- Utilise professional non-billable teams.
- Strong focus on procedure competence.
- Clear understanding of roles and responsibilities, regulations and procedures.
- Flexible organisational structure and management model.

Finally, Kaiser and Ringlstetter (2011:7, 10-11) discussed the significance of management of the organisation culture. The authors suggested that the main focus for professional service organisation managers should be the management and optimal deployment of professionals in accordance with organisational objectives (Kaiser & Ringlstetter, 2011:6-7, 90). Managers are obligated to focus on three key strategies to ensure the performance of professionals aligns with organisational intent. These strategies are: organisational culture development, organisational structure, and management of professionals (Broderick, 2011:10-12). The impact of the professional service organisation's culture on

professionals is greater than the impact of the professional's job description or organisation rules. The management of the motivation, co-ordination, and incorporation of professionals in an organisation is strongly influenced by a robustly cultivated organisational culture (Kaiser & Ringlstetter, 2011:11). Various researchers have used the one-firm theory to describe the culture that is characteristic of professional service firms (Maister, 2003:303-304; Broderick, 2011:240; Kaiser & Ringlstetter, 2011:11). These authors concurred that the one-firm concept positively influenced various organisations and depicts the following cultural features:

- *A highly developed, sometimes cult-like, institutional loyalty.*
- *Prevention of a general star mentality, which underlines the sole performance of an individual.*
- *High importance of team work and solidarity.*
- *Long work hours and high performance requirements.*
- *Acknowledgement of a mission, which prioritises client concerns.*

3.2.3 Management appointments

The importance of managerial leadership in professional service organisations has been well documented in earlier sections. McKenna and Maister (2005:xxiii) focussed on the fact that most management books are targeted at a corporate audience and neglect professional services organisations. Corporate settings usually have a leader in a position of power, whereas such positions are less common in professional service organisations. Broderick (2011:239) concurred and referred to management in corporate environments as command-and-control environments characterised by hierarchical decision making. Whereas professional service organisations utilise an array of management styles, ranging from monarch-like dictatorial to completely collaborative decision making (Broderick, 2011:259-260). Maister (2003:289-290) suggested that the aristocratic and democratic models have historically appeared to be in conflict, as neither model provides a sustainable and equitable management style. Sound managerial leadership characterised by strongly defined leadership proficiency can be provided under the aristocratic model while collaborative and equal say can be facilitated under a democratic model (Maister, 2003:289-290). No model can, by itself, withstand the challenges of managing professional services and the dilemma between professionals' preference for autonomy but need for managerial leadership.

Maister (2003:289-290) asked: *How can a democracy handle the twin problems of the tyranny of the majority and the obstructionism of the minority?* Professional service organisation management teams are challenged to re-evaluate their view of contemporary democracy and move towards putting a consensus democracy model into practice. The management styles described by Broderick (2011:259-260) are concisely illustrated in Figure 3.1. Data obtained from participants working in professional service organisations confirmed that only 10.0 per cent reported a dictatorship style: 32.0 per cent reported a consensus-driven enterprise and more than half (58.0 per cent) reported that they combine both styles. This indicates that the majority of professional service organisation management plot a course between collaborative consensus and dictatorial decisions. The size of professional service organisations influences their ability to operate in any one of these management styles. Smaller organisations tend to more easily adopt the collaborative consensus model, while large organisation can find it challenging if not impossible to facilitate agreement (Broderick, 2011:260).

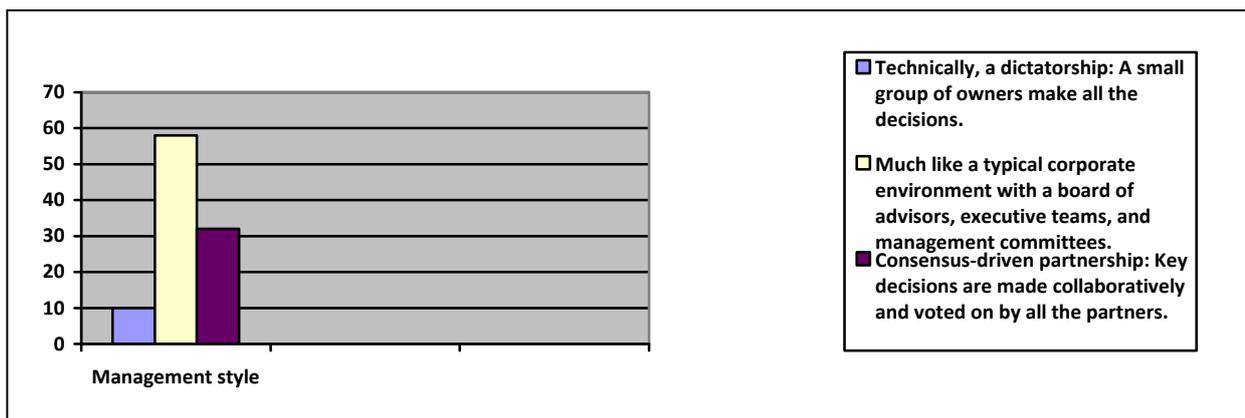


Figure 3.1. Management styles (Broderick, 2011:260).

While the core goals for professional service organisation managerial leaders and traditional corporate business leaders are similar, the execution of these goals differs noticeably (Broderick, 2011:266). These comparable goals of building sustainable value and advancing the organisational product are contingent on the productivity, capability, and capacity of the professionals employed at the professional service organisation. Managers of professional services are responsible for driving performance and building capability of professionals. These managers must have excellent motivational and communication skills, be flexible, be comfortable making difficult decisions, have a high level of accountability, and be confident to work in ambiguity (Broderick, 2011:266). Maister (2003:217-221) presented a number of supplementary character traits that are

believed to belong to proficient managers. These included the ability to reprioritise and shift priorities effortlessly, manage ambiguity and risk comfortably, motivate and reach goals through others, regulate thinking quickly, are altruistic, pay tribute to other professionals, be influential and trustworthy, and have strong self-esteem. Maister (2003:217-221) advised that this is not the case for all professional service organisation managers. Maister's own experiences in the field of professional service organisational management exposed how challenging the management role is. He elaborated on the huge disparity between the skill sets of a skilled professional and a successful manager.

Participants in Broderick's (2011:267) study reported the main characteristics of a manager in a professional service organisation, as shown in Figure 3.2.

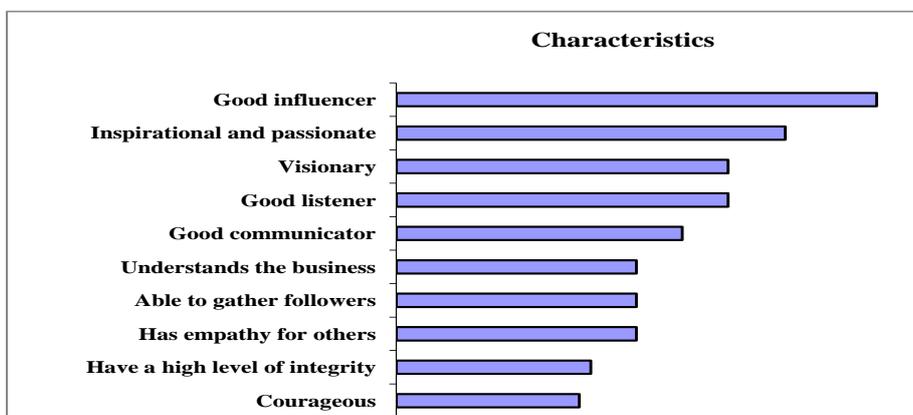


Figure 3.2. Characteristics of a successful manager (Broderick, 2011:267).

These results indicated that most of the listed characteristics (with the exception of *understanding the business*) are related to strong interpersonal skills and emotional intelligence. Thus, the necessary technical expertise component - understanding the business - is very small. These characteristics corresponded with research conducted by Goleman, Boyatzis and McKee (2001:42-51), which provided data in support of the strong link between the emotional intelligence and accomplishments and/or monetary performance of managers. That data pointed towards two key traits that directly influence the sine qua non functioning of managers: managers' manner and mental state or state of mind (mood). In return, these two traits influence the states of mind and moods of others (Goleman et al., 2001:44). Thus, it was evident that managers who display evidence of high emotional intelligence levels generate environments conducive to learning and developments based on mutual trust, contribution, and seize opportunities.

Broderick (2011:265-285) investigated the characteristics and role of thriving managers in the professional service organisation arena. The objective of that study - like for many others - was to uncover the secrets to managerial success. It is also the purpose of the current research to understand the managerial leadership required to be an effective and efficient manager, which positively influences the professional performance of educational psychologists. Broderick (2011:266) is of the opinion that management is the most important component to success in a professional service organisation, but she also acknowledged that management and leadership are largely indefinable elements. She claimed that the professional service organisation calls for a unique approach to managerial leadership and the traditional corporate command-and-control environment will not suffice. Broderick (2011:266) described the dynamic structure that was adopted by professional service organisations as flat, fluid, fragmented, and often unruly.

Another thought-provoking question relevant to the current study, which Broderick (2011:274) posed to professional service organisation managers, was: *Should leaders also be revenue producers, or should they focus solely on running the business?* Respondents put forward strong arguments for opposing views. Sixty per cent of the participants reported that they are responsible for producing revenue and the remaining 40.0 per cent reported being solely focussed on managing the business. This clearly indicated that a smaller number of managers are engaged exclusively in management of the business. These managers (two out of five respondents) who are fully engaged in managerial leadership are of the opinion that client-directed activities and management of the business should not be merged (Broderick, 2011:274-278). Two reasons in support of their argument were put forward. First, the managers reasoned that it is almost impossible to deliver high-quality services to clients (be revenue producer) at the same time as being fully absorbed in the management of the business, especially when working collaboratively in a matrix model (Broderick, 2011:277). They argued that this practice of dual focus will not facilitate strong connections between managers and clients and/or markets. Managers can easily become tired and lose focus as they are drawn deeper into the urgencies associated with service delivery and client-related activities. Broderick (2011:278) stated that immediate risks and long-term strategic planning will not receive the necessary focus from managers if their attention is divided between these two competing activities.

Secondly, it was recorded that participants believed that direct service delivery to clients is not a prerequisite to maintain contact and strong relationships with the sector (Broderick, 2011:277-278). Conversely, data were presented in support of managers remaining involved in producing revenue and deliver services at the same time as managing the professional services. The main reasons that respondents reported for this view were the value of staying engaged with their profession, sector, and clients (Broderick, 2011:278). One respondent, a CEO, defined the balance needed for managerial leadership as follows (Broderick, 2011:278): *Heavily-focussed client people don't have the vision and breadth to lead and deliver change. People who don't spend time with clients get out of touch with the business and lose traction with the partners.* Another CEO presented a contrasting view, in support of managers delivering services: *The principle is that if you are going to lead a group of people like our firm of professional succeeders, you need to have established your credentials outside the building.* Some professional organisations have implemented a managerial leadership model with two managers to manage and lead a professional service team (McKenna & Maister, 2005:xxiii). One manager is responsible for the day-to-day managerial leadership and coaching, while the second manager liaises with the marketplace.

Managing professionals in professional service organisations necessitates additional management proficiency and skills than that required in corporate organisations (McKenna & Maister, 2005:xxii; Broderick, 2011:9, 265-285). Broderick (2011:9) concurred: *Firm leaders will tell you that managing a successful professional service organization is a challenging business that requires a delicate balance between structure and autonomy and a unique leadership style.* Broderick (2011:278-285) discussed the importance of managerial leadership as one of the main success indicators of professional service organisations. She included data to elucidate managerial leadership development and offered professional advice for managers. The main themes that were endorsed as successful approaches to developing managerial leadership were:

- Informal exposure and opportunities to step up into management role for up-and-coming professionals.
- Development of internal exchange management rotation opportunities.
- Mentoring/supervision programmes.
- Formal management development programmes.

Broderick (2011:284-285) concluded with a summary of five key points raised by respondents as pertinent advice for managers of professional service organisations. These are:

- Adopt a leadership mind-set.
- Stay open and curious.
- Invest in your own development.
- Reflect, don't just react.
- Keep your nerve.

3.2.4 Workload management

It is understandable that professionals should be exposed to a variety of work assignment activities that can provide the opportunity to practice some skills while also allowing time to expand and gain new skills in other projects. Work allocation is not always conducted in a planned and structured manner in professional service organisations (Maister, 2003:156-157). As Maister (2003:156-157) put it, work is often randomly allocated based on urgency and risk factors in the midst of the daily constraints. This approach to assigning work can be challenging for both junior and senior level professionals since it habitually hampers the development of junior level professionals and hinders long-term professional development programmes.

Alternatively, the disorganised allocation of work can provide professionals with the opportunity to test their problem-solving skills, and demonstrate initiative by negotiating and influencing in order to obtain sought-after pieces of work. Maister (2003:156-157) explained that these emerging skills (problem solving, initiative, negotiation, influence) that professionals are also applicable to the service they deliver in the field. Professionals who take up these challenges typically progress faster than those who continue to perform more mundane activities (Maister, 2003:156-157). These unstructured work allocation practices are not true for all professional service organisations, most of which have strategies and teams in place to plan and allocate their work assignments appropriately to ensure maximum benefit. The professional service organisational management team is accountable for providing managerial leadership and the development and implementation of robust work assignment processes (Maister, 2003:157).

The workload of a professional is not only influenced by the type of activities they do, but also by the ratio of professionals-to-clients (see Par. 3.3.2). Kaiser and Ringlstetter (2011:90-91) argued that there are a number of ways to improve professionals' performance levels, which include the management of human resources. The management of human resources refers to the recruitment of an adequate number of professionals to provide professional service (Kaiser & Ringlstetter, 2011:90-91) that will positively influence the professional-to-client ratio. Having more professionals to deliver professional specialist services to clients not only increases capacity, but also provides an opportunity to strengthen professionals' commitment to the professional service organisation.

3.2.5 Management of supervision, coaching and mentoring practices

Kaiser and Ringlstetter (2011:91) argued that professionals develop their professional skills and improve their performance when they work in collaboration with other professionals in teams. These professional collaborative working practices are compatible with the professional supervision model that educational psychologists use (see Par. 3.3.5). The practice of offering professional advice and guidance between professionals is defined as mentoring by Broderick (2011:55-60). Mentoring has the following characteristics (Broderick, 2011:57-60): defined mentor and mentee roles, regularly set meetings between mentor and mentee, professional relationship between mentor and mentee, formalised mentoring process, and a process to capture outcomes and results. These characteristics are reminiscent of the characteristics of supervision practices. Interestingly, supervision was documented as part of the hygiene factors (salary, company policy, working conditions, supervision – the technical aspects, and interpersonal relations – supervision) identified in research conducted by Herzberg (Cole, 2004:37-39).

Comparable supervision practices, which have been extensively documented in the literature on management of professional service organisations, are coaching and mentoring practices. Maister (2003:157-162, 171, 210-212) defined coaching as the activity of turning various professional experiences into practical and usable proficiency and knowledge. The author cautioned that it is a challenging task to be a good mentor or coach. The aim is to teach professionals to think and not just to do (Maister, 2003:158, 171). Accomplished coaches and mentors demonstrate specific character traits and

practices, which include taking a real interest in developing professionals, taking their coaching role seriously, being willing to provide timely and vigorous feedback on performance, challenging mentees, setting realistic and achievable expectations, and being professional and available (Maister, 2003:158, 171, 210-212). Most professional service organisations have acknowledged the significance of sound supervision practices and made them compulsory in their organisations, in keeping with Maister's (2003:159) view.

Various participants (leaders) in a study conducted by Broderick's (2011:57, 209) highlighted the importance and benefits of mentoring and the influence that ongoing mentoring had on their own careers. Professional service organisations utilise mentoring practices in a diverse range of ways at various levels, including: senior executive mentoring, mentoring programmes for senior leadership teams, mid-level employee mentoring plan, peer-level mentoring, mentoring young professionals into an organisation, and buddy systems. In addition, a reverse-mentoring strategy emerged in some professional service organisations to support professionals with rapidly growing technology and social media. Young professionals who are more familiar with technology and social media mentor the more seasoned professionals in this domain (Broderick, 2011:57-60).

3.2.6 Summary

The lack of relevant literature posed a challenge for the researcher. A larger body of literature is available on other professional topics relevant to educational psychologists' clinical practice (Watkins et al., 2001:64-73; Jimerson et al., 2004:282; Jimerson et al., 2006:28; Farrell, 2010:593; Fraser & Kemp, 2012:13-20). Although these studies and publications are related to the field of educational psychology, they fall outside the scope of the current research regarding the influence of managerial leadership on the professional performance of educational psychologists. The current study focussed exclusively on educational psychologists and excluded psychologists who are registered under other scopes of practices, namely: psychologists within a general scope, clinical psychologists, and counselling psychologists (NZPB, 2012:12-13). The literature review also yielded data on a wide range of other factors that influence educational psychologists' professional performance that were not all included in the current study. These included

professional development, resources, acknowledgment of the field, collegial support, funding, remuneration, working conditions, training, and professional regulation.

Lack of managerial leadership was one of the most commonly reported internal challenges over the past decade (Jimerson et al., 2004:281; Jimerson et al., 2006: Jimerson et al., 2008a:18). Drucker (1993:337) concluded that organisations viewed the management of professional groups as one of their most challenging tasks in earlier years. Jimerson et al. (2004:7) and Jimerson et al. (2008a:18-19) found that management conflict within the profession is another internal challenge likely to put educational psychological service at risk. The cited body of academic literature agrees on the need for managerial leadership for educational psychologists. However, the question of which specific managerial leadership activities have the greatest influence on educational psychologists' professional performance remains unanswered. Edwards et al. (2007:273) and Coleman and Pine (2010:23) concurred with the data on the need for managerial leadership of educational psychologists.

3.3 THE MANAGERIAL LEADERSHIP OF EDUCATIONAL PSYCHOLOGISTS

3.3.1 Introduction

The understanding of the influence of managerial leadership on educational psychologists' professional performance are fundamental to the fields of management and leadership, and education psychology (Jimerson et al., 2004:274-276; Jimerson et al., 2006:19-21; Edwards et al., 2007:263-274; Musabelliu, 2007:12; Jimerson et al., 2008a:18-19; AEP, 2008:3-4; Coleman & Pine, 2010:23; Curtis et al., 2012:30; Curtis, 2012:4). This point strengthened the researcher's aspiration to understand the influence of managerial leadership on the professional performance of educational psychologists. The researcher is of the opinion that if managers gain a better understanding of the challenges that educational psychologists face, they will be able to make connections and find parallels in the fields of management and leadership, management of the professional performance of educational psychologists, and management of professional service organisations. Managerial leadership and the management of professional service organisations' body of literature can be studied and tested to investigate appropriate empirical and scientific

evidence that will positively influence the professional performance of educational psychologists.

Jimerson et al. (2004:273), Jimerson et al. (2006:20), and Jimerson et al. (2008a:17) documented a range of challenges to the profession of educational psychology. These researchers made a clear distinction between the internal and external factors that place the delivery of educational psychological services at risk. The results from these longitudinal studies depicting the external challenges to delivery of educational psychological services are represented in Table 3.3:

Table 3.3. External challenges (Jimerson et al., 2004:273; Jimerson et al., 2006:20; Jimerson et al., 2008a:17).

External challenge	Albania	Cyprus	Estonia	Greece	Northern England	Australia	China	Germany	Italy	Russia	Georgia	Switzerland	United Arab Emirates
Low status of educational psychologists	46	46	67	34	33	48	41	65	46	9	54	13	29
Low status of education in my country	27	18	25	24	12	18	3	43	18	2	26	1	10
Conflicts with competing professional groups	-	55	17	36	47	17	28	23	14	-	17	23	20
Other professional groups taking school psychology jobs	36	46	13	38	16	30	47	45	32	57	31	36	22
Lack of money to properly fund services	46	64	67	62	64	73	59	88	27	12	69	43	50
Lack of political stability	36	-	46	-	1	1	-	18	9	26	17	-	2
Lack of economical stability	36	9	46	14	1	1	22	33	9	21	51	1	2
Lack of public support for education	46	18	67	24	5	16	6	43	14	88	23	20	2
Low salaries for school psychologists	27	9	83	44	45	53	31	5	-	5	83	1	29

Coding	Considered as external challenge by 50.0 per cent and more of the participants
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Dissimilar viewpoints on perceived external threats and challenges to the profession of educational psychologists were reported in the respective countries. These results showed substantial inconsistency across the countries, with international consistency in only a few areas.

The ISPA ISPS question regarding the internal challenges was: *Please indicate which of the following internal challenges may jeopardize the delivery of psychological services within schools in your country.* The answers revealed an interesting discrepancy regarding perceived internal challenges (Jimerson et al., 2004:273-276; Jimerson et al., 2006:20-21; Jimerson et al., 2008a:17-18). Educational psychologists do not perceive internal challenges as having the same pressure on the service delivery of educational psychological services as the mentioned external challenges. Table 3.4 shows the results of the responses regarding the internal challenges that can potentially jeopardise service delivery.

Table 3.4. Internal challenges (Jimerson et al., 2004:274-276; Jimerson et al., 2006:21; Jimerson et al., 2008a:18-19).

Internal challenge	Albania	Cyprus	Estonia	Greece	Northern England	Australia	China	Germany	Italy	Russia	Georgia	Switzerland	United Arab Emirates
Lack of leadership within the profession	36	27	50	32	39	34	75	40	23	10	11	23	22
Conflict of leadership within the profession	-	64	8	30	18	1	19	15	9	2	14	8	12
Professional burnout	18	82	54	26	59	81	50	18	9	57	-	22	27
Lack of research and evaluation	36	73	42	46	46	29	84	48	23	12	34	40	51
Lowering standards for selecting or preparing professionals	18	27	25	26	21	38	31	3	18	26	43	7	12
Lack of professional standards governing professional services	36	27	50	42	10	18	47	38	23	19	34	18	29
More able professionals leaving the profession	46	0	33	12	22	34	41	3	14	55	14	18	20
Lack of peer support from other school psychologists	9	18	29	16	10	27	38	8	14	12	17	2	10
Lack of adequate supervision	36	64	63	40	18	49	53	38	18	19	31	8	5

Coding	Considered as internal challenge by 50 per cent and more of the participants
--------	--

The underlying threats to educational psychologists' service delivery related to the current study, were: lack of leadership within the profession, lack of research and evaluation, and lack of adequate supervision. Lack of leadership received consistently high endorsements across the board, ranging from ten per cent to as high as 75.0 per cent. Estonians endorsed the threat with 50.0 per cent and the Chinese endorsed it with an especially high endorsement of 75.0 per cent. This elevated rating for lack of leadership within the profession is of particular interest. The consistent endorsements across countries indicate

a perceived lack of leadership within the field of educational psychology around the world that requires an urgent response.

In line with the data from the longitudinal studies conducted by Jimerson et al. (2004:274-276), Jimerson et al. (2006:19-21), and Jimerson et al. (2008a:18-19), educational psychologists from several districts in the NZMOE reported on factors of concern regarding professional standards governing professional practice according to Edwards et al. (2007:271-273). Edwards et al. (2007:273) presented corresponding data that articulated the need for effective management of challenges for the profession and practice of educational psychology in NZ context. Educational psychologists regularly face competing and frequently conflicting demands and limitations. Managers are called on to implement effective managerial leadership work behaviours in order to negate these restrictive and competing challenges to ensure that educational psychologists consistently deliver safe, competent, and effective services. Coleman and Pine (2010:23) emphasised the need for educational psychologists and their managers to work together. The collaboration was described as data-driven dialogue, shared planning, positive relationships, shared ownership and reciprocity of responsibility for resources and outcomes (Elmore, 2004, cited by Coleman & Pine, 2010:23).

3.3.2 Ideal service delivery model and its influence on the professional performance of educational psychologists

The scholarly literature exposed two distinctive service delivery models in the field of educational psychology: the traditional model (TM) and the expanded role model (ERM) (Brown et al., 2006:487; AEP, 2011:6). Brown et al. (2006:286-496) reported comprehensively on the role function and job satisfaction of educational psychologists in the expanded role model. They described the expanded role model as the model in which educational psychologists work in a single school instead of being based at one school or local office and servicing multiple schools (i.e. the traditional service delivery model). In this expanded role model, educational psychologists deliver a range of services that include activities normally carried out by an educational psychologist. In addition to these tasks, educational psychologists also carry out tasks traditionally handled by school counsellors and school social workers. These tasks include psycho-educational assessments, counselling, and helping educators and parents to develop interventions or

strategies to address the child's individual needs, and social challenges. Brown et al. (2006:487) acknowledged that although the expanded role model has been used for some time, a limited amount of data is available regarding the success of such a model of service delivery.

The AEP position paper (2008:6) argued that there has been a significant change in how educational psychological services have been delivered to children since the conception of Children's Services Authorities in England and Wales. There is no prescribed or fully developed service delivery model for the organisation or for the educational psychological services across the United Kingdom. It has been noted that some common themes are developing, but that the AEP maintains that it is not in the best interest of children and their families to disperse educational psychological services at a local level. Worrell et al. (2006:140) stated: *It remains to be seen how current trends in education practices will contribute to future challenges in the way that school districts utilizes school psychologist services.* Data is insufficient and unclear on which model is most favourable. The researcher aims to gain deeper appreciation of which is the preferred service delivery model and how it influences educational psychologists' professional performance.

3.3.3 The influence of management appointments on the professional performance of educational psychologists

There are opposing schools of thought with regard to the ideal management appointment to provide managerial leadership to educational psychologists. The appointment of appropriately qualified educational psychologists in management roles (AEP, 2008:15; Brown, 2010:17; Coleman & Pine, 2010:21) to provide managerial leadership and/or the appointment of generic non-educational psychologist managers (Children's Workforce Strategy, 2007:28-31; AEP, 2008:10-11). Scholarly literature posed that educational psychologist benefit from distinctive managerial leadership from within the educational psychological domain (AEP, 2008:10-13; Brown, 2010:13, 17; Coleman & Pine, 2010:21-24; Soulbury Report, 2010:4-5). The reality is that most organisations across the world employ generic managers to provide managerial leadership for educational psychologists. These generic non-educational psychologist managers come from various professional disciplines, often with no educational psychological qualifications or management training.

The Association of Educational Psychology's position paper of 2008, entitled: *The Management of Educational Psychology Services and the Role of the Principal Educational Psychologist* (AEP, 2008:1-20), relevant to members of the Association of Educational Psychologists (AEP) in England, Wales, Scotland, and Northern Ireland, is concerned with the AEP's stance on the management of educational psychological services and the role of principal educational psychologists. The position paper (AEP, 2008:1-20) has a strong focus on the appointment of principal educational psychologists to manage and provide professional leadership to educational psychologists in the UK and other relevant countries. According to the AEP position paper (2008:13), new developments like Children's Services Authorities often provide inadequate direction regarding how to tackle the managerial leadership of educational psychologists, as a discrete professional group that do require professional management and clinical supervision from within their professional domain. Principal educational psychologists are described as the representatives of the educational psychology field and should have a strategic role in accordance with the AEP report principals (AEP, 2008:13). Principal educational psychologists with management responsibilities are best qualified to provide educational psychologists with clinical supervision and habitual management and strategic direction.

The AEP (2008:10) position paper explained the lack of properly combined managerial leadership and professional leadership has detrimental effects on educational psychologists' professional performance. The absence of a principal educational psychologist to manage and lead their counterparts will have the following consequences according to the AEP position paper (2008:10):

- Dissatisfaction of educational psychologists because they do not receive suitable collective organisational and professional leadership.
- Lack of educational psychological contributions to strategic decision making.
- Attrition of educational psychologist levels.
- A decline in the delivery of quality educational psychological services.

The AEP report (2008:10) acknowledged that the day-to-day management of operational activities can be performed by generic non-educational psychologist managers. *However, there should be professional oversight of the day-to-day management and a strategic lead provided for educational psychology in any authority by an appropriately qualified principal*

educational psychologist (AEP, 2008:10). Additionally, this paper stipulated that educational psychologists should have direct access to appropriately qualified principal educational psychologists to meet their clinical supervision needs. Qualified principle educational psychologists can provide clinical advice and guidance while general managers give professionally unsuitable directions at times. The Soulbury Report (2010:4-5) differentiated between senior educational psychologists and principal psychologists. Both senior and principal educational psychologists have management and leadership responsibilities:

Senior educational psychologists have duties and responsibilities above those of officers on scale A. They may have specific line management responsibilities for two or more officers on Scale A; or duties as deputy to the principal educational psychologists.

Principal educational psychologists are the officers to whom has been assigned the responsibility for organising and managing the educational psychology services and accountability for the professional work of the local authority's other educational psychologists.

Management of educational psychologists in a New Zealand context poses similar challenges to those expressed in the international literature. Various New Zealand-based authors have documented their concerns and challenged the managerial leadership of educational psychologists (Brown, 2010:17; Coleman & Pine, 2010:21-24). Brown (2010:17) cautioned that educational psychologists should not be managed by generic managers. These managers do not understand the complexities of schools and the intervention patterns according to Brown (2010:17). Along the same lines, Coleman and Pine (2010:21) reported on the negative impact that the restructuring of management had in the 1990s. The traditional management structure, with senior psychologists in senior management positions, was disestablished and replaced with a generic non-educational psychologist management structure.

Past managerial leadership contributions from regionally-based chief psychologists and district-based senior psychologists are presented as the optimal structure (Coleman & Pine, 2010:21). Educational psychologists had the open and timely access to the chief and senior psychologists for clinical supervision and support. Initially, the establishment of lead

practitioner and practice advisor roles were seen as advantages for providing professional and clinical support to educational psychologists who were managed by generic managers. Coleman and Pine (2010:21) later realised that the initial success was short-lived, stating: *The focus of the lead practitioners and practice advisors has as a consequence been directed more towards supporting managers than professional staff who, as a consequence, have been further disempowered.*

Brown (Hart, 2007:535, cited by Brown, 2010:15) contended that generic non-educational psychologist managers influenced and created restrictive conditions for educational psychologists and their professional performance. Coleman and Pine (2010:21) strongly supported the appointment of chief educational psychologists and/or district-based senior educational psychologists to replace general non-educational psychologist managers. General non-psychologist managers are distracted by pressing organisational needs and do not fully appreciate the nature of the educational psychology field. Coleman and Pine (2010:21) affirmed that restructuring management positions posed a challenge to the educational psychologists' professional performance. When generic non-educational psychologist managers were appointed, professional accountability and efficient management were lost. Hornby (2010:26) stated that the current management structure of educational psychologists contributes to the decline in the educational psychology profession in New Zealand. In contrast, Drucker (1993:335) cautioned that professionals do not always make good managers in his statement: *To promote the good professional employee into an administrative position will only too often destroy a good professional without producing a good manager.*

Other pertinent information about the perceived challenges was obtained from the NASP and the ISPA ISPS's results (Jimerson et al., 2004:274-276; Jimerson et al., 2006:19-21; Jimerson et al., 2008a:18-19; Curtis et al., 2012:30; Curtis, 2012:4). Educational psychologists around the world endorsed the internal challenges to service delivery of educational psychological services; namely, lack of leadership within the profession and the conflict of leadership as perceived pressures. Participants from China and Estonia identified and sanctioned the lack of managerial leadership within the profession highly, with 75.0 per cent and 50.0 per cent, respectively. The other participating countries (Albania, Cyprus, Greece, Northern England, Australia, Germany, Italy, and Russia) did not share the view of Chinese and Estonian educational psychologists. They did not

believe that lack of managerial leadership within the profession presents a threat to service delivery. Cyprus was the only country whose educational psychologists reported that conflicts of managerial leadership within the profession are a possible internal challenge to service delivery.

3.3.4 The influence of workload management on the professional performance of educational psychologists

There is a huge demand and strain on the educational psychological service across the world, with demand far exceeding the availability of this resource. The workload and ratio of educational psychologist-to-children continues to present a challenge for managers and there is an increasing need to identify issues impacting and relating to workload. More in-depth investigation is needed to explore managers' empirical experiences regarding educational psychologists' workload. It is also necessary to have a more comprehensive exploration of the management of educational psychologist-to-student ratios and the outcomes of these managerial leadership activities.

The workload of educational psychologists has been well researched and documented in the field of educational psychology (Curtis et al., 2002:30-42; Curtis, 2002; Curtis et al., 2004:431-442; Jimerson et al., 2004:278; Jimerson et al., 2006:25; Brown et al., 2006:488; Edwards et al., 2007:273; Jimerson et al., 2007:1-553; Jimerson et al., 2008a:22; Jimerson et al., 2008b:1-23; NASP, 2010:10; Curtis et al., 2012:28-30; Curtis, 2012:1-6; Castillo et al., 2012:4-6; Castillo, 2012:1-6; Merrell et al., 2012:104). These studies focussed mainly on the ideal ratio, wide-ranging ratios across different countries and within countries, current ratios in various countries, and the influence of ratios on the professional performance of educational psychologists.

Various prominent researchers reported on factors that influence educational psychologist-to-student ratios (Curtis, 2002; Curtis et al., 2004:439; Jimerson et al., 2004:278; Jimerson et al., 2006:25; Edwards et al., 2007:273; Jimerson et al., 2008a:22; Curtis et al., 2012:30). The main factors included: employment setting, how long the field of educational psychology has existed in a country, school setting, the GPS between countries, time, complexity and intensity of cases, workforce size, type of service, service delivery model, the number of schools, and other responsibilities. Researchers (Curtis et al., 2004:439;

Jimerson et al., 2004:278; Jimerson et al., 2006:25; Jimerson et al., 2008a:22) have cautioned that these contributing factors should be taken into consideration when viewing the different ratios across and within countries. Data regarding educational psychologist-to-student ratio were not consistent over the past decade (Jimerson et al., 2004:267, 278; Jimerson et al., 2006:25; Jimerson et al., 2008a:12, 22). Curtis (2002), Curtis et al. (2004:439), Jimerson et al. (2004: 278), Jimerson et al. (2006:25), and Jimerson et al. (2008a:22) maintained that wide-ranging educational psychologist-to-children ratios exist across different countries. These authors proposed that the ratios also varied within these countries. Ratios varied widely from 1:47 to 1:19, 065 and clearly did not correspond with the ideal ratio of 1:1, 000 proposed by the NASP (Curtis, 2004:439; Jimerson et al., 2004:267, 278; Jimerson et al., 2006:25; Edwards et al., 2007:265; NASP, 2010:10; Jimerson et al., 2008a:12, 22). Jimerson et al. (2006:25) further examined the range of ratios to explain the discrepancies.

The ideal ratio proposed by the National Association of School Psychologists (NASP) is one educational psychologist for every 1,000 school-aged students (1:1,000). The NASP's model for comprehensive and integrated school psychological services (2010) described the ratios of educational psychologists-to-students as a significant characteristic of the quality of service delivery to students. The NASP (2010:10) states: *The ratio should be determined by the level of staffing needed to provide comprehensive school psychological services in accordance with the system's needs assessment. Generally, the ratios should not exceed 1,000 students to 1 school psychologist.* The NASP also proposed that ratios should be further reduced to between 1:500 and 1:700 if comprehensive and preventative educational psychological services are delivered, in order to ensure the delivery of quality services to vulnerable children. Additional decreases in the ratio of educational psychologist-to-students are anticipated when educational psychological services are delivered to students who have significant special needs. Results from a study by Curtis et al. (2002:30-42) concerned with the relationship among the professional performance and demographic characteristics of school psychologists revealed supporting data. They found that lower ratios of educational psychologist-to-school-aged students are associated with an increase in intervention-focussed practices. Additionally, higher levels of special education activities have been linked with higher ratios of educational psychologist-to-school-aged students in the United States.

The ISPA (ISPS) longitudinal studies revealed the following ratios of educational psychologist-to-school-aged children: Northern England 1:5,000 (ranging between 1:60 and 1:13,000); Estonia 1:690 (Jimerson et al., 2004:267, 278); Australia 1:1,560; China 1:19,065; Italy 1:47 (Jimerson et al., 2006:25); Georgia 1:5,277; the United Arab Emirates 1:860; and Switzerland 1:3,122 (Jimerson et al., 2008a:12, 22). Jimerson et al. (2004:278) reported that their study in Albania, Cyprus, Greece, Estonia, and Northern England yielded ratios ranging from 1:580 to 1:9,050. High ratios of educational psychologists-to-school-aged students were found in the East South-Central and West South-Central areas of the United States, whereas the New England and Mid-Atlantic regions had much lower ratios (Curtis, 2004:439).

Curtis et al. (2002:30-42) asserted that a relationship exist between the ratio of educational psychologist-to-students and the professional performance of educational psychologists. A study conducted by Curtis et al. (2012:30), entitled: *School Psychology 2010: Demographics, Employment, and the Context for Professional Practices*, argued that it is impossible to make a causal link between ratios of educational psychologist-to-school-aged students and services provided. However, the evidence from that study implied that the likelihood of engaging in more intervention-focussed activities increases with the lowering of the mentioned ratios. Soto, Casapia, Ponce and Morales (2007:304) agreed and stated:

The high ratio of student to psychologist is truly abysmal, a condition that delays the implementation of effective prevention and other intervention programs designed to diminish the prevalence of students at risk for academic failure or social maladjustment.

According to Curtis (2002) and Curtis et al. (2002:32-33), the relationship between ratios and the kinds of services that are delivered is a significant contributing factor. It is clear that the ratio of educational psychologist-to-children should be managed but cannot be managed in isolation without including the wider contributing factors that have been pointed out in contemporary research (Curtis, 2002; Curtis et al., 2002:32-33; Curtis et al., 2004:439; Jimerson et al., 2004:278; Jimerson et al., 2006:25; Jimerson et al., 2008a:22). Similarly, Edwards et al. (2007:265) reported that educational psychologists in New Zealand context face heavy workloads and high ratio of educational psychologist-to-children. Edwards et al. (2007:265) documented the ratio of educational psychologist-to-

children as 1:5,100. The authors cautioned that the early childhood population might not be represented accurately. Other factors that influence the ratio in New Zealand context, included: time, complexity and intensity of cases, and other responsibilities.

3.3.5 Influence of managerial leadership on educational psychologists' engagement in clinical supervision

During the last decade, a number of studies dealt with educational psychologists' supervision practices (Jimerson et al., 2004:266; Jimerson et al., 2006:25; Thielking et al., 2006:206; Jimerson et al., 2008a:18-19, 23; AEP, 2008:1-20; NASP, 2010:1-20; Curtis et al., 2012:28-30; Curtis, 2012:1-6). The current study is not concerned with the actual clinical supervision practice but more with the influence of managerial leadership on educational psychologists' engagement in clinical supervision.

Clinical supervision is an integral part of educational psychologists' practice (Thielking et al., 2006:406; Jimerson et al., 2008a:5-28; AEP, 2008:1-20; NASP, 2010:1-12; Curtis et al., 2012:28-30; Curtis, 2012:1-6). Professional supervision is integrated into the NASP – *Model for Comprehensive and Integrated School Psychological Services* (NASP, 2010:1-12). The NASP model delineates the national principles that guide the field of educational psychology in the United States, including graduate education, credentialing, professional practice and services of educational psychologists, and ethical behaviour of effective educational psychologists (NASP, 2010:1). The legal, ethical, and professional practice encompasses supervision of educational psychologists and prescribes that educational psychologists be engaged in supervision and mentoring as a crucial part of their practice. NASP (2010:1) clearly stipulates that:

The school system ensures that all personnel have levels and types of supervision and mentoring adequate to ensure the provision of effective and accountable services. Supervision and mentoring is provided through an ongoing, positive, systematic, collaborative process between the school psychologists and school psychology supervisor or other school psychology colleagues. The process focuses on promoting professional growth and exemplary professional practice leading to improved performance by all concerned, including the school psychologist, supervisor, students, and the entire school community.

The AEP (2008:5-6) position paper calls for clinical supervision to be provided only by qualified educational psychologists based on the discrete nature of the field of educational psychology. The same paper states: *Given the discrete and complex professional nature of an educational psychologists' work, it is not possible for others without the same professional training to provide appropriate professional supervision to an educational psychologists.*

Likewise, clinical supervision is one of the key achievement areas in the job description of educational psychologists (MOE – Job Description, 2012:1-12), and educational psychologists are obliged to engage in and/or provide habitual clinical supervision. In the UK the AEP (2008:18) policy statement prescribes similar practices with regard to the management of supervision of educational psychologists, namely:

- All educational psychologists have the right to and should expect appropriate supervision of their work.
- With the exception of principal educational psychologists, a qualified educational psychologist should provide all such supervision.
- The clinical practice of educational psychologists should always be supervised by other qualified educational psychologists.

Thielking et al.'s (2006:404) study on supervision and satisfaction among educational psychologists had similar findings. They reported that educational psychologists in general did not describe supervision practices as optimal or satisfactory. Thielking et al. (2006:406) noted that the requirement with relation to supervision in an Australian context is a minimum of one hour of supervision per week for probationary psychologists. Thielking et al. (2006:404) strongly recommended that after an educational psychologist has met the compulsory supervision requirements and is successfully registered, that they continue to participate in clinical supervision activities on a regular basis. Thielking et al. (2006:407) (Crutchfield & Borders, 1997, cited by Thielking et al., 2006:407) stated that ongoing clinical supervision provides a strong foundation for the continued professional development of educational psychologists in their key roles in schools. These authors also reported on the relationship between the quality of supervision that educational psychologists receive and their level of job satisfaction.

The same study identified a relationship between frequency of supervision and caseload size (ratio of educational psychologist-to-students), revealing significant outcomes of adequate supervision for educational psychologists. In addition, more experienced educational psychologists participated in supervision to a lesser degree than their less experienced counterparts. Managers should encourage habitual and rigorous clinical supervision for all educational psychologists, regardless of their experience (Thielking et al., 2006:412). According to Thielking et al. (2006:412), the need to participate in rigorous supervision activities is based on the complex nature of the role of an educational psychologist, the need for new learning and debriefing, and the expectations (according to the Australian Psychological Society's standards for the delivery of school psychological services) for the practice of educational psychologists.

Other USA-based studies (Jimerson et al., 2004:266, 276, 279; Jimerson et al., 2006:13, 21, 25, 27; Jimerson et al., 2008a:11, 18, 19, 23; Curtis et al., 2012:30; Curtis, 2012:4-5) that have investigated the supervision practices in the field of educational psychology have yielded a diverse range of results. Curtis (2012:4-5) and Curtis et al. (2012:30) reported that 56.2 per cent of educational psychologists (NASP members) testified to having received administrative supervision but only 28.5 per cent received clinical supervision, mentoring and/or peer supervision through an organised programme. On the other hand, Jimerson et al. (2004:267) noted that high percentages of educational psychologists in Albania (80.0 per cent), Cyprus (55.0 per cent), and Northern England (66.0 per cent) reported having received professional supervision. The percentages of educational psychologists receiving professional supervision were lower in Estonia (14 per cent) and Greece (37 per cent). Educational psychologists in Cyprus, China, and Estonia rated the lack of adequate supervision to a significant degree (53.0-64.0 per cent) as a possible internal threat to the delivery of educational psychological services (Jimerson et al., 2004:274; Jimerson et al., 2006:21).

The majority of educational psychologists who participated in the ISPA ISPS reported having received adequate clinical supervision as educational psychologists - Australia (61.0 per cent), China (63.0 per cent), Russia (70.0 per cent) (Jimerson et al., 2006:14), Switzerland (57.0 per cent) and the United Arab Emirates (63.0 per cent) (Jimerson et al., 2006:12). A very low proportion (three per cent) of Georgian educational psychologists reported having received adequate supervision, while Italy (10.0 per cent) and Germany

(28.0 per cent) also had low numbers in this regard (Jimerson et al., 2006:14; Jimerson et al., 2008a:12). The reasons for the large spread in the above figures include the differences between the training programmes and regulations across countries, the length of time that educational psychology has existed and been recognised, age range, and the individuals' years of experience as educational psychologists according to Jimerson et al. (2006:25). Jimerson et al. (2006:25) proposed that the younger cohort of educational psychologists reported the highest percentage of supervision.

Similarly, lack of adequate supervision received relatively steady endorsements across all countries during the ISPA ISPS, ranging from five per cent in Cyprus to 64.0 per cent in the United Arab Emirates (Jimerson et al., 2004:273-276; Jimerson et al., 2006:20-21; Papacosta, 2007:69; Jimerson et al., 2008a:17-19). The two lowest scores were endorsed by Swedish educational psychologists (eight per cent) and the United Arab Emirates (five per cent). The remaining countries shared notably similar endorsements, which suggest that the lack of adequate supervision is a perceived internal challenge to the service delivery in the field of educational psychology. The question remains as to how managerial leadership influence the educational psychologists' engagement in professional supervision.

3.3.6 Summary

The literature study has shown the effect and impacts that workload and educational psychologist-to-children ratios have on the professional performance of educational psychologists and the quality of service delivery. It appears as though higher educational psychologist-to-student ratios have a detrimental effect on the professional performance of educational psychologists around the world. Although the literature study verified the ideal ratio, deviations exist based on the staffing levels, type of service, service delivery model, and student's specialist needs. However, the literature related to the management of these ratios is limited. The educational psychologist-to-children ratio continued to be a source of interest, based on the premise that it is linked to the delivery of different types of services – at least, according to Curtis et al. (2004:434), Curtis (2012:4), and Curtis et al. (2012:30). Nevertheless, the available data on the ratio of educational psychologists-to-children does inform the present study and ultimately influenced the formulation of questions for the questionnaires.

According to the literature, traditional and expanded service delivery models are the two main service delivery models in the field of educational psychology worldwide. From the literature, it could be discerned that the changing social, political, and educational climate has noticeable consequences for educational psychological services. Some countries have introduced minor changes to their educational psychology service delivery model, while others have been compelled to change their previous structure completely. Again, the following question was raised: How does managerial leadership of the service delivery model influence the professional performance of educational psychologists?

The management structure and the professional or organisational management appointment have been disputed for several years now (Jimerson et al., 2004:274-276; Jimerson et al., 2006:19-21; Jimerson et al., 2008a:18-19; AEP, 2008:1-20; Brown, 2010:17; Coleman & Pine, 2010:21-24; Curtis et al., 2012:30; Curtis, 2012:4). Several professionals have advocated for the appointment of principal educational psychologists to provide managerial leadership in the field. However, some studies have acknowledged that non-educational psychologists can be appointed to provide managerial leadership for educational psychologists. Nevertheless, the question remains as to which of the two proposed management appointments is most advantageous for the professional performance of educational psychologists.

Educational psychologists in a number of countries reported on various factors that impact their day-to-day professional performance (Thielking et al., 2006:406; Jimerson et al., 2008a:5-28; AEP, 2008:1-20; NASP, 2010:1-12; Curtis et al., 2012:28-30; Curtis, 2012:1-6). Professional supervision emerged as one of the most pertinent factors that influence the professional performance of educational psychologists. Psychologists from various countries rated the effect that the supervision has on their professional performance. Supervision practices were rated from adequate to deplorable. The policies and guidelines for educational psychologists' supervision practices outlined the expectations in each of the countries. Literature from New Zealand, United Kingdom, the USA, and Australia outlined the expectations that educational psychologists are obliged to participate in regular rigorous professional supervision.

The need for effective managerial leadership has been clearly documented in contemporary research and literature (Jimerson et al., 2004:274-276; Jimerson et al., 2006:19-21; Jimerson et al., 2007:1-553; Edwards et al., 2007 :263-274; Jimerson et al., 2008a:18-19; AEP, 2008:1-20; Curtis et al., 2012:30; Curtis, 2012:4). Research on the topic of management of educational psychologists is limited. The findings and data (both qualitative and quantitative) regarding service delivery model, management appointment, managerial leadership of the workload of educational psychologists, and engagement in supervision suggest that educational psychologists and their employers may benefit from further research and deeper understanding. The current study can provide a foundation that promotes further research regarding the influence of managerial leadership on educational psychologists' professional performance. The study can also provide data regarding existing managerial leadership practices. The researcher has also raised questions that are applicable to managers around the world who are responsible for providing managerial leadership for educational psychologists.

3.4 CONSEQUENCES FOR THE PROFESSIONAL PERFORMANCE WHEN EDUCATIONAL PSYCHOLOGISTS ARE NOT EFFECTIVELY MANAGED

3.4.1 Introduction

Results from the literature review revealed that managerial leadership affected the professional performance of educational psychologists (Jimerson et al., 2004:274-276; Jimerson et al., 2006:19-21; Worrell et al., 2006:142; Jimerson et al., 2007:1-553; Edwards et al., 2007:263-274; Jimerson et al., 2008a:18-19; AEP, 2008:1-20; Curtis et al., 2012:30; Curtis, 2012:4). This has a number of consequences for the professional performance of educational psychologists who are ineffectively managed, as documented in the literature. Worrell et al. (2006:142) declared that studies regarding the job satisfaction of educational psychologists are valuable because of the relationship between job satisfaction and work quality, organisational commitment, motivation, absenteeism, burnout, and achievement.

The following section discusses the consequences of ineffective managerial leadership that are relevant to the current study; namely, low levels of job satisfaction, low morale, high levels of attrition, erosion of the field of educational psychology, low levels of professional commitment, high staff turnover rates, retention problems, increased levels of

stress, professional burnout, role ambiguity, and conflict. Some consequences were clustered together because they appear to present jointly according to the body of published works.

3.4.2 Low levels of job satisfaction and low morale

Coleman and Pine (2010:24) reported that the changes in the management model employed by NZMOE resulted in low levels of staff satisfaction. These satisfaction levels have been captured in the NZPsS 2008 membership survey. Educational psychologists' low levels of job satisfaction have also been documented in the IEPD 2008 and AGM 2009 meeting transcripts, according to Coleman and Pine (2010:24). Kikas (2007:100) proposed that educational psychologists' lack of motivation can often be derived from their low salaries and poor working conditions. Managerial leadership of educational psychologists is considered to be a fundamental element of their working conditions.

3.4.3 High levels of attrition, erosion of the field of educational psychology, and low levels of professional commitment

One of the threats which was described in the longitudinal study conducted by Jimerson et al. (2004:273), Jimerson et al. (2006:20), and Jimerson et al. (2008a:17); namely, the low status of school psychology, pertains to the present study. The low status of psychology was perceived as a prospective external challenge in Estonia (67.0 per cent), Germany (65.0 per cent) and Georgia (54.0 per cent). The rest of the cohort rated the low status of school psychology, with percentages ranging from nine to 48.0 per cent, with the lowest ratings reported by educational psychologists in Russia (nine per cent) and Switzerland (13.0 per cent). Similarly, Coleman and Pine (2010:22) and Edwards et al. (2007:272) described the devaluing and low status of school psychology in New Zealand. Edwards et al. (2007:272) described it as the perceived erosion, of the role of educational psychologists in New Zealand. Edwards et al. (2007:272) argued that there is a perceived risk that the specialist skill set of educational psychologists is not acknowledged or even required in their current roles. Brown (2010:10) supported that view, stating that the decline in the profession of educational psychology must be addressed and questioning whether the value of the profession will ever be acknowledged again.

Among the other consequences mentioned by Coleman and Pine (2010:22) were ineffective management. This referred to managers who do not adequately engage with educational psychologists – (referred to as low professional engagement) and the decline in the professional creativity of educational psychologist. These consequences relate to low levels of professional commitment for both educational psychologists and their managers. Furthermore, Edwards et al. (2007:272) described the perceived erosion of the educational psychologists' traditional role as an issue that has impacted the field of educational psychology. The authors attributed the erosion in the role to the fact that work is determined and allocated by managers who are not qualified in the field of educational psychology.

Mpofu, Mutepfa, Chireshe and Kysayira (2007:446) identified financial constraints, high levels of attrition, and the resulting erosion of the quality of educational psychologists' training as challenges for educational psychologists in Zimbabwe. They suggested that the attrition rate of educational psychologists can be reduced by improving the management of available resources - increasing the number of educational psychologists, and having manageable psychologist-to-children ratios. They further stated that the rate of Zimbabwean educational psychologists moving to the private sector is unlikely to change soon. However, they did predict that improved management of competitive remuneration rates of public service educational psychologists could improve retention levels. Curtis et al. (2004:438) also noted that there is limited empirical data regarding the actual attrition rates or the rationale for attrition. However, these authors stated that it is important to bear in mind the general (natural) rate of attrition from the field of educational psychology.

The qualitative data and findings from an empirical study conducted by Thielking et al. (2006:412) on supervision and satisfaction among educational psychologists in Australia indicated that there exists a feeling of professional isolation and inadequate managerial leadership in their roles. According to the AEP (2008:13) report, continued inadequate support from principal educational psychologists in management positions, leads to dissatisfaction among educational psychologists. Consequently, the lack of sufficient combined professional and organisational leadership results in the erosion of educational psychologist staffing levels when the professional cohort faces a shortage in the field of educational psychology.

3.4.4 High staff turnover rates and retention problems

Various authors have suggested that factors such as heavy workloads and constrained roles of educational psychologists are the cause of retention problems in the field of educational psychology (Mpofu et al., 2007:446; Brown, 2010:17). According to Coleman and Pine (2010:24), educational psychologists have confirmed these major retention and recruitment issues in New Zealand and declared that these issues are not freely discussed or recognised by management. Edwards et al. (2007:266) reported similar data, and suggested that anecdotal reports implied that the discrepancy between the demand on educational psychological services and managerial leadership of organisational demands exacerbate staff retention and recruitment issues.

The AEP (2008:10) concurred that the lack of managerial leadership leads to high staff turnover rates. Curtis et al. (2004:437) explained that educational psychologists leave the field of educational psychology for various reasons, with retirement as the main reason. Curtis et al. (2004:437) said: *The disproportionate percentages of school psychologists who are older and who have many years of experience are major factors in determining how many will retire and when.*

Squires and Farrell (2007:89) warned that recruitment and retention continue to be fundamental topics that have a significant influence on the ability to meet the widening demands in the field of educational psychology in England and Wales. Pipa (2007:100) posited that Estonian educational psychologists who have recently entered the educational psychology field often resign because of the lack of adequate supervision. Boulon-Diaz and Roca de Torres (2007:317) made a similar finding, stating: *... that the Department of Education has faced difficulties recruiting and retaining full-time psychologists due to inadequate salaries, contracts with few fringe benefits, delays in payment for services performed, and supervision by unqualified personnel.*

3.4.5 Increased levels of stress and burnout

Brown (2010:17) commended that high caseload numbers and restrictive roles are among the main factors that can lead to educational psychologists' burnout, both in New Zealand and elsewhere. Approximately half of the respondents, identified professional burnout as

the internal challenge that is most likely to affect or jeopardise educational psychology service delivery (Jimerson et al., 2004:274-276; Jimerson et al., 2006:21; Jimerson et al., 2008a:18-19). According to Soto, Casapia, Ponce and Morales (2007:305), other aspects that impede the productivity of educational psychologists, affect professional burnout, and ultimately lead to Iranian (people from Ancient Persia) professionals leaving the field are inadequate working conditions and managerial leadership barriers. These managerial leadership aspects need to be negated and addressed to prevent educational psychologists working in an apathetic manner. Venezuelan educational psychologists reported a similar list of external threats to professional burnout, namely: low salaries, usurpation of educational psychology positions by poorly qualified professionals, a high educational psychologists-to-children ratio, inadequate supervision, Venezuela's precarious economic conditions, a lack of support among specialists, and students' low level of academic achievement.

3.4.6 Role ambiguity and conflict

Role ambiguity in the field of educational psychology appears when educational psychologists are required to perform activities that fall outside their skill base, or when their specialist knowledge base and skills are under-utilised or not utilised at all (Edwards et al., 2007:272). Edwards et al. (2007:272) attributed this to the fact that educational psychologists' work is negotiated by general managers, arguing that general non-educational psychologist managers do not have adequate clinical knowledge of the educational psychologists' professional practice or scope of work to make informed decisions. Edwards et al. (2007:272) also suggested that the conflicting and competing demands in the field of educational psychology should be managed by both educational psychologists and their managers in order to guarantee safe, capable, and effective professional practices.

Role conflict was considered to be another factor that impacted on educational psychologists' professional performance (Edwards et al., 2007:272; Brown, 2010:15; Coleman & Pine, 2010:22). Role conflict exists between educational psychologists and specialist educators on one hand, but also between educational psychologists and other psychological scopes of practice. Edwards et al. (2007:272) cautioned against the negative impact of managerial leadership where educational psychological tasks and roles

are handed over to professionals from disciplines and occupational groups other than the field of educational psychology. Managers are reminded that these professionals from other disciplines and occupational groups do not hold the same level of professional clinical knowledge as the educational psychologist cohort.

Data from longitudinal studies by Jimerson et al. (2004:273), Jimerson et al. (2006:20), Jimerson et al. (2008:17) demonstrated variance across all participating countries regarding conflict with competing professional groups and other professional groups taking school psychology jobs. Endorsements for conflict with competing professional groups ranged from zero to 55.0 per cent (for Estonian educational psychologists). A similar trend was revealed with the endorsements for other professional groups taking school psychology jobs. Respondents' endorsements ranged from 13.0 to 57.0 per cent. Russian educational psychologists had the highest rate in this category, identifying it as a likely external challenge to the delivery of educational psychological service. According to Edwards et al. (2007:272), Brown (2010:15), and Coleman and Pine (2010:22), these findings correspond with current issue of assigning roles and responsibilities that were previously held by educational psychologists on to other professional groups in New Zealand.

3.4.7 Discrepancy between desired and actual roles

As Edwards et al. (2007:266) noted, the retention and recruitment challenges caused by the demands for services and organisational demands may force educational psychologists to change their practice. The discrepancy between educational psychologists' preferred role of implementing interventions and consultation and their actual role (not preferred) of assessment is a great source of dissatisfaction among educational psychologists (Curtis, Hunley & Grier, 2002:30).

3.4.8 Summary

The literature clearly outlines the consequences for the professional practice of educational psychologists who are not effectively managed. Studies have shown that changes in a management model, low salaries, and poor working conditions can lead to low levels of job satisfaction and a decline in the morale of educational psychologists

(Mpofu et al., 2007:446; Worrell, 2007:100; Coleman & Pine: 2010:24). High levels of attrition and low levels of professional commitment resulted from low levels of management engagement and a lack of managerial support for encouraging research.

High levels of job attrition and the erosion of the role of educational psychologists have been attributed to the fact that educational psychologists are managed by generic managers or non-educational-psychologists (Edwards et al., 2007:272). Other studies have argued that inadequate support and lack of sufficient joint professional and organisational leadership and management lead to dissatisfaction and feelings of professional isolation (Thielking et al., 2006:412; AEP, 2008:13).

The literature has reported that the ratio of educational psychologists-to-children influences educational psychologists' staff turnover and retention (Edwards et al., 2007:266; Mpofu et al., 2007:446; Brown, 2010:17; Coleman & Pine, 2010:24). The management of educational psychologist-to-children ratios can negate the negative effect of a large caseload on the professional performance of educational psychologists. Ineffective managerial leadership is another major aspect documented in the literature that leads to high levels of staff turnover (AEP, 2008:10).

According to a number of studies (Jimerson et al, 2004:274-276; Jimerson et al., 2006:21; Kikas, 2007:100; Soto et al., 2007:305; Jimerson et al., 2008a:18-19, Brown, 2010:17), professional burnout is identified as one of the main consequences when the professional practice of an educational psychologist is not effectively managed. The literature also reported on the role ambiguity and role conflict experienced by educational psychologists who are not effectively managed in a number of different countries (Jimerson et al., 2004:273; Jimerson et al., 2006:20; Edwards et al., 2007:272; Jimerson et al., 2008a:17; Brown, 2010:15; Coleman & Pine, 2010:22).

3.5 SUMMARY

The international literature review was conducted to investigate the managerial leadership activities that influence the professional performance of educational psychologists. General background data was offered in order to define the challenges that were reported for managers and educational psychologists. The lack of data and research regarding

managerial leadership presented a challenge worldwide. The literature (body of published and written works) search in the fields of management and educational psychology generated insufficient contemporary empirical and scientific data on the topic under exploration. Cited data were deemed inadequate in terms of providing clarity to the research questions, specifically in relation to the managerial leadership of the professional performance of educational psychologists. The cited research topics included the following core themes: role function; job satisfaction; supervision; professional satisfaction and fulfilment; professional practices; training; professional development; intervention; assessment models; demographic characteristics; educational psychologist shortages; training models; employment conditions; best practice; concerns and challenges, management, leadership, organisational leadership, management practice, Managing professional service organisations (Stewart, 1988:1-166; Covey, 1990:1-360; Covey, 1991:1-335; Drucker, 1993:v-xii, 1-404; Handy, 1999:1-445; Kotter, 1999:1-184; Curtis, 2002; Smit & Cronje, 2002:v-xii, 1-514; Maister, 2003:v-xvi, 1-376; Jimerson et al., 2004:259-286; Bratton, Grint & Nelson, 2005:v-xix, 1-361; Drucker, 2005:vii-xix, 1-235; McKenna & Maister, 2005:xv-xxvii, 1-290; Hardison, Bolen & Walcott, 2006:486-496; Chair, Burns, Dawson, Kelley, Morrison, Ortiz, Rosenfield & Telzrow, 2006:1-32; Idsoe, 2006:46-72; Jimerson et al., 2006:5-32; Thielking, Moore & Jimerson, 2006:405-414; VanVoorhis & Levinson, 2006:77-90; Worrell et al., 2006:131-145; Brown, Hardison, Bolen & Walcott, 2007:47-57; Edwards et al., 2007:263-274; Bass, 2008:v-xix, 1-1516; Jimerson et al., 2008a:5-28; Jimerson et al., 2008b:1-23; Miller, Nickerson, Chafouleas & Osborne, 2008:679-692; Jimerson, et al., 2010:1-6; Castillo, Curtis & Gelley, 2010:4-6; Costello, 2010:1-16; Costello, 2011:1-16; Broderick, 2011:xi-xiii, 1-250; Kaiser & Ringlstetter, 2011:vii; Mintzberg, 2011:ix-xii, 1-306; Brown, Castillo, 2012:1-6; Bartolo, 2012:3; Curtis, 2012:1-6; Curtis, Castillo & Gelley, 2012:1, 28-30; Merrell et al., 2012:1-380; Smith, 2012:1-3; Fayol, 2013:110; Cole, 2013:v-xvii, 1-481; Northouse, 2013:xiii-xviii, 1-485; Tengblad, 2013:xi-xviii, 1-365; Yukl, 2013:1-448).

A limited amount of contemporary empirical data were discovered regarding the managerial leadership relating to service delivery models, management appointments, workload management, and engagement in clinical supervision. A broader search into organisational artefacts, policies, guidelines and formal documentations resulted in a more comprehensive database that relates to the descriptors and expectations set out for both service managers and educational psychologists. The scholarly literature exposed the lack

of current data on the topic of influence of managerial leadership on professional performance of the educational psychologists' cohort.

The written works provided insights and answers to the research sub-questions regarding the demographic characteristics of educational psychologists, major roles, purposes and responsibilities of educational psychologists, training and professional regulation of educational psychologists, and some of the consequences on the professional performance of educational psychologists when they are not effectively managed in Chapter 2. At the same time however, the scholarly literature yielded insufficient data to provide an answer regarding the influence of managerial leadership on the professional performance of educational psychologists.

Several themes emerged in the literature regarding the managerial leadership of educational psychologists in general. A number of these themes contained elements that linked strongly to the topic under investigation, while other themes are new and reflective. The researcher's view corresponds with data from earlier studies (Brown et al., 2006:47-57; Jimerson et al., 2004:259; Jimerson et al., 2006:6; Jimerson et al., 2008a:5-6; Brown, 2010:14-15; Coleman & Pine, 2010: 13; Hill, 2010:1-123; Hornby, 2010:26) that more research is needed in the fields of managerial leadership of educational psychology. Jimerson et al. (2004:260) explained that: *As the field of school psychology continues to develop around the world, it is important to obtain systematic data to better understand the training, roles and responsibilities of school psychologists.* The next chapter provides a detailed account of the research methodology implemented in the current study. The chapter provides clarification on the research paradigm, research approach, and methods used in the study.

CHAPTER 4

RESEARCH METHODOLOGY

4.1 INTRODUCTION

Chapter 3 provided a critical discussion about the management of professional service organisations, the management of educational psychologists, and the influence of managerial leadership on the professional performance of educational psychologists in selected countries. Well-known researchers in the field of professional service organisational management outlined the need for more research in this domain (Maister; 1993:xi-xiii, 1-250; Maister, 2003:v-xvi, 1-376; McKenna & Maister, 2005:xv-xxvii, 1-290; Lowendahl, 2008:20; Broderick, 2011:1-297; Kaiser & Ringlsetter, 2011:i-xvii, 1-208). Other well respected researchers in the field of educational psychology documented that the educational psychologists' service delivery models, management structure, workload management, and educational psychologists' engagement in clinical supervision have a significant influence on educational psychologists' professional performance (Curtis, 2002; Curtis et al., 2002:30-42; Jimerson et al., 2004:259-286; Brown et al., 2006:486-496; Chair et al., 2006:1-32; Idsoe, 2006:46-72; Jimerson et al., 2006:5-32; Thielking et al., 2006:405-414; VanVoorhis & Levinson, 2006:77-90; Worrell et al., 2006:131-145; Brown et al., 2007:47-57; Edwards et al., 2007:263-274; Jimerson et al., 2008:5-28; Jimerson et al., 2008:1-23; Miller et al., 2008:679-692; Jimerson et al., 2010:1-6; Brown, 2010:12-19; Coleman & Pine, 2010:20-25; Costello, 2010:1-16; Hornby, 2010:26-30; Costello, 2011:1-16; Bartolo, 2012:3; Castillo, 2012:1-6; Castillo et al., 2012:4-6; Curtis, 2012:1-6; Curtis et al., 2012:1, 28-30; Merrell et al., 2012:1-380; Smith, 2012:1-3).

Additionally, Chapter 3 discussed, in detail, the consequences of ineffective management for educational psychologists and their professional performance. The main consequences included: low levels of job satisfaction; high levels of attrition; erosion in the field of educational psychology; low levels of professional commitment; high staff turnover rates; staff retention problems; increased levels of stress and burnout; role ambiguity and conflict; discrepancy between desired and actual roles.

Chapter 4 explains the research design that guides the research decisions. It clearly identifies what the current study explores, examines, and measures. The researcher developed and included two separate visual images: the conceptual framework (see Appendix 2) and the research design (see Appendix 3). These diagrammatic representations will allow the reader to follow the theoretical perspective and research methodology for the current study. The research approaches, research paradigms, and underlying philosophies are further described in a narrative fashion to provide a more comprehensive explanation. Chapter 4 also presents the justification for the mixed methods research design, objective, and research questions.

Chapter 4 provides details on the population, sample frames, and how these samples were selected. The researcher explains the study's ethical measures and procedures that were followed. This chapter gives an account of the researcher's competency and relationship with participants. Additionally, a substantial amount of data is provided relating to privacy concerns, human rights' protection of participants, informed consent practices, and confidentiality. Data collection forms, also known as strategies of inquiry, approaches to inquiry, research methodologies are explained. The researcher commented on the strategies of inquiry and included the data collection procedures. Each strategy of inquiry was discussed under a separate heading, such as questionnaires and focus group interviews. The researcher discussed concepts of trustworthiness, validity, and reliability and detailed how these aspects were addressed in the study. The researcher then presented the forms and procedures of data analysis, interpretation, and presentation used for the study. Forms of data analysis, interpretation, and presentation from both the quantitative and qualitative research method were drawn on for the study. The researcher provides clear explanations and a rationale for the integration of the data in this chapter.

4.2 RESEARCH DESIGN

4.2.1 Introduction

The research design presents all the different components of the research study, which are presented and discussed under separate headings in the following section.

4.2.2 Research paradigm, approach and underlying philosophies

The current research is situated within the pragmatic philosophical paradigm. The researcher's paradigm was shaped by the fields of management and leadership, educational management, special education, educational psychology, and past research experience in these fields (Creswell, 2009:6). The pragmatic research paradigm allowed the researcher to draw on procedures that work for the phenomenon under investigation and to deploy various research methods when investigating the research problem (Creswell, 2007:23; Creswell, 2012:537). This paradigm focuses on the research problem and its explanations (Creswell, 2007:22-23; Creswell, 2009:10; Creswell, 2014:10-11). Table 4.1 demonstrates the pragmatic approach in mixed methods methodology, as succinctly described by Morgan (2007:71):

Table 4.1. Pragmatic approach to the key issues in social science research methodology (Morgan, 2007:71).

Research approach:	Qualitative	Quantitative	Pragmatic
Connection of theory and data	Induction	Deduction	Abduction
Relationship to research process	Subjective	Objective	Inter-subjectivity
Inference from data	Context	Generality	Transferability

The research problem required a mixture of approaches to comprehensively investigate the phenomenon. The researcher wanted to first understand relationships and examine the causes in the measured social facts and then follow up with a deeper understanding of the social phenomenon by interviewing managers (McMillan & Schumacher, 2001:15-16). The pragmatic research approach is described as the philosophical foundation for the mixed methods approach (Creswell & Plano Clark, 2007:23; Creswell, 2009:6, 10; Creswell, 2014:10-11). The research problem is viewed as pivotal (Creswell, 2009:10; Creswell, 2014:10-11). The mixed methods research approach enabled the researcher to

use multiple research methods, multiple forms of data collection, and take different worldviews during the research. The pragmatic approach let the researcher move between induction and deduction during the different phases of the study. Furthermore, the researcher gained an objective measure of the study during phase one and a subjective measure during the second-phase.

McMillan and Schumacher (2001:30-43) described research design as: ... *the procedures for conducting the study, including when, from whom, and under what conditions the data will be obtained*. Creswell (2009:216) strongly recommended that researchers develop visual illustration to outline the procedures they will use in their research, resulting in the research design for the current study in Appendix 2. This visual diagram put forward the chain of events that will be followed in the current research. The mixed methods explanatory sequential approach is depicted as the overarching approach for the entire research study and commences with the quantitative research phase. The quantitative paradigm is portrayed as the positivist epistemological beliefs, realist ontology, singular reality, and an objective perspective. The research design continued with a description of the strategy of inquiry used in the research, namely: non-experimental design survey. The forms of data collection that were implemented during the quantitative research are represented as the pre-determined instrument based questions that generated numeric quantitative data. Statistical analysis is revealed as the form of data analysis before the final step where the data were interpreted statistically. A similar process is illustrated for the qualitative research phase. Firstly, the interpretivist epistemological approach, relativist ontology, multiple realities, and the subjective perspective are illustrated as the qualitative paradigm. This is followed by the interactive phenomenological strategy of inquiry the researcher employed through emerging open-ended questions. These open-ended questions refer to the narrative qualitative data that was collected by conducting the focus group interviews. This leads to the second last procedure in the qualitative phase of data analysis that is depicted as text analysis. Data interpretation is represented in the research design as the last procedure in the second phase, where themes and pattern emerge. After the qualitative research phase, the research design moves to the analysis of how the qualitative results help explain the quantitative findings. Finally the four main outcomes of the research project are illustrated: inform researcher's practice, make a contribution to the field of management, fill the knowledge gap, and recommendations.

Creswell (2009:208-216), Creswell (2012:540), and Creswell (2014:219) stated that there are six main mixed methods designs commonly used in educational research: convergent parallel design; explanatory sequential design; exploratory sequential design; embedded design; transformative design; and multiphase design.

The explanatory sequential design described by Creswell (2009:211), Creswell (2012:542), and Creswell (2014:219, 220-221, 224-225) as the main form of the mixed methods design employed in educational research, was adopted for the current research. Creswell (2014:15) described explanatory sequential mixed methods research as: *... one in which the researcher first conducts quantitative research, analyses the results and then builds on the results to explain them in more detail with qualitative research.* The qualitative data explain the quantitative data. In addition, quantitative data was collected from multiple levels, namely from managers and educational psychologists. The perspectives of both managers and educational psychologists will be represented and provide opportunity for comparison of their views.

The quantitative research approach was the main research approach in this study, while the qualitative research method was a secondary method research method (Creswell, 2009:209). Creswell (2012:542) justified using the explanatory sequential mixed methods design as that the data and results yielded by the quantitative method present a general picture of the research problem. Subsequently, the qualitative approach further analyses the data to refine, expand, and explain this general picture. It is an easy approach to implement since the steps are separated into obvious, detached stages (Creswell, 2009:211). Qualitative research was used to better understand a phenomenon through personal interaction with participants, extended researcher presence in the field, and an in-depth literature search for more comprehensive meaning.

Since the mixed methods research approach combines quantitative and qualitative research, consideration should be given to both approaches. Each approach draws on different philosophical assumptions that need to be explored separately (Creswell, 2012:537). The different worldviews that the researcher had at different stages of the research included:

- Beliefs about the nature of reality (ontology) – single reality and multiple realities.

- What is accepted as knowledge and how it is justified (epistemology) – objective and subjective perspectives.
- The role of values in this research study (axiology) – control biases carefully.
- The process of research (methodology) – forms of collecting quantitative and qualitative data/forms of analysing quantitative and qualitative data/forms of interpreting quantitative and qualitative data.

Creswell (2013a:36-37) stated that pragmatism is characterised by ontological beliefs that focus on reality that is useful, practical and works for this study. Both single and multiple realities were used in this research paradigm. In addition, epistemological beliefs are known by implementing various research tools that reflect both deductive and inductive evidence. Both the researcher and participant views are reflected in the knowledge base according to Creswell (2013a:37). Creswell (2013a:37) claimed that the methodological beliefs engage both quantitative and qualitative approaches to gathering and analysing data in the interpretative frameworks and associate philosophical beliefs.

The ontological beliefs in phase one supports the idea of a single reality that needs to be discovered (McMillan & Schumacher, 2001:15; Creswell, 2013a:20). Realists believe that there is a truth to be proven about reality. This reality is in the minds of the participating managers and educational psychologists and must be discovered by the researcher. Therefore, reality is objective and singular. Phase one (quantitative research paradigm) used the positivist epistemological approach to knowing (Armitage, 2007:2-4). The positivist approach is based on the realist ontology. Knowledge is discovered from an objective perspective, and the researcher holds an etic viewpoint (McMillan & Schumacher, 2001:463). The researcher was on the outside, trying to objectively measure the topic under investigation. In addition, the researcher disassociated herself from the research and became imperceptible to the study to negate the influence of biases. Mncube (2005:1) stated that positivists believe that the researcher and the participants are independent of each other and do not influence each other. Conducting a quantitative study meant that the researcher placed as much distance as possible between herself and the study participants (Creswell, 2013a:20).

Furthermore, the quantitative approach deductively tested existing theory in the literature. The researcher verified the theory by studying hypotheses and questions drawn from that theory (Creswell, 2014:59-63). The researcher identified the variables in the hypotheses and questions: factors, predictor variables, intermediate variables and criterion variables. Non-experimental design was the preferred strategy of inquiry. The researcher also considered other non-experimental modes of inquiry that were not deemed appropriate to be used in the current research. Descriptive inquiry simply describes an existing phenomenon by using numbers to characterize individuals or a group (McMillan & Schumacher, 2001:33). In comparative inquiry, the researcher investigates whether there are differences between two or more groups on the phenomenon being studied (McMillan & Schumacher, 2001:33). Ex post facto inquiry is used to explore possible causal relationships among variables (MacMillan & Schumacher, 2001:34-35). The experimental modes of inquiry (true experimental/quasi-experimental/single subject) could not be used because the researcher did not manipulate what the participants experienced and did not methodically impose or hold back specific circumstances (McMillan & Schumacher, 2001:32-33). Quantitative data was collected and analysed to confirm or disprove the theory.

The researcher developed two independent questionnaires, one for managers of educational psychologists and one for educational psychologists, which will be discussed later in this chapter. McMillan and Schumacher (2001:33) claimed that non-experimental modes of inquiry are concerned with situations that have already taken place or relationships between variables. These questionnaires included the demographics of managers and educational psychologists to explore the different relationships between variables (McMillan & Schumacher, 2001:34). The pre-determined, instrument based questions focussed on factors that affected managerial leadership, the predictor variable, intermediate variables, criterion variables, and factors affected educational psychologists' professional performance. These questionnaires were simultaneously administered. The pre-determined measures resulted in numeric data that was statistically analysed and interpreted.

During phase two of the explanatory sequential mixed methods design, the researcher selected the qualitative research approach. The ontological assumption about the nature of reality in the qualitative approach is relativist or interpretivist beliefs. The researcher

embraced the idea that there are multiple realities (Creswell, 2007:16; Creswell, 2013a:20-21) that are co-constructed. Reality is not fixed, but there are multiple perspectives. The goal was to uncover perceptions that managers have about this reality. These multiple realities are seen in the various quotes recorded during the focus group interviews conducted with six managers. Participants reported different experiences, insights, and viewpoints on the research problem (Creswell, 2007:18; Creswell, 2013a:20-21). An insider approach increased propinquity between the researcher and the participants. The researcher tried to get as close to the managers as possible to gather subjective evidence based on their individual views (Creswell, 2013a:20-21). Creswell (2013a:20) stated: *The longer researchers stay in the field or get to know participants, the more they know what they know from first hand information.*

During phase two, the researcher used the interactive transcendental strategy of inquiry to describe the common meaning that the managers provided about their lived experiences (McMillan & Schumacher, 2001:36; Creswell, 2013b:76-81). Creswell (2013a:77) emphasised that phenomenology has a strong philosophical component and is popular in the social and health sciences, psychology, nursing, and education. MacMillan and Schumacher (2001:36) agreed with this claim. They described the interactive qualitative inquiry: *... as an in-depth study using face-to-face techniques to collect data from people in their natural setting.* The researcher was not concerned with describing and interpreting a cultural group (ethnography mode of inquiry), examining a bounded system or a case over a period of time (case study). The researcher also did not want to draw from critical theory/feminist theory/race theory/postmodern perspective (critical studies) (McMillan & Schumacher, 2001:35-38). Therefore, the researcher chose the interactive phenomenological mode of inquiry.

The qualitative research phase of the study inductively used theory. Detailed information was gathered from six purposefully selected managers of educational psychologists during focus group interviews. The qualitative data was analysed and sorted into categories that developed into broad patterns. The researcher compared these patterns to her personal experience, results from the quantitative phase, and scholarly literature on the phenomenon (Creswell, 2014:65-66). Qualitative research procedures were emerging and formed by the researcher's experiences, accumulating, and analysing information (Creswell, 2013:22). In addition, the researcher made known the values (axiology) she

brought to the study. Creswell (2013a:20) suggested that qualitative researchers acknowledge the value-loaded nature of the study and explicitly report these values and biases. The researcher's presence is visible throughout the text, and the accounts captured in the study are representative of the researcher's interpretation, and presentation, and study subject.

4.2.3 Rational for choosing the mixed methods research approach

The mixed methods research approach is an accepted methodological approach that includes philosophical assumptions of inquiry, research questions and data collection, analysis, presentation, interpretation, and reporting (Creswell, 2012:538). The author agreed with other prominent researchers that advocated for the application of the mixed methods design in the social sciences (Creswell & Plano Clark, 2007; Creswell, 2009:209; Creswell, 2012:538; Creswell, 2014:14-16). A mixed methods research methodology allows the researcher to collect, analyse, and incorporate both quantitative and qualitative research modes (Creswell & Plano Clark, 2007). Creswell (2012:534) stated:

With qualitative research now accepted by educational researchers, and with quantitative research long established as an approach, mixed methods research has become popular as the newest development in research methods and in approaches to mixing quantitative and qualitative research.

Creswell (2009:18) and Creswell (2012:535) stated that it is advantageous to implement the mixed methods research approach when neither the quantitative nor the qualitative approach can sufficiently explain the research problem. Integrating these approaches was beneficial in the current research for gaining a better understanding of the research problem that neither of the research approaches could provide separately. The mixed methods approach allowed the researcher to take advantage of the strengths embedded in both the quantitative and qualitative approaches. The mixed methods approach also decreased the effects of the limitations and weaknesses of each research method (Creswell, 2012:535, 536, 543). The mixed methods research design allowed qualitative research to explain the statistical results yielded by the quantitative phase.

Combining the strengths of the quantitative and qualitative research methods and reducing the weaknesses of the methods individually led to data triangulation. Triangulation is the process where the investigator gathers and mixes different types of data (quantitative and qualitative) relevant to the topic under investigation (Creswell, 2012:536, 537). The two sources and the phenomenon are described as the three points to the triangle (Creswell, 2012:536) as illustrated in Figure 4.2:

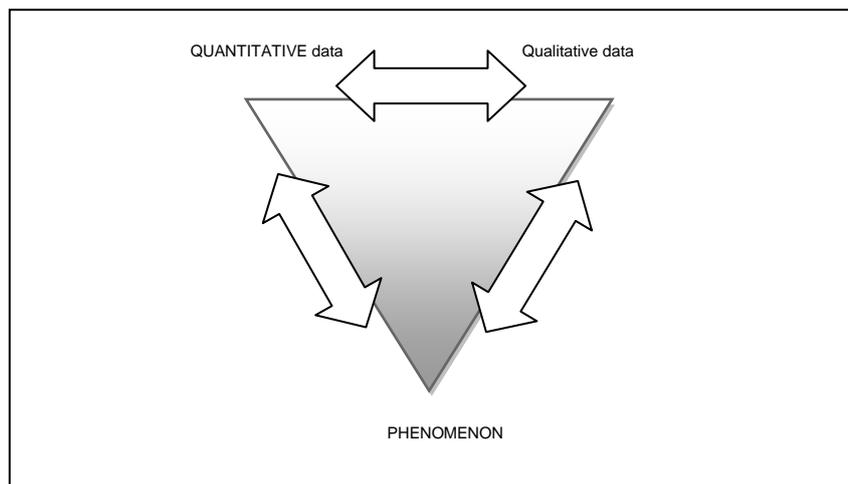


Figure 4.2. Triangulation of data.

Creswell (2012:535, 543, 554-555) stated that the mixed methods design is an advanced methods procedure. This method is time-consuming, and requires wide-ranging data collection and analysis. Explanatory data analysis is an additional rationale that led to selecting the mixed methods research approach. The data collected provided a more complete understanding of the research problem based on the following assumptions (Creswell, 2014:218):

- Different perspectives provided by the quantitative and qualitative data were compared.
- Quantitative results were explained by qualitative follow up data collection and analysis.
- Understanding non-experimental quantitative results by integrating the perspectives of individuals obtained during focus group interviews.
- Developing a more complete understanding of the changes needed for service managers through combining quantitative and qualitative data.
- Gaining a better understanding of the need for, and effect of, an intervention through collecting quantitative and qualitative data.

4.2.4 Research question and sub-questions

The researcher's professional role as a manager of educational psychologists, posed significant challenges when trying to locate and understand the empirical evidence based, best management practices. Data on the influence that managerial leadership have on employees in general did not provide sufficient explanation and information for managing educational psychologists specifically. The immediate and long-term influences that managerial leadership had on educational psychologists' professional performance were seen in inconsistent and un-equitable service delivery, educational psychologists themselves, and the educational psychology field.

The researcher consulted several sources: personal experience in educational management, special education, and educational psychology; personal intuition; expert opinions; documents and artefact; and existing literature. The researcher found a lack of satisfactory explanation about the influence of managerial leadership on the professional performance of educational psychologists. During the preliminary scholarly literature review the researcher discovered what others wrote on the topic. Their ideas provided a theoretical perspective (see Par. 1.6) and conceptual framework (see Par. 1.7 and Appendix 2). The scholarly literature justified the need for conducting research on the phenomenon and provided insight on issues through synthesising ideas and reworking theories. As a result, the researcher identified and formulated the following main research problem: ***What is the influence of managerial leadership on the professional performance of educational psychologists?*** Six sub-questions (see Par. 1.3) emanated from the research problem.

4.2.5 Objective of the research

The research problem of the study directed the secondary objectives:

- To investigate the demographic characteristics of managers of educational psychologists and educational psychologists (addressed in Chapter 2).
- To investigate the service delivery models and its influence on the professional performance of educational psychologists (addressed in Chapter 3).

- To explore the influence of management appointments on the professional performance of educational psychologists (addressed in Chapter 3).
- To examine the influence of workload management on the professional performance of educational psychologists (addressed in Chapter 3).
- To study the influence of managerial leadership on educational psychologists' engagement in clinical supervision (addressed in Chapter 3).
- To explore the consequences of ineffective managerial leadership for the professional performance of educational psychologists (addressed in Chapter 3).

4.3 POPULATION AND SAMPLING

Quantitative data was gathered from two independent sample groups during phase one of the research. The one sample consisted of managers responsible for managing and leading educational psychologists in India, Ireland, South Africa, Switzerland, and Sweden. The other sample consisted of educational psychologists practicing in India, Ireland, South Africa, Switzerland, and Sweden. Both samples were purposefully selected (McMillan & Schumacher, 2001:169, 175-176) based on their roles, qualifications, and employment setting. Purposeful sampling is based on the researcher's knowledge of the population and which participants would be the most knowledgeable and informative and the most representative of the entire population.

The managers were selected from a population of managers responsible for managing and leading educational psychologists across different settings – Department's of education and educational psychology associations. The target population for educational psychologists consisted of a sample of psychologists in selected countries, within a general scope, counselling psychologists, clinical psychologists, educational psychologists (Annual Report to the Minister of Health, 2011:9-11; New Zealand Psychologists Board - *Te Poari Kaimātai Hinengaro o Aotearoa*, 2012:12-13), industrial and organisational psychologists. The sample frame, or survey population comprised the eligible members of the population that encompassed educational psychologists working in departments of education, educational psychology associations, and in private practices in the selected countries. McMillan and Schumacher (2001:169) stipulated that even though the intent of the study was to generalise the findings to the population, the sample frame places some

boundaries on such generalisations. Pallant (2011:4) is of the opinion that people are unpredictable and warned that they cannot be relied on to turn up for interviews, complete questionnaires accurately, or return completed questionnaires all of the time. The author advised researchers to be cautious and plan accordingly by inviting a larger sample than you need for the research study.

In addition, Creswell (2013:158) suggested participants must have experienced the phenomenon being studied to help the researcher understand the problem and answer research questions. Thus, the site and participants for this study were purposefully selected to explain the research problem and phenomenon under investigation. Furthermore, McMillan and Schumacher (2001:177-180) cautioned that researchers need to consider the following factors when determining the sample size for a quantitative study: type of research, research hypothesis, financial constraints, importance of the results, number of variables, data collection methods, and the degree of accuracy needed for the study.

Creswell (2014:224) proposed: *The quantitative results typically inform the type of participants to be purposefully selected for the qualitative phase.* Consequently, qualitative data was collected from a purposefully selected sample of six managers in New Zealand and South Africa for the focus group interviews. McMillan and Schumacher (2001:401) stated that the power and logic of purposeful sampling lies in the fact that: ... *a few cases studied in depth yield many insights about the topic.* In addition, purposeful sampling raises the efficacy of the data gathered from a small sample. As a result, the researcher adhered to the typically small number of participants proposed for phenomenological qualitative research of between one and 40 participants (McMillan & Schumacher, 2001:401, 405; Creswell, 2014:189).

Criterion sampling was the preferred sampling strategy during the second (qualitative phase) phase of the research. The six managers were selected from the target population, based on their expertise and demographics. These demographics were position and location, also referred to as the delimiting variables (McMillan & Schumacher, 2001:169). The criterion sampling strategy was selected from the following quantitative sampling strategies: maximum variation, homogeneous, critical case, theory based, confirming and disconfirming cases, snowball or chain, extreme or deviant case, intensity, politically

important, random purposeful, stratified purposeful, opportunistic, combination or mixed, and convenience sampling. Creswell (2013:158) defined the purpose of criterion sampling as: ... *all cases that meet some criterion and described it as useful for quality assurance*. The researcher selected the six managers who manage and lead educational psychologists, based on their knowledge and experience in the field of management in New Zealand and South Africa contexts.

The researcher considered engaging in focus groups on the internet, which can include chat room and bulletin board groups as an innovative and modern alternative to face-to-face group interviews, as Creswell (2013:159) delineated. However, there are several challenges and risks in engaging in focus groups on the internet: enlisting appropriate participants; difficulty obtaining informed consent; arranging suitable time frames for all participants; increased ethical concerns/privacy protection/new power differentials; data ownership; authenticity; and technical skills of participants and researcher (Creswell, 2013:159, 161). These risks outweigh the advantages of an innovative internet based system. Traditional face-to-face focus group interviews were conducted as an alternative with the exception of one interview that was conducted through Skype.

4.4 ETHICAL CONSIDERATIONS

All researchers have ethical and legal responsibilities that demand attention and consideration when conducting research (McMillan and Schumacher, 2001:196; Creswell, 2014:92). McMillan and Schumacher (2001:196) emphasised:

It is ultimately the responsibility of each researcher to weigh these considerations and make the best professional judgement possible. To do this, it is necessary for the researcher to be fully aware of ethical and legal principles that should be addressed.

Ethical principles are the same for all types of research: quantitative, qualitative, and mixed methods. These ethical parameters include informed consent, dishonesty, confidentiality, anonymity, harm to participants, and privacy measures (McMillan & Schumacher, 2001:420). Creswell (2014:92) stated that a stronger focus must be placed on ethical issues in research today. Bryman and Bell (2007) conducted an examination of

the ethical considerations of nine professional social science research associations. These authors put forward 10 ethical principles based on this analysis, namely:

- Participants' dignity should be respected at all times.
- The researcher must ensure that all communication regarding the research is honest and transparent.
- The purpose and intention of the research project should never be embellished and the researcher should always be honest about these aims.
- Every participant should willingly consent to participate in the research.
- No harm should come to any participant during the course of the research.
- The privacy of research data should be guarded and safeguarded at all times.
- Anonymity of participating organisations and participants should be guaranteed.
- The researcher is obliged to declare any conflict of interest, funding sources, or any memberships.
- Avoid any form of bias with relation to the data and/or results of the study.

The researcher considered each one of these ethical parameters very carefully from the point of developing the research proposal - preceding the research, through to data collecting, data analysis, data sharing, and culminating in the closing stage by data archive. Thus, ethical issues should be addressed during each phase of the research process. The researcher consciously refrained from including participants from vulnerable groups (minors, mentally incompetent participants, victims, prisoners, and those with neurological impairments) and participants working at the New Zealand Ministry of Educations. The only foreseeable risk for managers and educational psychologists is one of inconvenience. The following ethical principles were implemented to strengthen the ethical foundation of the research:

- The researcher excluded the organisation that employs her from the research because of the conflict of interest.
- Protected and ensured participant privacy, anonymity, and confidentiality. No identifiable data were used during the course of the research.
- Respected participants and their sovereignty from conception to conclusion of the study.

- The researcher did not collect personally identifiable data, asked compromising questions, or ask for sensitive information.
- Gained voluntary informed consent from all participants.
- Protected the rights and welfare of all participants.
- Protected participants from harm (McMillan & Schumacher, 2001:197).
- Adhered to just and fair research practices during the research.
- Truthful and trustworthy in the discoveries.
- Transparent and honest at all times (McMillan & Schumacher, 2001:196).
- Culturally sensitive and competent.
- Respected the research site (Creswell, 2014:97).
- Studied the UNISA Policy on Research Ethics (2014).
- Submitted an application to University of South Africa (UNISA) College of ethical research ethical review committee (CEDU REC) for ethical review and clearance. Application was approved.
- Clearly and honestly documented and communicated the aims and objective of the research.
- No damaging data were collected from participant in the surveys or during the focus group interviews.
- The researcher included all the collected data for analysis. No responses or perspectives from participants were excluded.
- An accurate and honest representation of the evidence was documented in the results and outcomes of the study.

The researcher gained approval to conduct quantitative research from departments of education and educational psychological associations in Ireland, India, South Africa, Switzerland, and Sweden.

4.4.1 Competency of the researcher

The researcher is proficient and sufficiently trained to perform the research, based on previous academic studies and professional training (see Par. 1.2). She is current with the pertinent areas of study, has the necessary capacity and capability to carry out the research, understands participants' morals and standards, is culturally responsive and sensitive, knowledgeable about research methodology, is compliant and accommodating

toward all participants and settings, and is non-invasive and non-judgemental in all research situations.

All research activities, from conception to completion, were founded on ethical considerations and moral reasoning (McMillan & Schumacher, 2001:196; Creswell, 2014:92-101). The researcher's main intent of beneficence (aim to do good) and non-maleficence (aim not to do any harm) directed all research decisions.

4.4.2 Relationship with the participants

The researcher maintained strategically established relationships with participants during the study. During phase one, the researcher was disassociated with the participating managers and educational psychologists. The researcher was invisible to the participants by means of a web-based survey program. The research aims, uses, design, informed consent, privacy measures, confidentiality and anonymity, and time frames were explicitly stated and given to participants in writing. For the duration of the second phase of the research, the researcher conducted face-to-face interviews with six informative managers. McMillan and Schumacher (2001:416) highlighted the significance of declaring the researcher's social relationship with the participants. The authors believed that the researcher who has personal and professional experiences can empathise with participants. They can more readily identify the observed processes and subtle innuendos of participants. The researcher was explicit and completely transparent about the study aims and design throughout the research process. A healthy relationship was maintained with all participants from approval and consent to thanking the participants for their help in the research. McMillan and Schumacher (2001:16) suggested that the role of the researcher in qualitative work is to be fully engrossed in the situation and event. The researcher in this study took an interactive social role during interviews when observations were recorded. Qualitative researchers are renowned for self reflection and regimented subjectivity of their role throughout the research study (McMillan & Schumacher, 2001:16).

The researcher established a relationship with each participant, based on mutual trust, respect, and reciprocal co-operation. Interviewees were given a comprehensive account of the purpose, focus, and procedures of the study. Participants were assured that all information was confidential and the researcher guaranteed anonymity. Participants

received an overview of the interview content and context and highlighted the importance of the data. The research aims, research design, informed consent, withdrawal, time frames, use of audiotape, strategies to protect and respect the site, and focus interview schedule were unambiguously explained and set out in writing for participants.

4.4.3 Privacy and confidentiality

The researcher guaranteed participant privacy and protected the information participants shared. Privacy refers to the participants' right to keep their information unattainable by other people. Participants were given free choice to participate in the study. All participants provided informed consent (see Par. 4.4.4). They had the right to not complete the surveys or participate in the focus group interviews. They could withdraw from participating in the research at any stage. The researcher did not unnecessarily enter into participants' private lives, collect personally identifiable data, ask compromising questions, or ask for sensitive information. Questions were professional and non-invasive. Privacy practices, research aims and procedures, and use of data were explicitly explained upfront in writing during both phases of the research. Participants knew exactly the expectations before participating in the research and how their privacy would be protected.

The Lime Survey web-based tool provided the option of not sharing responses with anyone else. This ensured that responses were kept protected, private and not public. The researcher ensured confidentiality and anonymity for all participants (Creswell, 2014:94) by not using identifiable data when collecting survey responses through the web-based tool (McMillan & Schumacher, 2001:198). Lime Survey web-based tool allowed the researcher to collect all responses anonymously by disabling the function to store e-mail addresses and IP addresses. Participants logged onto Lime Survey by using a code to protect their identity. Access to data was limited to the researcher. The researcher used a username and password to log onto Lime Survey on a private password protected computer in a secure setting. Names of all participants were withheld at all times.

4.4.4 Informed consent

All participants were required to check the consent-box indicating that they agreed to participate in the quantitative research phase (Sue & Ritter, 2012:28; Creswell 2014:96) or signed informed consent in the qualitative research phase (see Appendix 5). Informed consent protects participants by including comprehensive data about the proposed research (purpose/duration/procedures) and present sufficient information for participants to make a fully informed decision, also known as autonomous authorisation. Informed consent was voluntary, and participants were given the option to withdraw at any time for any reason. Sue and Ritter (2012:28) and Creswell (2014:96) emphasised that the informed consent form should include the following components to protect the human rights of all participants:

- Information about the researcher.
- Naming the sponsoring institution.
- Explicitly outlining the aim of the study.
- Delineating the benefits for participants.
- Intensity and nature of participant involvement in the research.
- Details of risk for participants.
- Assurance of confidentiality to all participants.
- Declaration that participants can withdraw at any time.
- Make names and contact details available if questions arise.

The informed consent and check-box options were sent out in the e-mail invitation, which was included in an e-mail message sent to participants (see Appendix 5 and Appendix 6) (Sue & Ritter, 2012:109-119). The first e-mail was sent to the entire target samples of managers and educational psychologists. It contained the link inviting participants to take part in the survey (QUAL phase one) after checking the consent-box. After the analysis of the quantitative data, a second e-mail was sent to the six managers whom were identified for the focus group interviews during the second phase. The informed consent form was attached to the second e-mail and required a signature from participants. Participants were encouraged to read the informed consent form before sending it back to the researcher. The researcher did not detect any risks or possible harm from the proposed research and consequently did not include any information regarding identified risks in the informed consent form.

4.5 VALIDITY AND RELIABILITY

Validity and reliability are the two most important decisive factors for determining the quality of a research project (McMillan & Schumacher, 2001:239; Pallant, 2011:6; Sue & Ritter, 2012:28-29). Creswell (2014:155) stated: ... *the validity and reliability of scores on instruments lead to meaningful interpretations of data*. Validity and reliability have an effect on the quality of the data in a study according to Pallant (2011:6). Validity of a scale is defined by Pallant (2011:6) as: ... *refers to the degree to which it measures what it is supposed to measure*. The author also suggested that no specific characteristic of a scale's validity exist. It can only be validated by gathering empirical data relating to the topic under exploration (Pallant, 2011:6). Content validity, construct validity, and criterion validity are described as the three main categories of validity. According to Pallant (2011:7):

Content validity refers to the adequacy with which a scale has sampled from the intended universe, construct validity involves testing a scale... in terms of theoretically derived hypothesis concerning the nature of the underlying variable or construct, and criterion validity concerns the relationship between scale scores and some specific, measurable criterion.

Creswell (2014:201) further explained that validity in quantitative research has a different meaning than validity in qualitative research. During this study, the researcher established the validity of the scores from the quantitative measures during the first phase and considered the validity of the qualitative findings during the second phase (Creswell, 2014:225).

McMillan and Schumacher (2001:166-167) defined quantitative research design validity as the degree to which a relationship exist between the scientific explanation of the occurrence and reality. These authors further elaborated that test validity entails far more than just verifying if a test measures specifically what it was developed for. It is the conclusion, application, or consequences that are valid or invalid, not the test. The Standards for Educational and Psychological Testing was quoted to support this view (Standards for Educational and Psychological Testing, 1985:9, 13; Standards for Educational and Psychological Testing, 2000:9 cited by McMillan and Schumacher,

2001:239-240): *Validity refers to the appropriateness, meaningfulness, and usefulness of the specific inferences made from the test scores. Validity refers to the degree to which evidence and theory support the interpretation of test scores entailed by specific uses of tests.*

Pallant (2011:5) stated that it is difficult to find the most appropriate validated scales for a study. She suggested that researchers review associated literature carefully to discover which measures were implemented successfully in related studies. Two independent, web based surveys were developed, as described (see Par. 4.6). One survey was developed for managers and a second survey was developed for educational psychologists. These surveys were created by amending, rephrasing, and modifying components from the International School Psychology Association International School Psychology Survey (2008). The ISPA ISPS was based on the National Association of School Psychology survey (Jimerson et al., 2008:7). Both questionnaires concentrated on five focus areas: demographic characteristics; workload; service delivery models; professional and organisational management; and professional supervision. Furthermore, the researcher presented participants with an opportunity to make any additional comments related to the phenomena for selected questions.

Written permission was obtained from ISPA Research Committee to use the ISPA ISPS to use and amend questionnaires (Pallant, 2011:5-6). The scores obtained from the NASP survey and the ISPA ISPS during the last three reiterations (Jimerson et al., 2004:259-286; Jimerson et al., 2006:5-32; Jimerson et al., 2008:5-28; Curtis et al., 2010:28-30; Curtis et al., 2012:1, 28-30) demonstrated high levels of validity and reliability. The test-retest reliability of the scales used in these studies were confirmed by repeating the research several times and administering the surveys to educational psychologists (Pallant, 2011:6). These surveys items accurately measured the contents they were developed to measure. Thus, they reflected a high level of content validity and internal consistency (Pallant, 2011:5-6; Creswell, 2014:160). The results of these two longitudinal studies (NASP; ISPA ISPS) not only correlated with one another, but also were current and showed consistency over time. Creswell (2014:160) defined the relationship that the two sets of results have to one another as the predictive variable. The scores are also incredibly useful to researchers, managers, and educational psychologists. Most literature cited for this current study referred to, and built on, the results from the two dominant longitudinal studies.

These results significantly influenced and informed policies, educational psychologists' professional practices, advocated for children, youth and families (Curtis et al., 2012:1).

The researcher counteracted threats to the internal and external validity during the quantitative research phase by implementing the following strategies:

- The researcher planned the time frames for administering the web based surveys by seriously considering the most opportune time. In addition, McMillan and Schumacher (2001:190) suggested that it is advantageous for researchers to conduct research at the most favourable time to negate subject attrition.
- The researcher developed web based surveys that were succinct and to the point, with a realistic number of questions to ensure that participants stayed focussed and answered all questions from start to finish with the same vigour (McMillan & Schumacher, 2001:190; Sue & Ritter, 2012:51).
- The researcher ensured that instrumentation (web surveys) was clear, well worded, achievable, and not difficult to complete (McMillan & Schumacher, 2001:190; Sue & Ritter, 2012:51).
- The researcher considered the quantitative results and how they can be generalised to a wider population of educational psychologists and their managers. The researcher anticipated that the results from this research can be generalised to those who manage educational psychologists in various contexts/settings, professionals who have similar characteristics as educational psychologists in this research, registration, affiliation and training. It may also influence policies or legislation concerned with managing educational psychologists in various settings (McMillan & Schumacher, 2001:190; Curtis et al., 2012:1; Sue & Ritter, 2012:51).
- The researcher considered the various ways of using the data from this research. The researcher is of the opinion that the data will have a significant effect on her personal professional management performance. Data will enable the researcher to effectively manage and lead in a professional service organisation, more specifically educational psychologists. The data will also contribute to the gap in the literature. Furthermore, the data may contribute to the knowledge base in both the educational psychological and management domains.

Creswell (2014:225) strongly advocated for implementing additional validity measures during an explanatory sequential mixed methods study. Based on Sue and Ritter's (2012:55-56) and Creswell's (2014:225) recommendations, and the researcher's personal considerations, the researcher implemented several measures:

- The researcher ensured that the wording of survey questions was correct, precise, and succinct.
- The researcher also ensured that sufficient and appropriate response options were given for each question.
- The researcher gathered the qualitative data from the same sample of managers that participated in the quantitative phase.
- The sizes of the manager and educational psychologist samples during phase one and the managers sample during phase two were based on the optimal numbers suggested by McMillan and Schumacher (2001:177-180, 401, 405) and Creswell, (2014:189).
- The researcher also considered opportunities and possibilities yielded during the quantitative phase that needed to be followed up in the qualitative phase. This enabled the researcher to follow up on the most appropriate options that yielded data which answered the research questions.
- The researcher guarded against deliberately or non-intentionally influencing participants while the web surveys were administered. The only mode of communications was through the Survey Monkey website.

Conversely, Creswell (2014:201) (Creswell & Miller, 2000, cited by Creswell, 2014:201) described validity within qualitative research as: *... one of the strengths of qualitative research and is based on determining whether the findings are accurate from the standpoint of the researcher, the participant, or the readers of an account.* The author explained that quantitative validity implies that the researcher monitors the validity of outcomes by implementing specific strategies to ensure that the researcher, participants, and readers experience an account similarly. With this in mind the researcher used the following qualitative claims of validity, based on data collection and analysis techniques from McMillan and Schumacher (2001:407-410), Creswell (2013a:246, 250-252), and Creswell (2014:201-202):

- Prolonged fieldwork – the in-depth understanding of the phenomenon enhanced the researcher’s ability to describe the site and people, and give credibility to the qualitative data (Creswell, 2014:202).
- The researcher was able to triangulate data from observation, artefact analysis, quantitative data from managers and educational psychologists, and qualitative data from a sample of managers during the focus group interviews.
- The focus group interviews were captured on audio recordings. The researcher transcribed the tapes and documented the verbatim accounts of participants’ language. Details of interviewees’ nonverbal communication were also written down during the interviews (Creswell, 2013a:253).
- The interviews were recorded to guarantee that verbatim accounts were captured. The transcripts were made available to participants for review to ensure accuracy and validity.
- The researcher used rich, thick descriptions (Creswell, 2013a:252; Creswell, 2014:202) to show the qualitative outcomes to provide the reader with a complete, elaborate picture of the site.
- An external auditor reviewed different stages of the entire research project. This auditor is a registered educational psychologist who has extensive research experience and published numerous educational psychology research projects. This resulted in vigorous scrutiny of the current research by a capable and highly regarded professional.

Reliability in quantitative research refers to consistency and precision in measurement (McMillan & Schumacher, 2001:244). McMillan and Schumacher (2001:244) further defined reliability as: *... the extent to which the results are similar over different forms of the same instrument or occasions of data collection*. Pallant (2011:6) defined reliability of a scale as the extent to which it is free from accidental error. Test-retest reliability and internal consistency are applied to determine a scale’s reliability (Pallant, 2011:6). Several strategies were employed in the current study to ensure and enhance reliability of the measurements in the present research:

- The researcher presented elaborate, clear descriptions of the research aims, the researcher’s role, participant characteristics, participant selection criteria and techniques, and the context and site.

- The explanatory sequential mixed methods design allowed for multiple data collection techniques and analysis modes that resulted in the triangulation of methods.
- The conditions and procedures of data collection were consistent throughout the research project (McMillan & Schumacher, 2001:249). The researcher meticulously documented each step in the research design diagram (see Appendix 3) and the data collection procedure (see Par. 4.6). The researcher provided all participants with the same instructions for both phases of the research, and equal time and conditions to complete the questionnaires.
- The focus group interviews were audio-recorded. This provided accurate, verbatim transcriptions of the interviews. The researcher personally administered both the web surveys and conducted the focus group interviews.
- All participants were highly qualified, educated, and experienced. Participants were able to read, interpret, and answer questions in English. There were no ambiguous questions posed in the questionnaires or during the interviews.
- The researcher motivated participants during both phases of the research by providing an outline of the importance, value, and possible contributions of the research data in the informed consent letter. The implications of the current research were beneficial for both managers' and the educational psychologists' professional performance.
- The researcher conducted pilot testing with one manager and one educational psychologist (Pallant, 2011:5-6; 9). This enabled the researcher to adjust the instrument questions, scale items, and format. Participants in the pilot tests were not part of the sample groups who participated in the actual research.
- The researcher strategically calculated the number of questions posed in the questionnaires. The researcher kept a balance between not too many questions that could burden participants and enough (increased number) questions to increase reliability.

4.6 INSTRUMENTATION

4.6.1 Questionnaires

There were multiple objectives to this study. First, the researcher aimed to describe the participants and a situation (Sue & Ritter, 2012:2) by using the descriptive research method. Demographic information was gathered from participants (Pallant, 2011:7). A set of research objectives (see Par. 1.4) were posed to guide the research (Field, 2011:4). Second, the researcher intended to explain why the phenomenon occurred, so used the explanatory research design. The explanatory research design was characterised by the research hypotheses that was stated earlier (see Par. 1.5) (Sue & Ritter, 2012:2).

The explanatory sequential mixed methods research design allowed the researcher to collect data through multiple strategies of inquiry and data collection techniques. During phase one of the research, the researcher used a non-experimental design based on the fact that there was no experimental group selection. Pallant (2011:5) suggested that various ways exist for gathering data. The ways of collecting data depends on the nature of a research project and may entail: *measuring output or performance on some objective criteria, or rating behaviour according to a set of specific criteria* (Pallant, 2011:5). Survey research was deemed the most appropriate method of data gathering. Pallant (2011:7) and Sue and Ritter (2012:3) described surveys as systems that are utilised to collect data from participants. Iarossi (2006:4) stated that surveys are inevitably part of our lives. The researcher considered various methods for administering the survey that were proposed by Sue and Ritter (2012:3), namely: self-administered mail, face-to-face interviewing, e-mail survey, web-based, mobile surveys. The e-mail survey method was preferred because it allowed the researcher to include the link that led to the questionnaire. Sue and Ritter (2012:14) asserted: *... we mean surveys created using survey software and accessed by respondents through a link in an e-mail invitation*. Other considerations that led to the selection of the e-mail survey method included (Iarossi, 2006:1-8; Dillman, Smyth & Christian, 2009:15-40; Sue & Ritter, 2012:5, 10, 14):

- Study can include large sample sizes.
- Can research and include participants who geographically spread apart. The surveys can be e-mailed to participants across the world.

- Web-based e-mail surveys are economical and cost effective to distribute and return.
- Quick turnover rate.
- The e-mail surveys can be kept in the field for an extended time, if needed.
- Both samples have full access to high quality technology and fast internet services. E-mail surveys will be sent to work e-mail addresses.
- All participants were trained, capable, and proficient computer/Internet users.
- Sue and Ritter (2012:11) noted that an existing e-mail list provides efficiency during an e-mail survey.
- The researcher has the technical ability, confidence, and proficiency to create, use and administer an online survey.
- Data can be directly entered and analysed with online Survey Monkey software.

The e-mail survey data collection method posed disadvantages and challenges. The researcher made use of the following tactics to negate these disadvantages: pre- testing the software (Pallant, 2011:5; 9), administering the survey in a time when most other research projects are completed, and ensuring that all participants had access to the required technology. Dillman et al. (2009:44) stated that the Internet is a useful way to gather data from a targeted population, but warned against coverage gaps. The next two sections will examine and explain the two questionnaires (see Appendices 6 and 7).

The questionnaire for managers was divided into five sections to demarcate the different focus areas of the research (see Appendix 6). It consisted of 28 items or questions for managers (Q^m). The coding Q^m is used to refer to questions asked in the managers' survey:

- Section A: Biographic characteristics of service managers.
- Section B: Management of educational psychologists' workload.
- Section C: Management of service delivery model used by educational psychologists.
- Section D: Management structure and professional management of educational psychology services.
- Section E: Management of professional supervision of educational psychologists.

Survey questions are developed and used as a measurement tool to elicit respondents' opinions, knowledge of a phenomenon, and behaviours (Dillman et al., 2009:68; Pallant, 2011:9; Sue & Ritter, 2012:51). Pallant (2011:10) and McMillan and Schumacher (2001:258) stated that questions must be clearly and directly related to the research objectives. They must also be self-explanatory, easy to understand and answer, free of jargon, and visually appealing. The researcher excluded graphs, pictures, audio, video content, and contingency questions to keep the questionnaire as succinct and precise as possible. Pallant (2011:10) provided recommendation to improve questionnaire quality and advised researchers to steer clear of: *long complex questions, double negatives, double-barrelled questions, jargon or abbreviations, culture specific terms, words with double meanings, leading questions, and emotionally loaded words.*

The on-line survey questionnaire for managers included both open-ended and closed-ended questions (McMillan & Schumacher, 2001:260-265; Dillman et al., 2009:72-77, 108-150; Pallant, 2011:7-8; Sue & Ritter, 2012:55-67) (see Appendix 7). The open-ended questions required participants to type responses in their own words and were mostly used to gather data on the demographics of managers (Section A:Q^m 2/Q^m 3/Q^m 4/Q^m 5/ Q^m 6/Q^m 7/Q^m 8/Q^m 9), ideal management appointment (Section C:Q^m 2), workload management systems (Section D:Q^m 2/Q^m 5), and on educational psychologists; engagement in clinical supervision (Section E:Q^m 2). Dillman et al. (2009:72) and Pallant (2011:8) claimed that open-ended questions provide respondents with opportunity to answer questions freely and unreservedly.

The rest of the questions were closed-ended. Dillman et al. (2009:72-77), Pallant (2011:7-8), and Sue and Ritter (2012:60) stated that closed-ended questions offer respondents a number of responses from which to select. These questions include all possible response options. Combinations of dichotomous questions were included: yes/no, male/female (Section A:Q^m 1/Section C:Q^m 4), multiple-choice (Section B:Q^m 1/Section C:Q^m 1/ Q^m 3/Section D:Q^m 1/Q^m 4/Q^m 6), ranking (Section D:Q^m 7), and unipolar rating scaled (Section B:Q^m 2/Section C:Q^m 5/Section D:Q^m 3/Q^m 8/Section E: Q^m 1/Q^m 3/Q^m 4). The mixture of closed and open-ended questions is predominantly valuable in the early stages of research in an area, as it gives an suggestion of whether the defined response categories sufficiently covers all the responses that respondents wish to give (Pallant 2011:9).

The questionnaire for educational psychologists was structured similarly to the one for managers. The coding Q^{EP} is used to refer to questions asked in the educational psychologists' survey. The survey was divided into five sections to demarcate the different objectives of the research and consisted of 24 items or questions (Q^{EP}) (see Appendix 7):

- Section A: Biographic characteristics of educational psychologists.
- Section B: Educational psychologists' service delivery models.
- Section C: Management appointments.
- Section D: Workload management.
- Section E: Educational psychologists' engagement in clinical supervision.

The survey included open-ended (Section A:Q^{EP} 2/Q^{EP} 3/ Q^{EP} 4/Q^{EP} 5/Q^{EP} 6/Q^{EP} 7/Section C:Q^{EP} 2/Section D:Q^{EP} 4) and closed-ended questions. The open-ended questions included dichotomous (Section A:Q^{EP} 1/Section C:Q^{EP} 4), multiple-choice (Section B:Q^{EP} 1/Section C:Q^{EP} 1/Q^{EP} 3/Section D:Q^{EP} 1/Q^{EP} 3/Q^{EP} 5), unipolar rating scale (Section B:Q^{EP} 2/Section C:Q^{EP} 5/Section D:Q^{EP} 2/Q^{EP} 7/Section E:Q^{EP} 1/Q^{EP} 2/Q^{EP} 3) and ranking scale questions (Section D:Q^{EP} 6). No graphs, pictures, audio, video, or contingency questions were used.

4.6.2 The interview schedule

The qualitative research phase involved interviews with six informative, purposefully selected managers (Creswell, 2013b:78, 81; Creswell, 2014:190). Creswell (2014:190) proposed that researchers conduct face-to-face focus group interviews with six to eight participants. Focus group interviews are an important data collection procedure implemented in this study to elaborate and enhance the quantitative data. These interviews allowed a wider channel of communication and for the researcher to ask participants to clarify or repeat their answers.

The researcher developed a set of open-ended questions based on four of the five focus areas covered in the questionnaire: biographical characteristics, workload management, management appointment, and educational psychologists' engagement in clinical supervision. The open-ended questions were formulated and emerged based on the outcome of the quantitative data analysis. The researcher developed an interview protocol

containing the following information (see Appendix 8): name of the research project, summary of project and aims, date, time, place, name of interviewer, and the interview questions.

4.7 DATA COLLECTION PROCEDURES

4.7.1 Questionnaires

Data collection procedures formed an essential part of the research process. The researcher developed a distinct, step-by-step plan to guide the quantitative data collection process for the research (see Fig. 4.3). The data collection model is based on recommendations from the literature (McMillan & Schumacher, 2001:258-261; Iarossi, 2006:9-10; Dillman et al., 2009:33-40, 271-299; Sue & Ritter, 2012:14-133). The success of any research study is strongly associated with a well constructed research survey plan. The first step in the data collection plan was to select an appropriate survey method that was derived from the research objectives. The main elements of a survey plan, that warrant serious consideration during the first step according to Sue and Ritter (2012:14) are:

- Selection of survey style.
- Choose of survey software.
- Formulate and put clear project objective in writing.
- Set timelines.
- Address all ethical considerations imperative to the online survey environment.

Participants were selected in step two of the survey plan, based on the survey objectives as explained (see Par. 4.3). Two samples were randomly selected from departments of education and national educational psychological associations from Ireland, India, South Africa, Switzerland, and Sweden, to participate in the survey. Both sample groups were selected by a combination of non-probability purposeful sampling and convenience sampling techniques (Iarossi, 2006:18-20; Dillman et al., 2009:41-43, 49-61; Sue & Ritter, 2012:33-47). The managers were representative of a larger population of managers who manage and lead educational psychologists in various settings in selected countries. The sample of educational psychologists was representative of educational psychologists in selected countries.

In step three, the researcher developed a robust, valid, reliable invitation (see Appendix 5) and survey questionnaires (see Appendices 6 and 7) (Iarossi, 2006:10-11, 27-67; Dillman et al., 2009:65, 79-89, 275-277; Sue & Ritter, 2012:51), as explained (see Par. 4.6.1). The researcher paid particular attention to the following aspects in developing the invitation and questionnaire development phase (Sue & Ritter, 2012:51):

- Stay focussed on survey objectives.
- Create valid and properly constructed questions.
- Give clear, concise instructions.
- Edit invitations and survey questionnaires to eliminate typos and errors.
- Plan questionnaire layout and format to be professional and appealing.
- Select most appropriate question formats.
- Consider the four scales of measurement when writing survey questions: nominal measures/ordinal measures/interval measure/ratio scales of measures.
- Adhere to ethical rules and refrain from asking sensitive information or question that may jeopardise participant anonymity.

The entire process of administering the online survey was presented in step four (McMillan & Schumacher, 2001:267; Iarossi, 2006:10-11; Sue & Ritter, 2012:130). The researcher selected an educational psychologist and a manager to participate in the trial survey process from beginning to end. The educational psychologist and the manager were excluded from the actual research. Only two test respondents participated in the pre-test based on the small size and limited number of the sample frames (Sue & Ritter, 2012:130). The small number of respondents did not correspond to the suggested sample of five to 10 individuals.

In step five, the researcher considered respondents' comments and suggestions regarding survey time frames, technical matters, content, and process. The survey plan was revised and the suggested modifications were implemented before the pre-test data was deleted in preparation of the full launch. The full launch of the survey took place during step six. E-mails with the survey invitations and questionnaire links (managers and educational psychologists) were distributed to all organisations and associations that provided approval for the researcher to conduct research. The researcher had a contact person in

each research cite and communicated by phone and email. The surveys were launched on a Monday and were active for two weeks.

Step seven was crucial to the survey plan. Participants chose or declined (opt out) to participate in the research. Respondents made a decision based on the information they received in the e-mail invitation, as described (see Par. 4.4.4). When a participant agreed to complete the online survey, they selected (clicked) the consent-box. The eighth stage gave participants access to the link that stated: *Click here to begin the survey.* Alternatively a person can decide not to participate and withdraw from the study at this stage. No exploration (reasons) or follow up contact resulted from the participants' decision to not participate.

Non-responders received strategically timed reminders on the first Friday and a final reminder on the Wednesday before the final Friday during stage nine of the survey plan. The researcher aimed to increase the response rate with these reminders (Sue & Ritter, 2012:131). The tracking report of the e-mail recipients guided the researcher's decision about whom to send reminders to (Dillman et al., 2009:278-280; Sue & Ritter, 2012:142-143). The researcher's implementation was strengthened by these authors declaration: *Uploading an e-mail distribution list to a web-based survey host for the deployment of the survey simplifies the process, as you can track completed responses via the host's software.*

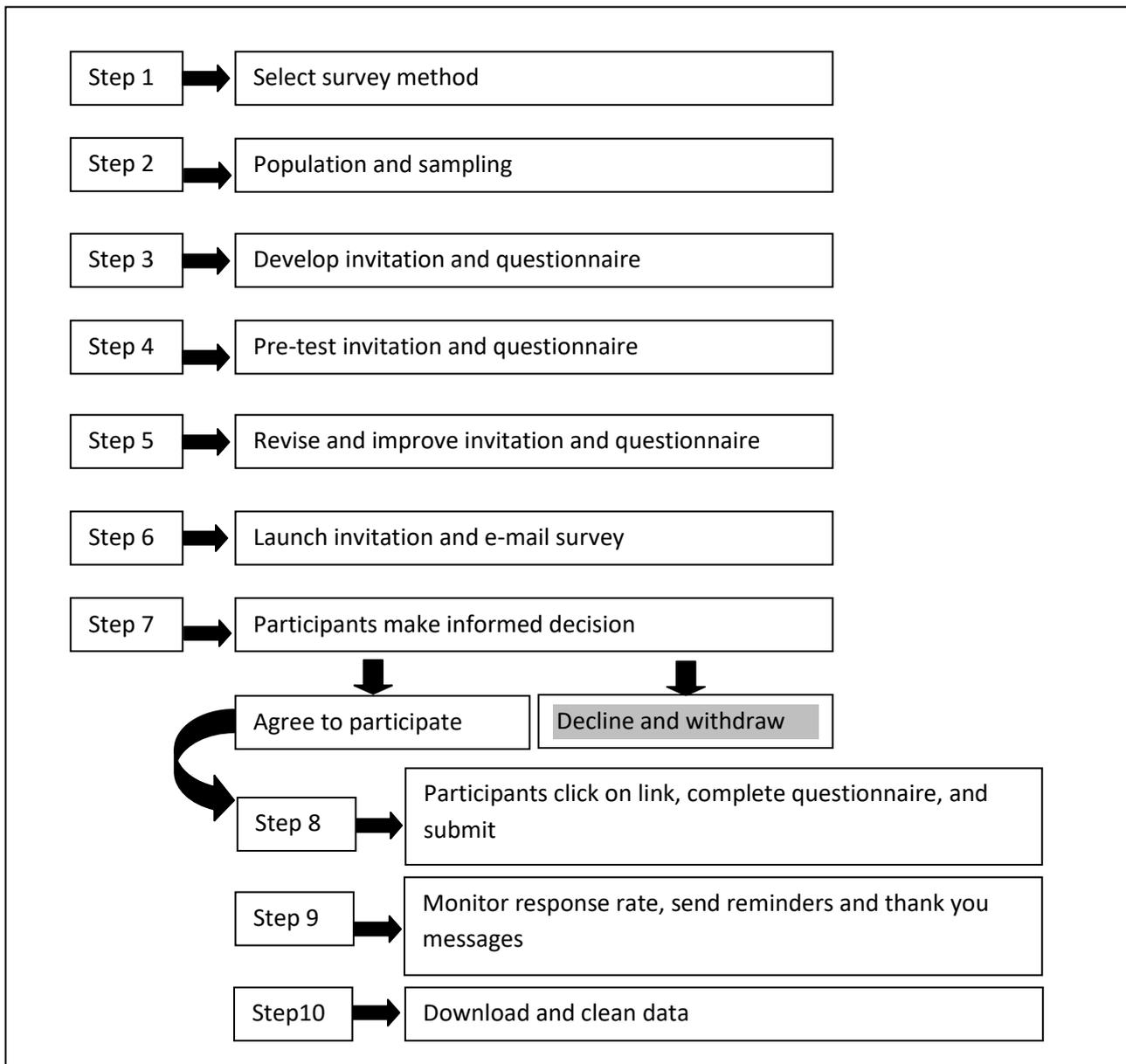


Figure 4.3. Survey plan (Adapted from McMillan & Schumacher, 2001:258-261; Dillman et al., 2009:33-37; Sue & Ritter, 2012:5, 14-138).

4.7.2 Focus group interviews

The researcher selected an interactive, transcendental (or psychological phenomenological) design for the qualitative phase of this research (McMillan & Schumacher, 2001:443-445; Creswell, 2013b:76-83, 273, 259-260; Creswell, 2014:187). Creswell (2013b:76) stated that phenomenological research: ... *describes the common meaning for several individuals of their lived experiences of a concept or a phenomenon.* Additionally, Creswell (2013b:76) stated: ... *psychological phenomenology is focussed less on the interpretation of the researcher and more on a description of the experiences*

of participants. However, McMillan and Schumacher (2001:445) contradicted this previous view and stated: *Phenomenological interviews permit an explicit focus on the researcher's personal experiences combined with the experiences of the interviewees.* The researcher was aware of these opposing views and aimed to keep a balance throughout the interview process.

The researcher wanted to describe managers' universal managerial leadership activities that influence educational psychologists' professional performance. These managers were purposefully selected for the focus group interviews because they experienced the phenomenon under investigation and were in management roles. Thus, the researcher took a fresh look at the topic under investigation by setting personal experience aside (Moustakas, 1994 cited by Creswell, 2013b:80).

The researcher developed a step-by-step plan to lead the focus group interview process based on suggestions for data recording procedures from prominent authors (McMillan & Schumacher, 2001:405-407; Creswell, 2013b:145, 163; Creswell, 2014:193-194).

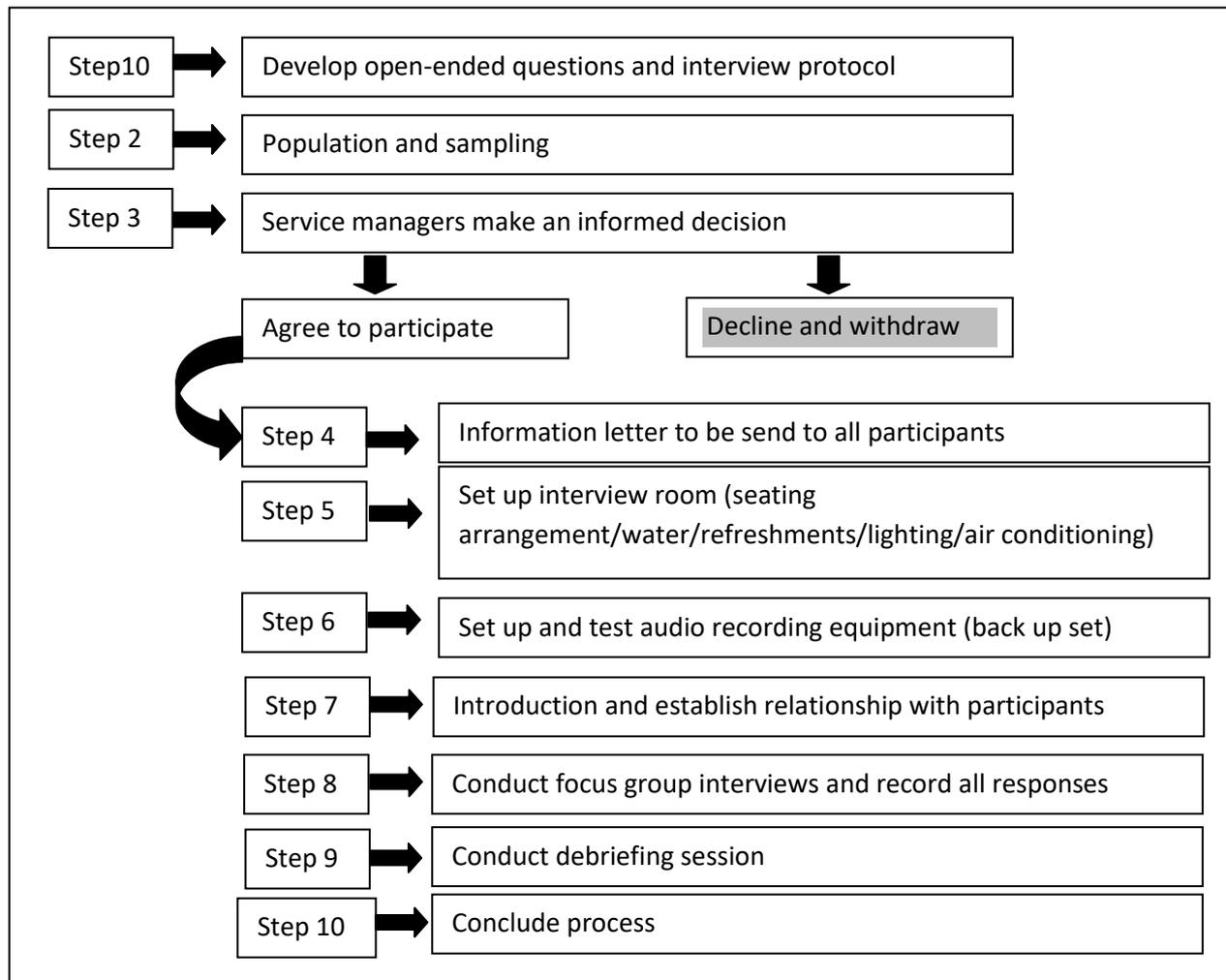


Figure 4.4. Focus group interview plan.

The open-ended questions for the interviews were developed during step one and included in the interview protocol (see Appendix 8). After the questions were compiled and the interview protocol finalised, the researcher purposefully selected the manager sample. An invitation (see Appendix 4) went out to six managers to invite them to participate in the focus group interviews (Creswell, 2013b:78, 81; Creswell, 2014:190). The researcher kept a list with 10 possible participants in case some managers chose not to participate and opt-out. The invitation included the same information that was used in the e-mail invitation during phase one of the research (see Par. 4.4.4). The only differences were that the participants received a paper copy and signed the informed consent section (Creswell, 2013b:166) (see Appendix 4). Informed consent was given by those managers who agreed to participate in the interviews in step three. Managers who declined were not approached again and withdrew from the study. Another manager from the list was approached until the researcher obtained informed consent from four managers.

Step four entailed finalising all arrangements for the focus group interviews. The researcher sent out letters that contained: research aims, venue, date, and time. Steps five and six started the day before the interviews were conducted. The room was cleared, cleaned and prepared for the interviews. Special attention was paid to seating arrangements to ensure optimal audio recording and face-to-face positioning. The researcher also considered the most favourable lighting and air conditioning settings. A white board with the research goals was placed for all participants to see. Water and a fresh fruit plate were placed on the table.

The researcher set up and tested two sets of Panasonic audio recording equipment to minimise possible equipment failure during the interview process (Creswell, 2014:194). The second set of recording equipment, charger, batteries, power, and electrical leads were tested and set up at the back of the interview room as backup. Creswell (2014:194) strongly recommended that researchers take written notes during interviews in case the equipment fails. The researcher and participants tested the equipment again before the interviews started in step seven. The researcher established relationships with participants based on mutual trusts, respect, and reciprocal co-operation before stating the interviews with an introduction. The interviewees were provided with a comprehensive account of the purpose, focus of the interviews, interview content, and importance of their contributions. The researcher re-iterated that all information was confidential and anonymous.

The researcher started with step eight and asked the open-ended questions after interviewees were relaxed and ready. All responses were recorded. Non-verbal cues and tactic modes of communication were meticulously noted during the interviews. These notes augmented the recorded data during the analysis stage. Step nine was the debriefing session after the interviews were conducted. Participants were offered an opportunity to clarify any misunderstanding that may have occurred. The researcher ended the interview when all participants were thanked for their contributions and time (Creswell, 2014:194). The researcher stayed in the interview room after all participants left to reflect and make notes of interruption.

4.8 ANALYSIS, INTERPRETATION AND PRESENTATION OF DATA

4.8.1 Quantitative data analysis, interpretation, and presentation

The quantitative data obtained from administering the two independent questionnaires were analysed by following the steps defined by Pallant (2011:28) in Figure 4.5.

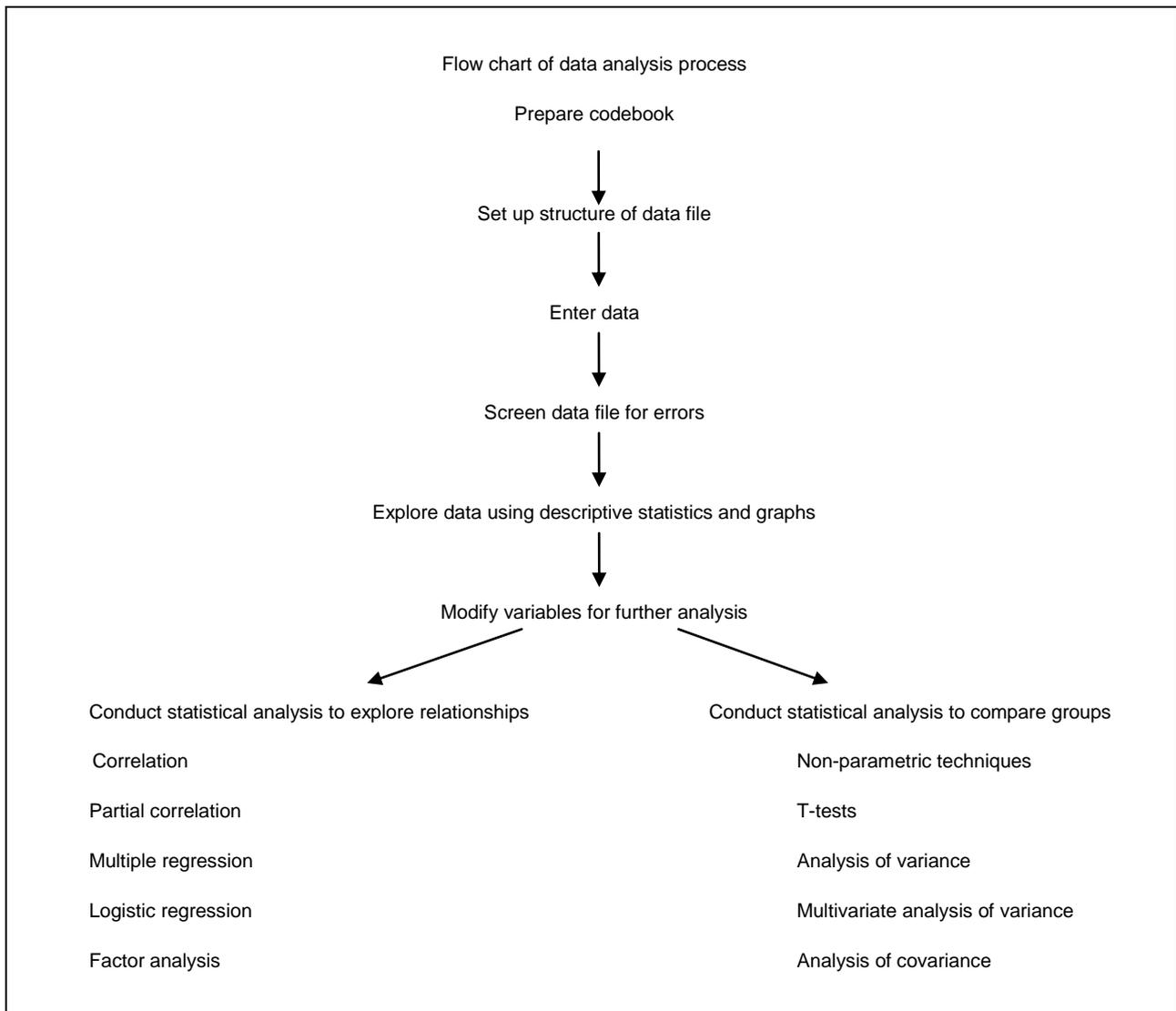


Figure 4.5. Data analysis flow chart (Pallant, 2011:28, 37-38)

Before systematic data analysis could be carried out, the researcher needed to clean the data as illustrated in Figure 4.6. This process involves identifying and rectifying any data-entry errors, incomplete answers, answers out of the possible range, and questionnaire programming errors (Sue & Ritter, 2012:147-148). Sue and Ritter (2012:147-148) summarized the three-stage data cleaning process for web surveys: screening phase,

diagnostic phase, and treatment phase. The researcher applied all three stages by scanning and examining the spreadsheets and summaries (screening phase) to uncover any strange data points and then rectifying or documenting the errors. The main reason for cleaning the data is to ensure accurate and ethical data analysis and reporting.

Pallant (2011:102-121) suggested a step-by-step process for choosing the right statistic:

- The type of question the researcher aim to address.
- The type of item and scale of measurement that the researcher incorporated in the questionnaire.
- The nature of data that is available for variables.
- The underlying assumptions and requirements that must be met for a statistical technique.

Data analysis and reporting requirements verified the most suitable level of measurement for each item on the questionnaire (Sue & Ritter, 2012:67-68). Descriptive statistics described and summarised data. Inferential statistics identified associations and relationships that informed predictions and generalisations. Sue and Ritter (2012:150) concisely defined descriptive statistics as the method that is implemented to explain the fundamental features of the data in a study, and summarise the sample and answers to survey questions. The researcher ran descriptive univariate statistics on the data set before the more complex analysis began. The main aim of the descriptive analysis was to collect, organise, summarise, and present data that described the characteristics of these samples and situations. Sue and Ritter (2012:150) described the purpose of descriptive statistics as depicting the essential characteristics of data in research.

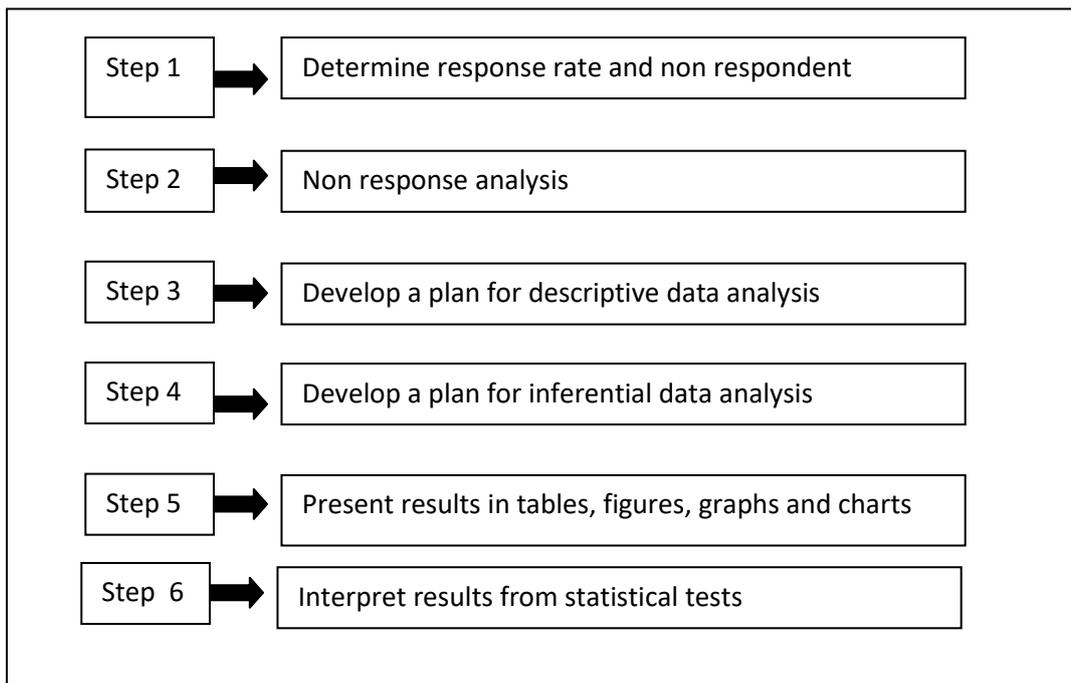


Figure 4.6. Quantitative data analysis, interpretation, and presentation plan (Adapted from Sue & Ritter, 2012:150).

Descriptive statistics portrayed the frequency distribution of all questionnaire items and reported summary statistics (measures of central tendencies/measures of distribution). These descriptive statistics were represented as tables, percentages, charts, and frequency distribution tables (Sue & Ritter, 2012:150). Nominal data was displayed as tables, pie charts, column charts, and bar charts. Ordinal measurements were displayed in tables, column charts, and bar charts. Interval and ration measures were depicted on tables, bar charts and histograms.

4.8.2 Qualitative data analysis, interpretation, and presentation

McMillan and Schumacher (2001:405, 461) and Creswell (2013b:182) agreed that qualitative data analysis is inductive, interactive and occurs in overlapping cycles. Data is organised into categories and patterns. These categories are then labelled and captured. Creswell (2013b:180) defined data analysis in qualitative research as: *... the preparation and organising data for analysis, then reducing the data into themes through a process of coding and condensing the codes, and finally representing the data in figures, tables, or a discussion.* Creswell (2013b:179) also stated that qualitative data analysis is more than analysing text and illustrating information. The author stated: *It also involves organising the*

data, conducting a preliminary read-through of the database, coding and organising themes, representing the data, and forming an interpretation of them.

Data analysis and interpretation in quantitative research entail segmenting data and taking it apart before assembling it again (Creswell, 2014:194). The researcher used interpretative, subjectivist approach in the qualitative data analysis. She used a combination of manual and computer-assisted methods (McMillan & Schumacher, 2001:261). The quantitative data analysis and interpretation plan developed for this research is not linear; however these steps overlap and interrelate (Creswell, 2014:196) (see Fig. 4.7).

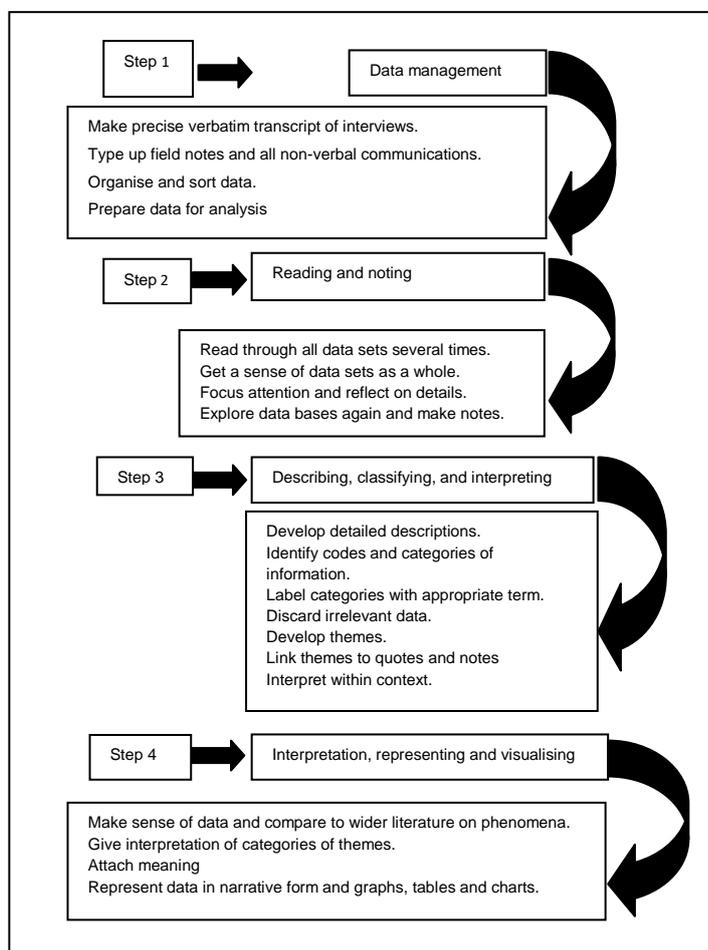


Figure 4.7. Qualitative data analyses, interpretation, and representation plan (Adapted from McMillan & Schumacher, 2001:468-482; Creswell, 2013b:182-187; Creswell, 2014:197-201)

4.9 SUMMARY

The researcher began this chapter with the theoretical perspective, research design, research paradigm, approaches, and underlying philosophies that underpin the current research. The theoretical perspective and research design were (see Appendix 1). The rationale for choosing the mixed methods approach was explained. The researcher thinks that neither the quantitative approach nor the qualitative approach on its own would be able to provide sufficient data to answer the research questions satisfactory.

The origin of the research purpose, sub-problems, and objectives were discussed. The researcher exposed the gap in the knowledge base concerning managing educational psychologists, lack of research on the phenomena, and the need to answers to the researcher problems. In addition, the population and sample of managers and educational psychologists were described. All ethical considerations were explicitly stated by describing the researcher's competency and relationship to participants. Clear explanations were provided on the procedures that were followed to ensure participant privacy, anonymity, and confidentiality. Informed consent processes were clearly described for both phases of data collection.

Validity and reliability in the quantitative and qualitative research phases were important factors that influenced the quality of the research project. Strategies were presented to negate the threats to internal and external validity during the quantitative and qualitative research phases. Furthermore, strategies were given to enhance reliability of measurement. The researcher described the two instruments developed for the research: Two questionnaires (see Appendices 6 and 7) and focus group interview schedule (see Appendix 8). Data collection procedures were delineated by proposing the survey plan and focus group interview plan. Finally, the quantitative and qualitative data analysis, interpretation, and representation procedures and plans were presented. In Chapter 5, the researcher will present and analyse the data obtained from the two questionnaires and interviews.

CHAPTER 5

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

5.1 INTRODUCTION

Chapter 4 presented the research methodology and vindicated the research decisions for this thesis. That chapter documented the pragmatic philosophical paradigm in which the current study is embedded and from which the mixed methods research approach originated. Chapter 4 includes a summary of the views of numerous prominent researchers on the implementation of the mixed methods research approach. The research question and sub-questions were stated and discussed, with the objective of understanding the influence of managerial leadership on the professional performance of educational psychologists. The four most frequently mentioned characteristics of the educational psychologists' role in need of managerial leadership were identified; service delivery model, management structure, workload management, and professional supervision.

Chapter 4 contains data on the population and sampling methods, the ethical considerations of the study, competency of the researcher, relationship of the researcher with participants, ensuring privacy and confidentiality, and a description of the informed consent process for both phases of the research. Chapter 4 presented and discussed the instrumentation (surveys and interviews) used in this study in depth. It also summarised the consideration, selection, development, format, and content of the surveys for managers and educational psychologists. Chapter 4 also provided data on the interview schedule and the open-ended questions that were developed for managers. This was followed by an explanation of all the data collection procedures that were utilised during the quantitative and qualitative data collection phases. Finally, the data analysis, interpretation, and presentation for both phases of the research were presented in two separate sections.

The analysis, interpretation, and presentation of quantitative and qualitative data are addressed and presented in Chapter 5. Data are presented in three clearly demarcated sections that relate to the research approaches - firstly the quantitative research, followed

by the qualitative research, and a third section on how the qualitative data explain the quantitative findings. These sections are consistent with the mixed methods explanatory sequential research design that was developed and presented in Chapter 1 (see Appendix 2). Each section comprises predominantly of the sub headings which were derived from the research sub-questions (see Par. 1.3) and used in developing the surveys (see Par. 4.6.1) and focus group interview schedule (see Par. 4.6.2), that is:

- Demographic data.
- Data regarding the preferred educational psychologists' service delivery model and its influence on the professional performance of educational psychologists.
- Data regarding the influence of management appointments on the professional performance of educational psychologists.
- Data regarding the influence workload management on the professional performance of educational psychologists.
- Data regarding the influence of managerial leadership on educational psychologists' engagement in clinical supervision.
- Data regarding the consequences for the professional performance of educational psychologists, when they are not effectively managed.

5.2 QUANTITATIVE RESEARCH

Quantitative research was conducted during the first- phase of the current study (see Fig. 1.1). Two separate codebooks, one for managers and one for educational psychologists, were prepared in a Microsoft Excel spreadsheets. Variables from the two questionnaires were listed in the spreadsheets (Pallant, 2011:11, 28), capturing the data from each respondent in preparation for SPSS entry. Participants were assigned a unique identification number (ID) in the first column. Each item in the questionnaire was then given a unique abbreviated variable name to enter into SPSS that could not contain any punctuation (spaces, full stops, symbols) or commands, and had to have fewer than 64 characters (Pallant, 2011:13). The next column provided the numerical coding instructions for all responses. Verbatim scripts for all open-ended questions were captured without any coding.

The codebook was imported into SPSS for further data manipulation and analysis (Pallant, 2011:27-28, 37). An in-depth examination of both data files were conducted to screen for and locate any errors that may influence the subsequent statistical analysis (Pallant, 2011:43-49). The researcher looked for scores that fell outside the probable range of scores in categorical and continues variables. Pallant (2011:47) defined these as out-of-range responses.

The researcher commenced with descriptive statistics to describe the characteristics of the two samples and provide a summary of respondents' responses to the survey questions (Pallant, 2011:53; Sue & Ritter, 2012:150) from the SPSS output report. The frequency distribution, measure of central tendency (mean/median/mode), and measures of dispersion (standard deviation/range/variance) were interpreted and presented in tables, graphs (histograms/bar graphs), and figures. Specifically, histograms were used to study the shape of distributions in some instances and to check for possible outliers (see Fig. 5.7 and Fig. 5.10) (Tabachnick & Fidell, 2007:81; Pallant, 2011:57; Sue & Ritter, 2012:150). The exclude cases pair wise option was utilised to exclude those cases where they did not provide information but included the data where they did respond, to mitigate the effect of missing data on outcomes of the research (Pallant, 2011:58). The researcher documented the cases that were excluded by stating that there are missing data.

The selection of the appropriate statistic was based on Pallant's (2011:102-121) step-by-step process (see Par. 4.8.1). Descriptive statistics were mainly utilised in cited research and scholarly literature that influenced the current study (Jimerson et al., 2004; Brown et al., 2006; Jimerson et al., 2006; Edwards et al., 2007; Guzzo et al., 2007; Papacosta; 2007; Zhou, 2007; Jimerson et al., 2008a; Brown, 2010; Coleman & Pine, 2010; Hill, 2010; Hornby, 2010; Castillo, 2012; Castillo et al., 2012a; Curtis et al., 2012). The current study is not only interested in describing the data, but also in exploring the relationship between variables and differences between groups though inferential statistics (Sue & Ritter, 2012:158). The chi-square test was used to analyse and compare categorical data and the Mann-Whitney Test was employed to test for the difference between two independent groups on continuous measures.

5.2.1 Biographical data of manager cohort

Table 5.2 provides a summary of the demographic characteristics of managers who responded during the first- phase of the quantitative research. Six managers completed the section of the questionnaire on biographic characteristics. Two managers did not respond to two questions in the questionnaire.

Table 5.1. Summary of managers' biographical information.

Demographic data	Variable	Frequency	Percentage	Mean (\bar{x}) Median (Md) Standard Deviation (S) Minimum Maximum Valid n
Gender	Male	2	33.3	
	Female	4	66.7	
Total		6	100.0	
Age	45 years	1	16.7	54.3
	52 years	1	16.7	54.5
	53 years	1	16.7	5.7
	56 years	1	16.7	45.0
	60 years	2	33.3	60.0
Total		6	100.0	6
Ethnicity	Irish	3	50.0	
	Caucasian	2	33.3	
	South African	1	16.7	
Total		6	100.0	
Language	Afrikaans	2	33.3	
	English	4	66.7	
Total		6	100.0	
Management experience	13 years	1	20.0	18.2
	15 years	1	20.0	18.0
	18 years	1	20.0	4.7
	20 years	1	20.0	13.0
	25 years	1	20.0	25.0
Total		5	100.0	5
Missing data		1	16.7	
Experience managing educational psychologists	6 years	1	20.0	14.3
	13 years	1	20.0	14.5
	15 years	1	20.0	4.8
	18 years	1	20.0	6.0
	20 years	1	20.0	20.0
Total		5	100.0	5
Missing data		1	16.7	
Highest qualification level	Master's	4	66.6	
	Doctorate/PhD	2	33.3	
Total		6	100.0	
Highest qualification in management	None	5	83.3	
	Master's	1	16.7	
	Doctorate/PhD	0	0	
Total		6	100.0	
Professional background	Education	1	16.7	
	Educational management	1	16.7	
	Counselling psychologist and education	1	16.7	
	Educational psychologist and education	2	33.3	
	Educational psychology and organisational psychology	1	16.7	
Total		6	100.0	

5.2.1.1 Gender

The scholarly literature review included hardly any data on the biographical characteristics of managers of educational psychologists. The only cited data related to the qualifications and professional backgrounds of managers (see Par. 3.3.4). The quantitative data revealed that two-thirds (66.7 per cent) of responding managers are female (n=4) and 33.3 per cent of managers are male (n=2), as illustrated in Figure 5.2.

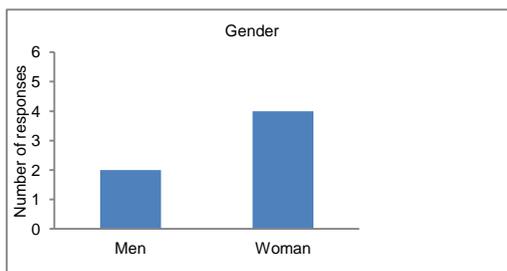


Figure 5.2. Managers' gender.

5.2.1.2 Age

Overall, the responding managers were mature (middle-aged) (see Fig. 5.3). This can be interpreted as indicative of several years of lived and vocational experience. Five of the six respondents (83.3 per cent) were 52 years of age or older and three of the six (50.0 per cent) were 60 or older. Half (50.0 per cent) of the respondents will reach retirement age within the next nine years. The mean age of the sample of managers (n=6) is 54.3 years ($\bar{x}=54.3$), ranging in age from 45 to 60 years, with a standard deviation of 5.7 ($S=5.7$) (see Fig. 5.1 and Fig. 5.3).

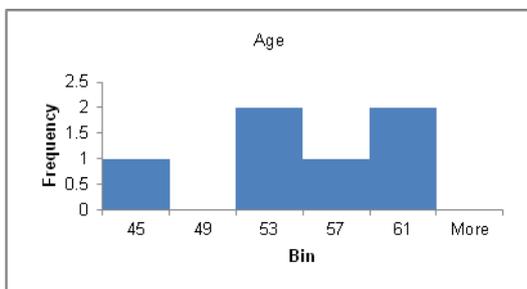


Figure 5.3. Managers' ages.

5.2.1.3 Ethnicity

The question relating to the ethnicity of manager sample was formulated in an open question format to afford participants the opportunity to report which ethnic group they identify with. They were not presented with a list of ethnic groups to choose from. The fact that questionnaires were administered in five different countries (India, Finland, Ireland, South Africa, and Switzerland) made it impractical to list all the potential ethnic groups. The data are representative of the countries that participated in the study. Responding managers reported that they either identified as Irish (50.0 per cent), Caucasian (33.3 per cent), or South African (16.7 per cent) (see Table 5.1; Fig. 5.4). Although not ethnically diverse or representative of the minority groups they service, managers are representative of the countries that participated in the research.

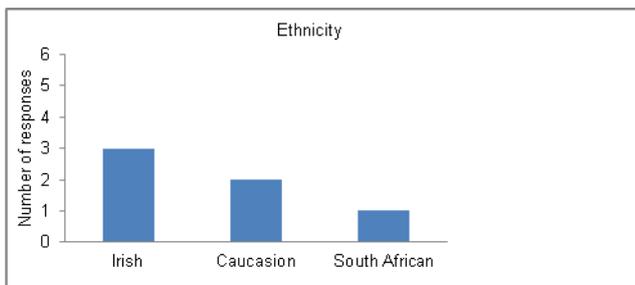


Figure 5.4. Ethnicity of managers.

5.2.1.4 Language

All of the managers (n=6) responded to the question of what language they speak/communicate in most frequently (see Table 5.1). The researcher did not investigate whether that language was the respondents' second language or if managers are monolingual or multilingual. These topics fall outside the scope of the current study. Four of the six (66.7 per cent) managers (n=4) reported they speak/communicate most frequently in English and the other two (33.3 per cent) stated that they speak/communicate most frequently in Afrikaans (see Fig. 5.5).

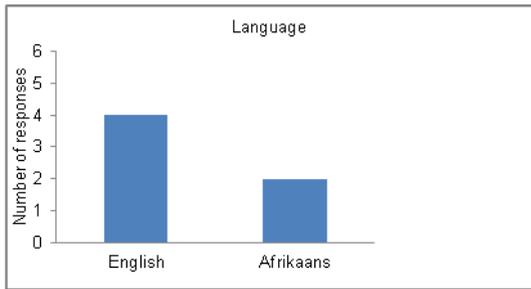


Figure 5.5. Language managers speak/communicate in most frequently.

5.2.1.5 Management experience

Data obtained from responding managers suggested experienced individuals who have been in management roles for over a decade (see Table 5.1). Five of the six managers reported on the number of years of management experience that they have (see Table 5.1; Fig. 5.6). The mean number of years of management experience is 18.2 years ($\bar{x}=18.2$), ranging from 13 to 25 years, with a standard deviation of 4.7 ($S=4.7$) (see Table 5.6).

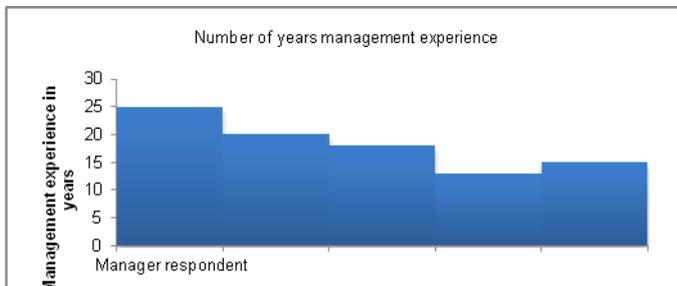


Figure 5.6. Number of years of management experience.

5.2.1.6 Experience managing educational psychologists

Five managers reported how many years of experience they had managing educational psychologists (see Table 5.1). The respondent with the least experience was the youngest manager. The mean number of years of experience is 14.3 years ($\bar{x}=14.3$), ranging from 6 to 20 years, with a median of 14.5, and standard deviation of 4.8 ($S=4.8$) (see Fig. 5.7).

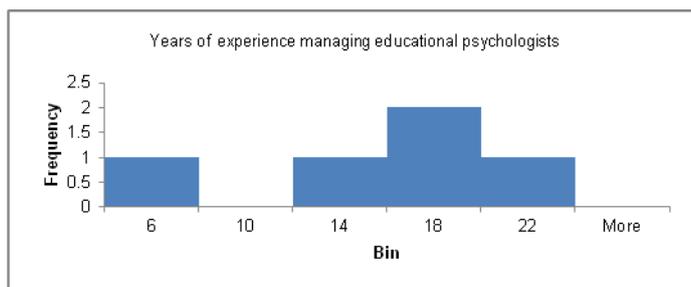


Figure 5.7. Years of experience managing educational psychologists.

5.2.1.7 Highest qualification levels

Two separate questions were posed with regards to managers' qualification level: highest level of qualification and highest level of formal management qualification (see Table 5.1). The data suggest that the responding managers are highly qualified overall. These qualification levels are comparable to those of educational psychologists and contradict McKenna and Maister (2005:xxii) and Broderick's (2011:9) assertion that qualification levels of professional's intimidate managers. Four of the six (66.7 per cent) managers ($n=4$) held master's-level degrees and the other two (33.3 per cent) held ($n=2$) doctorate-level degrees (see Table 5.1). One of the five (20.0 per cent) managers had a formal management qualification that is a master's-level degree in management.

Managers' professional background provides supplementary information that relates to the qualification level of managers. Both of the respondents with doctorate-level qualifications came from psychology backgrounds (counselling and educational psychology scopes of practice). Three other managers who hold masters-level degrees reported coming from similar psychology backgrounds (counselling and educational psychology scopes of practice). This data corresponds with data from the literature review regarding the training and preparation programmes of educational psychologists (see Par. 2.4.2). Data on training requirements indicated that, in some countries, a master's degree in psychology and a subsequent doctoral-level degree is a minimum requirement to enter the field of educational psychology (Edwards et al., 2007:266; Costello, 2010:5; Morrell et al., 2012:98; APS, 2015). The managers who reported master's-level and doctoral-level degrees as their highest qualification levels align with their professional backgrounds and training requirements in psychology.

5.2.1.8 Professional background

Participants' professional backgrounds represented only two categories: education and psychology. Three different scopes of practice from the field of psychology were covered (counselling, organisational and educational scopes of practice) and two areas in the field of education (deaf education and educational management). Two-thirds of the (66.7 per cent) responding managers have both education and psychology backgrounds. The other two (33.3 per cent) respondents (n=2) have deaf education and educational management backgrounds respectively.

5.2.2 Biographical data of educational psychologists

Biographical data of educational psychologists is extensively researched and included in most cited research in the field of educational psychology. The quantitative phase of the current research included a set of questions relating to educational psychologists' biographic characteristic as documented in Table 5.8.

Table 5.8. Summary of educational psychologists' biographical data.

Demographic data	Description	Frequency	Percentage	Mean (\bar{x})	
				Median (Md)	Standard deviation (S)
Gender	Male	3	15.0		
	Female	17	85.0		
Total		20	100.0		
Age	27 years	1	5.0	41.1	
	30 years	2	10.0	38.0	
	32 years	1	5.0	10.2	
	35 years	3	15.0	27.0	
	36 years	2	10.0	64.0	
	37 years	1	5.0	20	
	39 years	1	5.0		
	40 years	1	5.0		
	44 years	1	5.0		
	47 years	1	5.0		
	48 years	1	5.0		
	49 years	1	5.0		
	50 years	1	5.0		
	54 years	1	5.0		
60 years	1	5.0			
64 years	1	5.0			
Total		20	100.0		
Ethnicity	Coloured (Cape Malays)	2	10.0		
	White/Caucasian	11	55.0		
	Finnish	4	20.0		
	India	1	5.0		
	Pakistani	1	5.0		
	European	1	5.0		
Total		20	100.0		
Language	Afrikaans	5	25.0		
	English	7	35.0		
	Swedish	2	10.0		
	Finnish	6	30.0		
Total		20	100.0		
Classroom teaching experience	0 years	9	45.0	5.4	
	2 years	1	5.0	2.6	

	3 years	2	10.0	9.6
	4 years	2	10.0	0.0
	5 years	1	5.0	40.0
	6 years	1	5.0	20
	10 years	1	5.0	
	11 years	1	5.0	
	20 years	1	5.0	
	40 years	1	5.0	
Total		20	100.0	
Experience working as an educational psychologist	0.5 years (6 months)	1	5.0	8.0
	1 year	1	5.0	8.0
	2 years	2	10.0	4.8
	4.5 years	1	5.0	0.5
	5 years	1	5.0	15.0
	6 years	3	15.0	20
	7 years	1	5.0	
	9 years	2	10.0	
	10 years	3	15.0	
	12 years	1	5.0	
	15 years	4	20.0	
	Total		20	100.0
Highest qualification level	Master's	19	95.0	
	Doctorate/PhD	1	5.0	
Total		20	100.0	

5.2.2.1 Gender

Data on the gender representation of the educational psychologist respondents is consistent with the numerous studies that have shown female dominance in the field of educational psychology (Curtis et al., 2002:32, 35; Curtis et al., 2004:432; Jimerson et al., 2004:277; Jimerson et al., 2006:21; Brown et al., 2006:488; Worrell, Skaggs & Brown, 2006:143; Jimerson et al., 2008a:24; Jimerson et al., 2010:1; Curtis et al., 2012:2; Merrell, Erwin & Peacock, 2012:112). Of the 20 responding educational psychologists, 85.0 per cent (n=17) were female the other three (15.0 per cent) were male (see Table 5.8; Fig. 5.9).

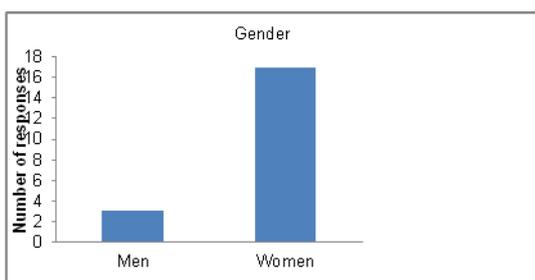


Figure 5.9. Gender of educational psychologists.

5.2.2.2 Age

Educational psychologists reported a wide spread age range that is leaning toward the younger end, with more than half (n=11) in their late twenties and thirties (see Table 5.8). The mean age of the sample of educational psychologists (n=20) is 41.1 years (\bar{x} =41.1)

ranging from 27 to 64 years, with a standard deviation of 10.2 ($S=10.2$). Ninety per cent of the respondents were 54 years of age or younger and another 10.0 per cent ($n=2$) were 60 years of age or older (see Figs.5.10 and 5.11). These results showed fewer over-60s than the 17.8 per cent found by Curtis et al. (2012:1-6). Similarly, one in five respondents in the current study was 50 or over compared to approximately half in the study by Worrell et al. (2006:143).

The mean age ($\bar{x}=41.1$) of respondents ($n=20$), is consistent with the mean age of 42.2 years ($\bar{x}=42.2$), that Curtis et al. (2004:433) and Jimerson et al. (2010:1) reported. Jimerson et al. (2010:1) found an age range between 35 and 44 years. The longitudinal studies by Jimerson et al. (2004:265), Jimerson et al. (2006:12), and Jimerson et al. (2008a:10) calculated the mean age for each respective country that participated. The data from the current study correspond to the documented mean age of educational psychologists in Northern England ($\bar{x}=42$) and Estonia ($\bar{x}=39$). However, the mean age indicates a younger sample of educational psychologists than those educational psychologists in Australia ($\bar{x}=47$), Switzerland ($\bar{x}=47$), Cyprus ($\bar{x}=49$), and Germany ($\bar{x}=53$), but older than Albania ($\bar{x}=24$), China ($\bar{x}=31$), Russia ($\bar{x}=32$), United Arab Emirates ($\bar{x}=33$), Georgia ($\bar{x}=34$), Greece ($\bar{x}=35$), and Italy ($\bar{x}=36$) (see Fig. 5.12).

The small size of the current sample means that the data on the mean age and age range should be interpreted with caution. However, the researcher feels compelled to highlight that the current data does not resonate with the predicted ageing workforce (Worrell et al., 2006:143; Ysseldyke et al., 2006:10).

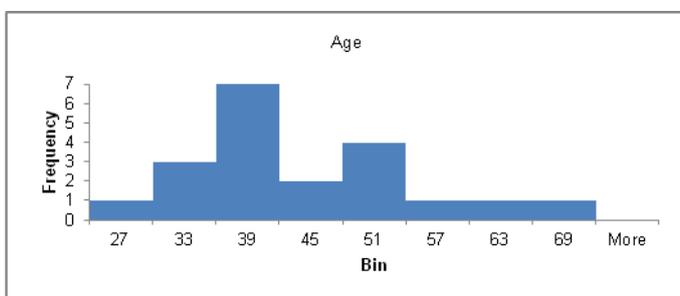


Figure 5.10. Age of educational psychologists.

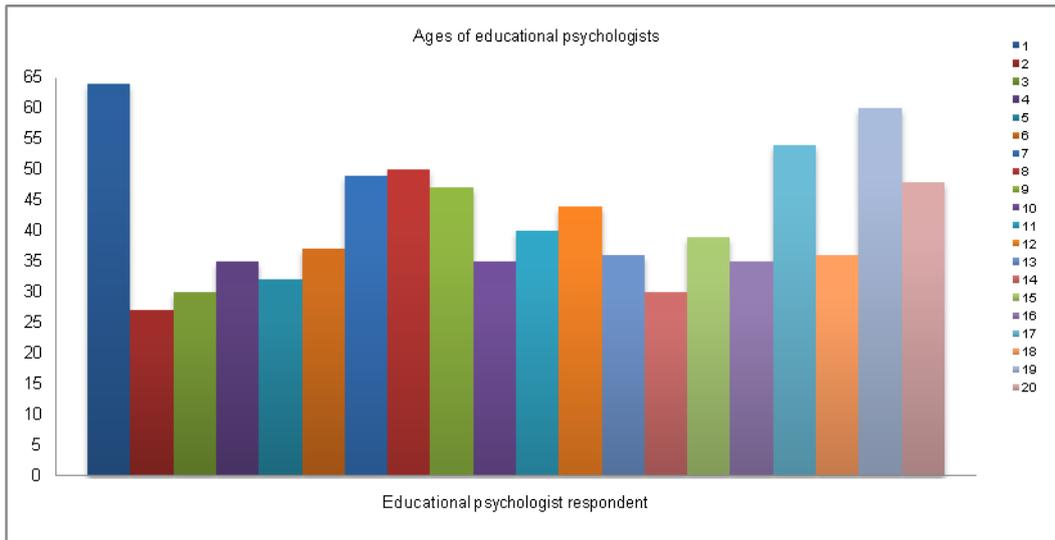


Figure 5.11. Ages of educational psychologists.

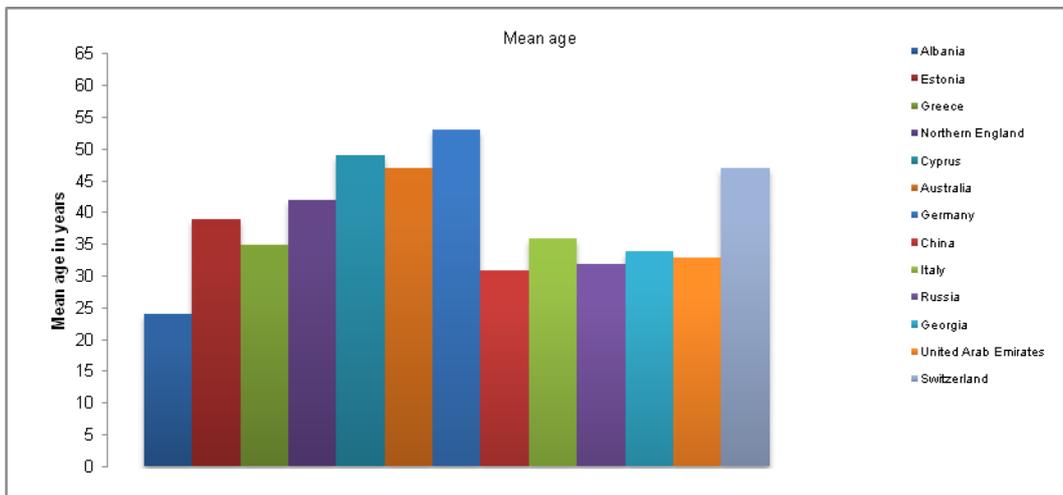


Figure 5.12. Mean age of educational psychologists in countries that participated in the ISPA longitudinal studies (Jimerson et al., 2004:265; Jimerson et al., 2006:12; Jimerson et al., 2008a:10).

5.2.2.3 Ethnicity

Participants (n=20) reported six different ethnic groups: Cape Malays/Coloured (10.0 per cent), Caucasian (55.0 per cent), Finnish (20.0 per cent), Indian (5.0 per cent), Pakistani (5.0 per cent), and European (5.0 per cent) (see Table 5.8 and Fig. 5.13). These ethnic groups are representative of the participating countries (Finland, India, Ireland, South Africa, and Switzerland). The Cape Malays are an ethnic group that live in South Africa. They were labelled by the apartheid-era government’s classification of ethnicity as a subcategory known as the “coloured” category (<https://en.wikipedia.org/wiki/Cape-Malays>,

cited on 13/05/16). The educational psychologist sample in this study is ethnically diverse but continues to show discrepancy between cultural groups, with the Caucasian ethnic group (55.0 per cent) receiving the highest representation (see Fig. 5.13) (Curtis, 2002; Curtis et al., 2004:49-66; NASP, 2005; NASP, 2009; MOH, 2010:1-11; Chandler, 2011:99-127; Griffin & Muniz, 2011:57-76; Merrell et al., 2012:114; Curtis et al., 2012:1, 28, 30; Bocanegra, 2012:1-5, NZPB, 2013). These results are similar to the data from the NASP membership survey during the 2004-2005 school years, suggesting the educational psychologists are not ethnically representative of the population they serve.

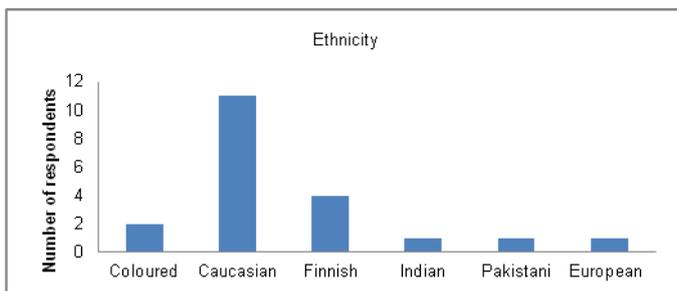


Figure 5.13. Ethnicity of educational psychologists.

5.2.2.4 Language

The languages that educational psychologists speak/communicate in most frequently correspond with the data on the ethnic groups they represent (see Table 5.8). The ISPA ISPS provided in-depth analysis of the language capability of educational psychologists and the researcher acknowledge that subsequent questioning relating to educational psychologists bilingual capabilities and the most used second language is needed. Educational psychologists (n=20) reported a range of languages that they speak/communicate in most frequently: Afrikaans (25.0 per cent), English (35.0 per cent), Swedish (10.0 per cent), and Finnish (30.0 per cent) (see Fig. 5.14).

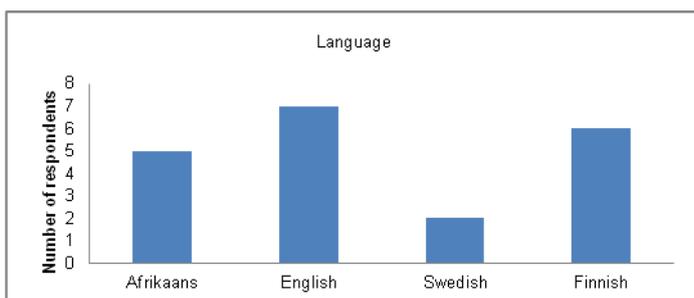


Figure 5.14. Language educational psychologists speak/communicate in most frequently.

5.2.2.5 Classroom teaching experience

The data from the current study correspond with the data from the literature search regarding the inconsistent international pattern with relation to classroom teaching experience of educational psychologists. Various studies have shown that, for numerous countries, classroom teaching experience is not a prerequisite for entering into the field of educational psychology (Jimerson et al., 2004:266; Jimerson et al., 2006:11-12; Edwards et al., 2007:368; Jimerson et al., 2008a:10; Costello, 2010:5; MOE, 2012).

In the current study, the data obtained from educational psychologists (n=20) on the number of years of classroom teaching experience varied significantly (see Table 5.8). The mean number of years of teaching experience is 5.4 years ($\bar{x}=5.4$). Classroom teaching experience ranged from zero (45.0 per cent) to 40 years. Thirty-five per cent of respondents (n=7) reported less than 10 years of classroom teaching experience, while the remaining 20.0 per cent (n=4) had 10 or more years of teaching experience (see Fig. 5.15).

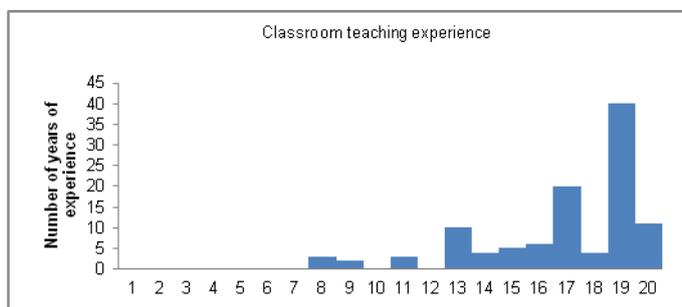


Figure 5.15. Educational psychologists' classroom teaching experience.

5.2.2.6 Experience practicing as an educational psychologist

The number of years of experience ranged from less than a year (six months) to 15 years (see Table 5.8). The mean number of years was eight years of experience as an educational psychologist ($\bar{x}=8$). Sixty per cent of respondents (n=12) reported less than 10 years of experience. Of the remaining 40.0 per cent of respondents (n=8), four reported 10-12 years experience and a further four had 15 years of experience (see Table 5.8 and Figure 5.16).

Data on the number of years of experience practising as an educational psychologist and the age of participating educational psychologists exposed patterns consistent with those in scholarly literature (Curtis et al., 2004:433; Jimerson et al., 2004:266; Jimerson et al., 2006:11; Jimerson et al., 2008a:21). These authors presented information on the relationship between the number of years experience as an educational psychologist and the age of educational psychologists. Eleven of the educational psychologists (n=11) in the current study, aged between 27 and 39 reported that they have worked as educational psychologists for 10 years or less. Seven (35.0 per cent) of the nine respondents aged 40-64 reported that they had 10-years of experience as educational psychologists. The other two had nine years of experience. The youngest respondent (n=1), who was 27 years old, had half a year of experience as an educational psychologist.

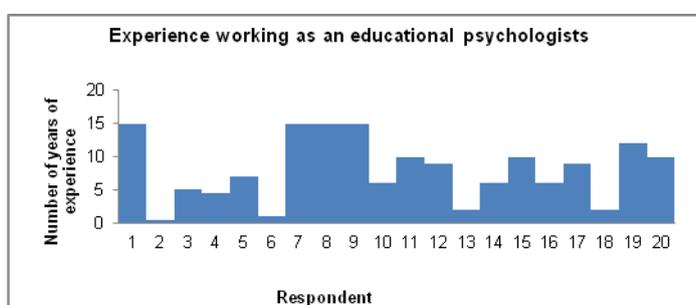


Figure 5.16. Years of experience practicing as an educational psychologist.

5.2.2.7 Highest qualification level

The cited scholarly literature shows that educational psychologists hold high qualification levels (see Par. 2.4.2). These high qualification levels were rationalised in term of the extensive educational psychological training programmes (Maister, 2003:207-208, 291; Dawson et al., 2004:118; McKenna & Maister, 2005:xxii; Edwards et al., 2007:266; AEP, 2008:5; Costello, 2010:5; Jimerson et al., 2010:1-6; Soulbury Report, 2010:4; Broderick, 2011:9; Merrell et al., 2012:98; NZPB, 2012:12). Dawson et al. (2004:118) argued that educational psychologists are among the best-trained professional groups in the education sector. A large majority of countries require master's-level qualifications as a prerequisite for entering the educational psychology field. A few countries, like Ireland and the United Kingdom, have the added requirement of a subsequent doctoral-level degree in educational psychology (Costello, 2010:5; Merrell, 2012:98). The quantitative data from

the current study correspond with the data from the scholarly literature (see Table 5.8). Only one of the 20 responding educational psychologists reported holding a doctorate, whereas the others all held (95.0 per cent) master's-level qualifications.

5.2.3 Data regarding the influence of managerial leadership on educational psychologists' service delivery model

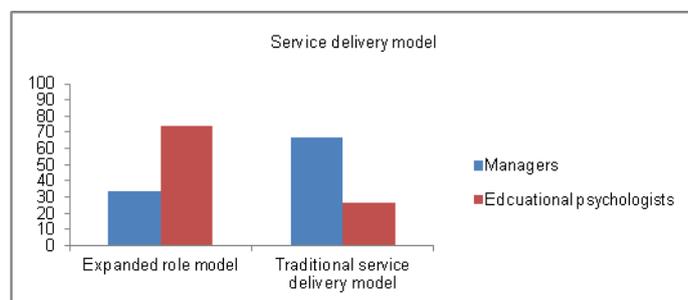
Respondents (managers and educational psychologists) were presented with two broad categories of educational psychologist service delivery models: traditional service delivery model and expanded role model (see Table 5.18). The traditional service delivery model (TM: also termed *Traditional Local Authority* in the AEP report, 2011:6-11), is characterised as the model in which educational psychologists are employed by local authorities (education/social development/health) in local districts. Educational psychologists work in homogeneous or multi-disciplinary teams in the local district offices and provide a range of educational psychological services to a number of schools and students. The expanded role model for educational psychologist service delivery (ERM) is a growing modern approach (Brown et al., 2006:487). These educational psychologists are based in, and deliver educational psychological services to, a single school or facility. Brown et al. (2006:487) explained that the role of an educational psychologist in the expanded role model is extended to include activities usually conducted by social workers and school counsellors. The current study intentionally focussed on these two distinct options in an attempt to eliminate any misunderstanding that can occur if a range of emerging models and variation on the two models are listed (see Par. 3.3.3).

5.2.3.1 Ideal service delivery model

Responding managers' views on the most effective service delivery model differed from those of the educational psychologist respondents. Two-thirds (66.7 per cent) of the six managers (n=4) endorsed the traditional role model, compared to the 26.3 per cent of responses from educational psychologists (n=5), as illustrated in Table 5.17. Conversely, the expanded role model was endorsed by one-third of managers (n=2), compared to the 73.6 per cent endorsement from responding educational psychologists (n=14) (see Table 5.17 and Fig. 5.18).

Table 5.17. Ideal service delivery model.

In your opinion, which service delivery model is most effective for delivering educational psychological services?			
Service delivery model	Respondent	n	%
Educational psychologists working in an expanded role model (ERM) (e.g., educational psychologists are based in and work in a single school).	Manager	2	33.3
	Educational psychologist	14	73.6
The traditional educational psychologists' service delivery model (TM) (e.g., educational psychologists are based in a school or local district office and provide educational psychological services to multiple schools)	Manager	4	66.7
	Educational psychologist	5	26.3

**Figure 5.18.** Ideal service delivery model.

5.2.3.2 Influence of service delivery models

Drucker (1993:193-194) claimed that the organisational structure influence the performance of an organisation. Broderick (2011:237-238) explained that it is also specifically linked to the performance and quality of professionals' practice. Maister (2002:3-6) concurred and put forward that the expertise essential for the organisation and the different task levels essential for core business, form the basis for organisational structures. Activity analysis - service delivery, is one of the determining activities (activity analysis/ decision analysis/relations analysis) that predict the ideal organisational structure according to Drucker (1993:193-201), Cole (2004:184), and Broderick (2011:237-263) (see Par. 3.2.2). Consequently, a supplementary question was included to help attain a more comprehensive understanding of the influence of service delivery models on the professional performance of educational psychologists as captured in Table 5.19. Two-thirds (66.7 per cent) of responding managers (n=4) rated the influence of the TM on the four listed professional educational psychological activities as a *moderate, big, or significant influence*. In particular, three of the four (75.0 per cent) managers who selected TM rated developing comprehensive individualised-intervention focussed programmes, working collaboratively in teams, developing preventative school-wide programmes, and delivering quality services to students who have special needs as being influenced in a big or significant manner (see Table 5.19). These ratings signify added support for the TM and

correspond with the 66.7 per cent of responding managers that selected the TM as the most effective model in Figure 5.18.

The managers' judgement is in direct contrast to the views expressed by educational psychologist respondents. Educational psychologists (n=15/75.0 per cent) rated the expanded role model as having a *moderate, big or significant influence* on the professional listed activities as captured in Table 5.19. Between 86.6 and 93.3 per cent of responding educational psychologists believed the ERM had a *big or significant influence* on all listed activities (see Table 5.19). A lower number of 6.7-13.3 per cent believed that the ERM model only has a *moderate influence* on the listed professional educational psychologist activities. Data revealed that neither of these educational psychologist service delivery models was believed to have a *negative influence* on listed professional activities.

These opposing views on the preference and influence of the two service delivery models are evident in the scholarly literature and are associated with significant changes in educational psychological services, changes in legislation, funding models, and trends in education practices (Brown et al., 2006:487; Worrell et al., 2006:140; AEP, 2008:6). The service delivery model is typically situated in an organisational structure and determined by the employment setting (see Par. 2.3.2). A manager has limited authority to change the service delivery model but can influence the implementation thereof to support educational psychologists and manage their service delivery effectively (Broderick, 2011:239).

Table 5.19. Influence of service delivery models on professional activities of educational psychologists.

Rate the influence that the service delivery model, selected in Table 5.17, has on the professional performance of educational psychologists.								
Expanded role model (ERM).								
The traditional educational psychologists' service delivery model (TM).								
<i>Educational psychological activity</i>	Respondent	Model	Negative influence Total=n Percentage	Slight influence Total=n Percentage	Moderate influence Total=n Percentage	Big influence Total=n Percentage	Significant influence Total=n Percentage	Total=n Percentage
Developing comprehensive individualised intervention-focussed programmes	Manager	TM			n=1 16.7	n=3 50.0		n=6 100.0
		ERM					n=2 33.3	
	Educational psychologist	TM			n=2 10.0	n=1 5.0	n=2 10.0	n=20 100.0
		ERM			n=2 10.00	n=6 30.0	n=7 35.0	
Working collaboratively in teams	Manager	TM			n=2 33.3	n=1 16.7	n=1 16.7	n=6 100.0
		ERM			n=1 16.7	n=1 16.7		
	Educational psychologist	TM			n=2 10.0	n=1 5.0	n=2 10.0	

		ERM			n=1 5.0	n=5 25.0	n=9 45.0	n=20 100.0
Developing preventative school-wide programmes	Manager	TM			n=1 16.7	n=2 33.3	n=1 16.7	n=6 100.0
		ERM				n=1 16.7	n=1 16.7	
	Educational psychologist	TM				n=2 10.0	n=3 15.0	n=20 100.0
		ERM			n=2 10.0	n=5 25.0	n=8 40.0	
Quality services to students who have special needs	Manager	TM			n=1 16.7	n=2 33.3	n=1 16.7	n=6 100.0
		ERM					n=2 33.3	
	Educational psychologist	TM			n=1 5.0	n=2 10.0	n=2 10.0	n=20 100.0
		ERM			n=2 10.0	n=6 30.0	n=7 35.0	

5.2.4 Data regarding the influence of management appointments on the professional performance of educational psychologists

There has been an on-going debate in the literature about whether qualified educational psychologists are better qualified to provide managerial leadership to educational psychologist teams than generic non-educational psychologist managers (Jimerson et al., 2004:274-276; Brown et al., 2006:486-496; Jimerson et al., 2006:19-21; Children's Workforce Strategy, 2007:28-31; Musabelliu, 2007:12; AEP, 2008:10; Jimerson et al., 2008a:18-19; Brown, 2010:13, 17; Coleman & Pine, 2010:21-24; Soulbury Report, 2010:4-5; Curtis et al., 2012:30; Curtis, 2012:4; Truong & Ellam, 2014:5-29) (see Par. 3.3.4). Authors considered the management role to be a critical issue for the field of educational psychology. Subsequently, three management appointment options were presented to participants in order to explore their preference (see Table 5.20).

5.2.4.1 Management appointments

There was an even split in the responses from manager respondents for the ideal management appointment. Half (50.0 per cent) of responding managers (n=3) selected the appointment of qualified educational psychologists in management roles and the other half (50.0 per cent) selected the appointment of qualified educational psychologists with management responsibilities to complement the role of the generic non-educational psychologist manager (see Table 5.20). Reasons manager respondents provided in support of selecting the appointment of qualified educational psychologists in management roles were: *Essential for management to fully understand the demands of the job... ; I believe it is important for managers to have ongoing experience of service delivery.* The

managers who selected qualified educational psychologists with management responsibilities to complement the role of the generic non-educational psychologist manager, stated: ... *broader spectrum supervision...* ; *In-depth understanding of the role...* ; *We need both psychological knowledge and managerial skills...* These results are consistent with views shared by various prominent researchers in the field of educational psychology (AEP, 2008:10; Brown, 2010:13, 17; Coleman & Pine, 2010:21-24; Soulbury Report, 2010:4-5).

Table 5.20. Preferred management appointment.

In your opinion, which management appointment provides the most effective managerial leadership of the professional performance of educational psychologists?	Manager		Educational psychologist	
	n	%	n	%
Appointment of generic non-educational psychologist managers	-	-	-	-
Appointment of qualified educational psychologists in management roles	3	50.0	15	75.0
Appointment of qualified educational psychologists with management responsibilities to complement the role of non-educational psychologist manager	3	50.0	5	25.0
Total	6	100.0	20	100.0

Responding educational psychologists were more divided in their opinion. Three-quarters (75.0 per cent) of the responding educational psychologists (n=15) leaned towards the appointment of qualified educational psychologists in management roles. This is consistent with views from the AEP position paper (2008:15), Brown (2010:17) and Coleman and Pine, 2010:21. The justifications for responding educational psychologists' choice are documented in Table 5.21.

Table 5.21. Rationale for selection management appointments.

RESPONDENT	Management appointment	Response
ID 8	2	<i>To know and understand the work of psychologists, it would be optimal, if the chief of psychologists would have at least the same qualifications...</i>
ID 12	3	Missing data.
ID 15	2	Missing data.
ID 18	3	<i>Someone who has knowledge and experience of the profession should have management responsibilities, or at least have a complimentary role.</i>
ID 19	2	Missing data.
ID 21	2	<i>Only another psychologist can understand the realities and pressures of this profession...</i>
ID 25	2	<i>They understand the work of psychologists.</i>
ID 31	2	<i>Better understanding of the possibilities and restrictions of the profession... Can give appropriate advice/you speak the same professional language.</i>
ID 50	2	<i>It is very important for the manager to be a registered psychologist in order to understand the role and responsibilities of the Educational psychologist. Especially important for them to know the ethical guidelines as set out by HPCSA... Non-psychologist managers... we have been managed by those in the past, have unrealistic expectations which sometimes contravene our ethical code...</i>
ID 52	2	<i>It is quite difficult for someone who does not have the skills or training of a psychologist to understand the complexities of our job.</i>
ID 54	3	<i>In my opinion... A combination of professional knowledge/experience and managerial knowledge/experience will be most effective in any company.</i>
ID 55	3	<i>I feel that it is important to have someone who is actively working in the field to oversee psychologists. However, the scope of management is such that it is hard to do both, thus a combination of a working psychologist and an administrator.</i>
ID 57	2	<i>Understanding the role of educational psychologists better if a manager has the same qualification. General managers do not necessarily know what is within an educational psychologist's scope of practice.</i>
ID 58	2	<i>Without on-the-ground knowledge and experience of working as an educational psychologist... it is impossible to manage another's workload; the intricacies of the role are best understood by someone who has experience of it themselves.</i>

ID 60	2	<i>Need to be managed by an educational psychologist.</i>
ID 65	2	<i>Managers who are also qualified educational psychologists have an understanding of where we are coming from and are aware of the potential and limitations and constraints of the role we find ourselves working in. They can step into our shoes and empathise with our situation and as they are working in the same agency, they will often have experienced similar challenges along the way and can offer appropriate possible solutions that are evidence-based and relevant to the field of educational psychology.</i>
ID 66	2	<i>More understanding of role of psychologists including ethical considerations.</i>
ID 72	2	<i>Non-educational psychologists do not always understand the ethical responsibilities of educational psychologists.</i>
ID 73	3	<i>Will be able to assist and support the educational psychologist...</i>
ID 74	2	<i>General managers want educational psychologists to do general work. They do not understand the time it takes to support one child and often focus on number of children supported.</i>

Code:

2-Appointment of qualified educational psychologists in management roles.

3-Appointment of qualified educational psychologists with management responsibilities to complement the role of the non-educational psychologist manager.

Four dominant themes emerged from the educational psychologists' comments on the preference for the appointment of qualified educational psychologists in management roles:

- The need for managers to understand the work, role, pressures that educational psychologists face.
- Relevant educational psychology qualifications better equip managers to support educational psychologists.
- The ability to give appropriate professional advice.
- Knowledge and understanding of ethical guidelines.

The lack of any educational psychologists' support for the appointment of generic non-educational psychologist managers corresponds with data from the managers' answer to the same question (see Table 5.20) (AEP, 2008:10; Brown, 2010:17; Coleman & Pine, 2010:21-24; Soulbury Report, 2010:4-5). According to the current study, the appointment of generic non-educational psychologist managers is questionable if it is not complimented by a qualified educational psychologist. This management appointment challenge requires serious consideration based on the reality that generic managers lack educational psychologist qualifications (AEP, 2008:10-13; Brown, 2010:13, 17; Coleman & Pine, 2010: 21-24; Soulbury Report, 2010:4-5). However, it should be acknowledged that qualified educational psychologist managers lack management qualifications, as established in the responses from manager cohort (see Pars. 5.3.1.7 and 5.3.1.8) (Goleman et al., 2001:42-51; Maister, 2003:289-290; AEP, 2008:10-11; Mintzberg, 2009:104-106; Broderick, 2011:259-285). Maister (2003:217-221), in particular, mentioned that the management role is demanding and pointed at the discrepancy between a professionals' skill set and the proficiency of a successful manager.



Figure 5.22. Preferred management appointments.

5.2.4.2 The influence of management appointments

However, the appointment of generic non-educational psychologists is a reality according to the Children's Workforce Strategy (2010:17) and the AEP report (2008:10-11). The influence of this management appointment on the professional performance of educational psychologists is raised by various researchers (AEP, 2008:10; Hart, 2007:535, cited by Brown, 2010:15; Brown, 2010:17; Coleman & Pine, 2010:21-24). These authors cautioned against the restrictive conditions that derive from the appointment of generic non-educational psychologist managers. Disadvantageous influences, job dissatisfaction, a lack of contributions to strategic direction, attrition, and a decline in quality of service delivery, are some of the consequences of the appointing a generic manager, as listed by the AEP (2010:10).

The AEP report (2008:10) stated that generic managers sometimes provide inappropriate direction to educational psychologists. Brown et al. (2010:17) and Coleman and Pine (2010:21) argued that generic managers lack understanding of the complexities of school systems and educational psychologists' professional practice, they are obstacles to quality educational psychological service delivery, and they are only focussed on and distracted by organisational demands. The appointment of a generic non-educational psychologist manager was further challenged when a very small number of managers reported that this management appointment influence only a few of the listed situations: manage professional performance of educational psychologists (n=1); contribute to organisational strategic direction and decision making (n=1); manage day-to-day operational activities (n=1); and perform human resource management (n=1) (see Table 5.23; Fig. 5.24). The influence of generic non-educational psychologist managers on the last three preceding

management activities received similar low scores from responding educational psychologists (see Table 5.23; Fig. 5.25).

The strong preference for qualified educational psychologists in management roles, as the most preferred management appointment to influence the listed management activities, was strongly supported by both managers and educational psychologists (see Table 5.20; Fig. 5.22). Between 50.0 and 83.3 per cent of responding managers believed most (six of the eight) listed management activities are strongly influenced by a qualified educational psychologist manager (see Table 5.23). This trend is consistent with cited research (Jimerson et al., 2004:274-276; Brown et al., 2006:486-496; Jimerson et al., 2006:19-21; Children's Workforce Strategy, 2007:28-31; Musabelliu, 2007:12; AEP, 2008:1-20; Jimerson et al., 2008a:18-19; Brown, 2010:13, 17; Coleman & Pine, 2010:21-24; Soulbury Report, 2010:4-5; Curtis et al., 2012:30; Curtis, 2012:4; Truong & Ellam, 2014:5-29) (see Par. 3.3.4). The influence of a qualified educational psychologists manager on the day-to-day operational activities did not receive the same high level of endorsement and were only endorsed by two (33.3 per cent) of the six managers.

Table 5.23. Influence of management appointments activities.

Please select the management appointment that would have the strongest influence on the listed managerial activities.					
Management activities	Respondent cohort	Generic non-educational psychologist manager Total=n Percentage	Qualified educational psychologist manager Total=n Percentage	Appointment of qualified educational psychologists with management responsibilities to complement the role of non-educational psychologist managers Total=n Percentage	Total=n Percentage
Provide clinical supervision of educational psychologists	Manager		n=5 83.3	n=1 16.7	n=6 100.0
	Educational psychologist		n=19 95.0	n=1 5.0	n=20 100.0
Manage professional performance of educational psychologists	Manager	n=1 16.7	n=3 50.0	n=2 33.3	n=6 100.0
	Educational psychologist		n=17 85.0	n=3 15.0	n=20 100.0
Manage delivery of quality educational psychological services	Manager		n=3 50.0	n=3 50.0	n=6 100.0
	Educational psychologist	n=1 5.0	n=17 85.0	n=2 10.0	n=20 100.0
Contribute to organisational strategic direction and decision making	Manager	n=1 16.7	n=4 66.7	n=1 16.7	n=6 100.0
	Educational psychologist	n=3 15.0	n=10 50.0	n=7 35.0	n=20 100.0
Manage day-to-day operational activities	Manager	n=1 16.7	n=2 33.3	n=3 50.0	n=6 100.0
	Educational psychologist	n=3 15.0	n=9 45.0	n=8 40.0	n=20 100.0
Understand the complexities of school system	Manager		n=5 83.3	n=1 16.7	n=6 100.0
	Educational psychologist		n=18 90.0	n=2 10.0	n=20 100.0
Provide support on professional matters and cases	Manager		n=5 83.3	n=1 16.7	n=6 100.0
	Educational psychologist		n=19	n=1	n=20

			95.0	5.0	100.0
Human resource management	Manager	n=1 16.7		n=5 83.3	n=6 100.0
	Educational psychologist	n=5 25.0	n=5 25.0	n=10 50.0	n=20 100.0

Furthermore, data revealed that the combination of generic non-educational psychologist managers and qualified educational psychologists managers strongly influence human resource management (n=5), management of day-to-day operational activities (n=3), and manage delivery of quality educational psychological services (n=3) (see Table 5.23; Fig. 5.24). These results are echoed in the AEP report (2008:10-11), which described the roles of qualified principal educational psychologists and generic managers. Generic non-educational psychologist managers focus on the day-to-day management of operational activities and habitual general management, while principal educational psychologists attend to the clinical matters, provide professional management, and provide clinical supervision. Harmony between these two roles and skill sets would be the determining success factor.

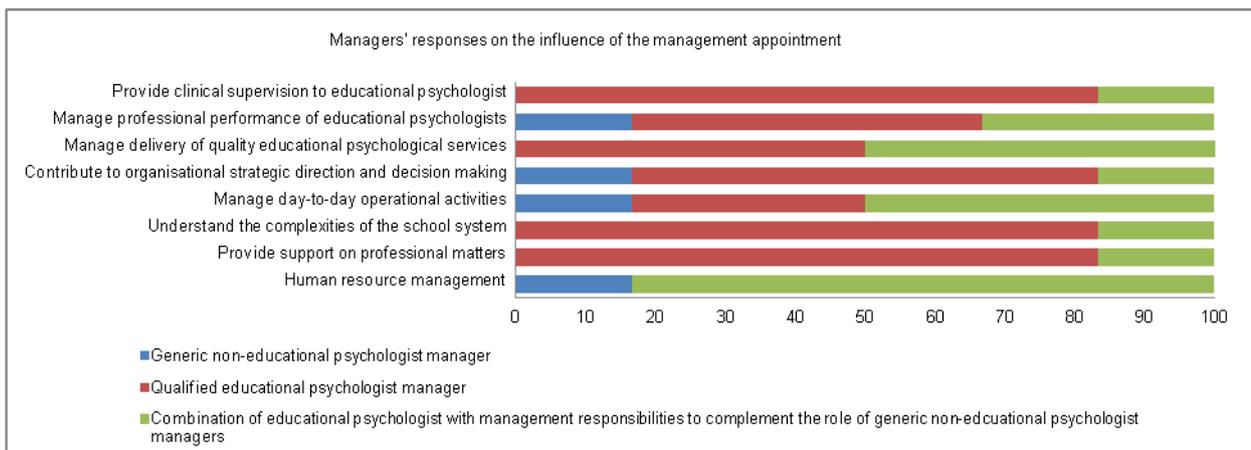


Figure 5.24. Manager responses on the influence of management appointments.

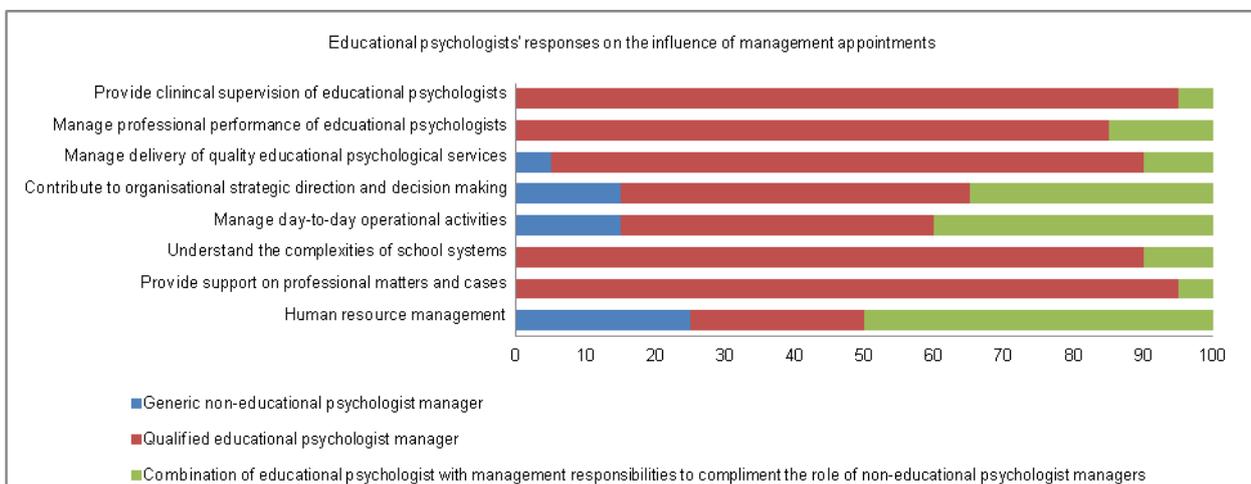


Figure 5.25. Educational psychologist responses on the influence of management appointments.

In addition, four true-or-false questions related to the preferred management appointment, were asked to further explore scholarly literature (see Table 5.26). The majority of responding managers (66.7 per cent) and educational psychologists (85.0 per cent) concurred that educational psychologists require distinctive managerial leadership and professional management from within the educational psychological domain. This follows the same line of thought as other researchers in the field that strongly believe educational psychologists need to be managed by professionals with educational psychology backgrounds (AEP, 2008:1-20; Coleman & Pine, 2010:21; Soulbury, 2010:4-5). In spite of the preceding view, 66.7 per cent of managers (n=4) and 35.0 per cent of educational psychologist respondents, stated it is false that managerial leadership for the professional performance of educational psychologists can only be provided by qualified educational psychologist managers.

It was no surprise that every member of both responding cohorts agreed (true) that educational psychologists should have direct access to qualified educational psychologists to meet their clinical supervision needs. The researcher is of the same mind as respondents and prominent authorities in the field of educational psychology with relation to the provision of clinical supervision by qualified educational psychologists (Thielking et al., 2006:406; Musabelliu, 2007:12; AEP, 2008:13; Jimerson et al., 2008a:5-28; Coleman & Pine, 2010:21; NASP, 2010:1-10; Curtis et al., 2012:28-30; Curtis, 2012:1-6). However, the researcher does not believe that these qualified educational psychologist supervisors need to be in management positions. In the researchers experience any qualified educational psychologist is suitable to provide supervision, provided that they are respected and trusted by the supervisee. With the support of robust supervision guidelines from the employing organisation and/or educational psychological regulatory authorities any two qualified educational psychologists can engage in robust clinical supervision.

Table 5.26. Management appointment.

Based on your management experience, please indicate if the following statements are TRUE or FALSE.				
Statement	Respondent	TRUE	FALSE	
		Total=n Percentage	Total=n Percentage	Total=n Percentage
Educational psychologists require distinctive organisational and professional management from within the educational psychological domain	Manager	n=4 66.7	n=2 33.3	n=6 100.0
	Educational psychologist	n=17 85.0	n=3 15.0	n=20 100.0
Managerial leadership for the professional performance of educational psychologists can only be provided by qualified educational psychologist managers	Manager	n=2 33.3	n=4 66.7	n=6 100.0
	Educational psychologist	n=13 65.0	n=7 35.0	n=20 100.0
Educational psychologists should have direct access to qualified educational psychologist to meet their clinical supervision needs	Manager	n=6 100.0		n=6 100.0
	Educational psychologist	n=20 100.0		n=20 100.0

5.2.4.3 Consequences of a lack of appropriate managerial leadership

The identification of the most appropriate person to provide managerial leadership to educational psychologists is followed by the exploration of the consequences for the professional practice of educational psychologists when they do not receive appropriate combined management. Respondents were asked to rate the consequences for eight listed outcomes (see Table 5.27). No statistical significant differences were found between the ratings on any of the consequences, between responding managers and educational psychologists (see Table 5.27).

Three of the first four consequences that are most likely to occur correspond between the manager and educational psychologist respondents when ranked (see Tables 5.27 and 5.28; Figs. 5.29 and 5.30): low levels of job satisfaction; increased levels of stress; burnout. Four (66.7 per cent) of the six managers considered it least likely that high staff turnover rates would be a consequence when educational psychologist do not receive appropriate combined management. Whereas this consequence, ranked in third place according to educational psychologists' responses.

Table 5.27. Consequences of management appointments for the professional performance of educational psychologists

Please rate the consequences of management appointment on the professional performance of educational psychologist.							
Consequence	Respondent	Not at all likely (Total – n) (Percentage)	Slightly likely (Total – n) (Percentage)	Moderately likely (Total – n) (Percentage)	Quite likely (Total – n) (Percentage)	Extremely likely (Total – n) (Percentage)	Mean (\bar{x}) Median (Md) Standard Deviation (S) Minimum Maximum Mean rank (Sum of ranks) Valid n
** Statistical test analysis							
Low levels of job satisfaction	Manager			n=1 16.7	n=4 66.7	n=1 16.7	4.00 4.00 0.63 3.00 5.00 15.17 (91.00) 6
	Educational psychologist	n=3 15.0	n=2 10.0	n=3 15.0	n=7 35.0	n=5 25.0	3.45 4.00 1.39 1.00 5.00 13.00 (260.00) 20
** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of low levels of job satisfaction as a consequences for the professional performance of educational psychologists when they do not receive appropriate combined day-to-day operational and professional management, between managers (Md=4.00, n=6) and educational psychologists (Md=4.00, n=20), U=50.000, z=-0.639, p=.523).							
Poor professional performance	Manager		n=2 33.3	n=2 33.3	n=2 33.3		3.00 3.00 0.89 2.00 4.00 15.00 (90.00) 6
	Educational psychologist	n=4 20.0	n=5 25.0	n=5 25.0	n=5 25.0	n=1 5.0	2.70 3.00 1.22 1.00 5.00 13.05 (261.00) 20
** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of poor professional performance as a consequences for the professional performance of educational psychologists when they do not receive appropriate combined day-to-day operational and professional management, between managers (Md=3.00, n=6) and educational psychologists (Md=3.00, n=20), U=51.000, z=-0.565, p=.572).							
Capacity and capability issues	Manager		n=2 33.3	n=2 33.3	n=2 33.3		3.00 3.00 0.89 2.00 4.00 13.50 (81.00) 6
	Educational psychologist	n=4 21.1	n=2 10.5	n=7 36.8	n=5 26.3	n=1 5.3	2.84 3.00 1.21 1.00 5.00 12.84 (244.00) 19
Missing data							
** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of capacity and capability issues as a consequences for the professional performance of educational psychologists when they do not receive appropriate combined day-to-day operational and professional management, between managers (Md=3.00, n=6) and educational psychologists (Md=3.00, n=19), U=54.000, z=-0.199, p=.843).							
High levels of attrition	Manager	n=1 16.7	n=2 33.3	n=1 16.7	n=2 33.3		2.67 2.50 1.21 1.00 4.00 12.75 (76.50) 6
	Educational psychologist	n=4 20.0	n=2 10.0	n=9 45.0	n=3 15.0	n=2 10.0	2.85 3.00 1.23 1.00 5.00 13.73 (274.50)

							20
<p>** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of high levels of attrition as a consequences for the professional performance of educational psychologists when they do not receive appropriate combined day-to-day operational and professional management, between managers (Md=2.50, n=6) and educational psychologists (Md=3.00, n=20), U=55.500, z=-0.285, p=.776).</p>							
Low levels of professional commitment	Manager		n=3 50.0	n=1 16.7	n=2 33.3		2.83 2.50 0.98 2.00 4.00 15.17 (91.00) 6
	Educational psychologist	n=4 20.0	n=7 35.0	n=5 25.0	n=2 10.0	n=2 10.0	2.55 2.00 1.23 1.00 5.00 13.00 (260.00) 20
<p>** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of low levels of professional commitment as a consequences for the professional performance of educational psychologists when they do not receive appropriate combined day-to-day operational and professional management, between managers (Md=2.50, n=6) and educational psychologists (Md=2.00, n=20), U=50.000, z=-0.633, p=.527).</p>							
High staff turnover rates	Manager		n=1 16.7	n=4 66.7	n=1 16.7		2.17 2.00 0.98 1.00 4.00 8.92 (53.50) 6
	Educational psychologist	n=3 15.0	n=3 15.0	n=3 15.0	n=8 40.0	n=3 15.0	3.25 4.00 1.33 1.00 5.00 14.88 (297.50) 20
Increased levels of stress	Manager		n=1 16.7	n=2 33.3	n=2 33.3	n=1 16.7	3.50 3.50 1.05 2.00 5.00 12.67 (76.00) 6
	Educational psychologist	n=3 15.0	n=1 5.0	n=5 25.0	n=4 20.0	n=7 35.0	3.55 4.00 1.43 1.00 5.00 13.75 (275.00) 20
<p>** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of increased levels of stress as a consequences for the professional performance of educational psychologists when they do not receive appropriate combined day-to-day operational and professional management, between managers (Md=3.50, n=6) and educational psychologists (Md=4.00, n=20), U=55.000, z=-0.314, p=.753).</p>							
Burnout	Manager		n=1 16.7	n=3 50.0	n=1 16.7	n=1 16.7	3.33 3.00 1.03 2.00 5.00 14.58 (87.50) 6
	Educational psychologist	n=3 15.0	n=5 25.0	n=5 25.0	n=4 20.0	n=3 15.0	3.05 3.00 1.32 1.00 5.00 13.18 (263.50) 20
<p>** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of burnout as a consequences for the professional performance of educational psychologists when they do not receive appropriate combined day-to-day operational and professional management, between managers (Md=4.00, n=6) and educational psychologists (Md=4.00, n=20), U=53.500, z=-0.406, p=.684).</p>							

Table 5.28. Summary of the ranking of the consequences of management appointments for the professional performance of educational psychologists

Consequences of management appointments for the professional performance of educational.	
Manager ranking order of consequences	Mean/Median/Standard Deviation
1 st Low levels of job satisfaction	\bar{x} =4.00/Md=4.00/SD=0.63
2 nd Increased levels of stress	\bar{x} =3.50/Md=3.50/SD=1.05
3 rd Burnout	\bar{x} =3.33/Md=3.00/SD=1.03
4 th Poor professional performance	\bar{x} =3.00/Md=3.00/SD=0.89
5 th Capacity and capability issues	\bar{x} =3.00/Md=3.00/SD=0.89
6 th Low levels of professional commitment	\bar{x} =2.83/Md=2.50/SD=0.89
7 th High levels of attrition	\bar{x} =2.67/Md=2.50/SD=1.21
8 th High staff turnover rates	\bar{x} =2.17/Md=2.00/SD=0.89
Educational psychologist ranking order of consequences	
	Mean/Median/Standard Deviation
1 st Increased levels of stress	\bar{x} =3.55/Md=4.00/SD=1.43
2 nd Low levels of job satisfaction	\bar{x} =3.45 /Md=4.00/SD=1.39
3 rd High staff turnover rates	\bar{x} =3.25/Md=4.00/SD=1.33
4 th Burnout	\bar{x} =3.05/Md=3.00/SD=1.32
5 th High levels of attrition	\bar{x} =2.85/Md=3.00/SD=1.23
6 th Capacity and capability issues	\bar{x} =2.84/Md=3.00/SD=1.21
7 th Poor professional performance	\bar{x} =2.70/Md=3.00/SD=1.22
8 th Low levels of professional commitment	\bar{x} =2.55/Md=2.00/SD=1.23

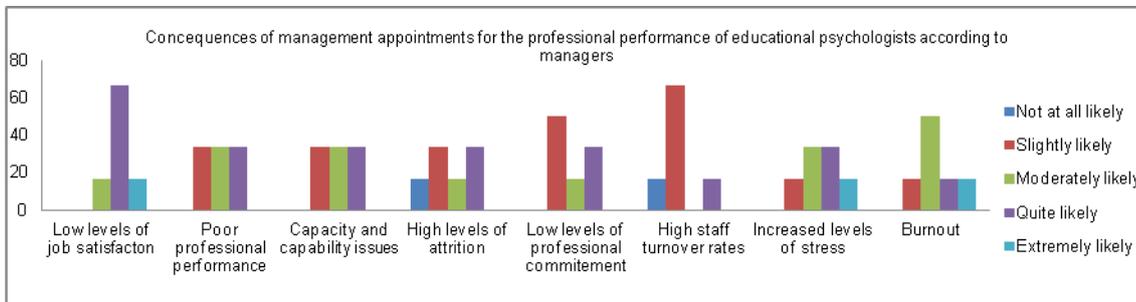


Figure 5.29. Consequences of management appointments for the professional performance of educational psychologists according to responding managers.

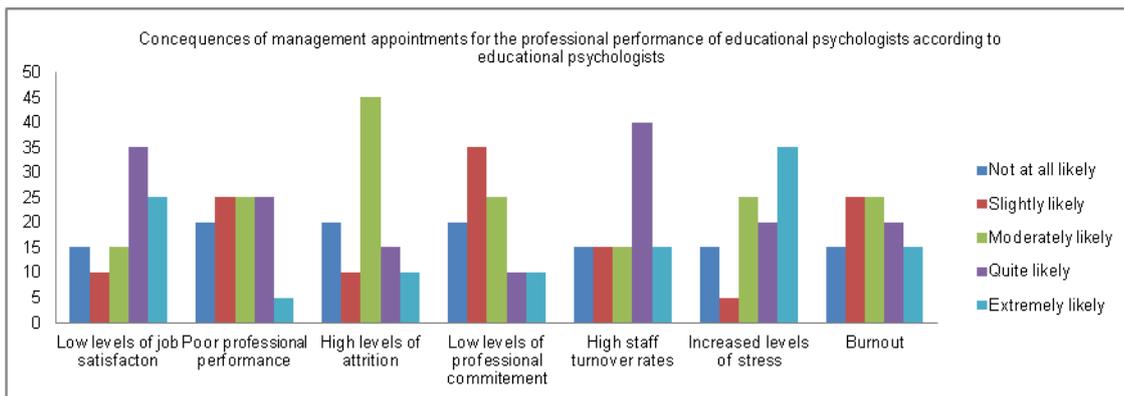


Figure 5.30. Consequences of management appointments for the professional performance of educational psychologists according to responding educational psychologists.

5.2.5 Data regarding the influence of workload management on the professional performance of educational psychologists

5.2.5.1 Workload management

A range of factors influence the managerial leadership of professionals' workloads, specifically those of educational psychologists (Curtis et al., 2002:30-42; Curtis, 2002; Maister, 2003:156-157; Curtis et al., 2004:431-442; Jimerson et al., 2004:278; Jimerson et al., 2006:25; Brown et al., 2006:488; Edwards et al., 2007:273; Jimerson, Oakland & Farrell, 2007:1-553; Jimerson et al., 2008a:22; Jimerson et al., 2008b:1-23; NASP, 2010:10; Kaiser & Ringlsetter, 2011:90-91; Curtis et al., 2012:28-30; Curtis, 2012:1-6; Castillo et al., 2012:4-6; Castillo, 2012:1-6; Merrell et al., 2012:104). Managerial leadership efforts to manage the workload of educational psychologists should be cognisant of these factors which include different workload management systems, most effective workload management activities, outcomes of workload management endeavours, ideal educational psychologists-to-student ratios, and the influence of a variety of professional activities on these ratios. Scholarly literature mainly focussed on educational psychologists-to-student ratios.

A structured workload management system was the preferred workload management process, most often used for maximum benefit according to responding managers (see Table 5.31; Fig. 5.32). Four out of six managers (n=4) selected the structured workload management system. Maister (2003:157) stated that rigorous work assignment processes are utilised, for maximum advantage, by the majority of professional service organisations. Maister also clearly demarcated managers' responsibility and the significance of utilising vigorous structured workload management systems.

Table 5.31. The most often used workload management processes.

Please indicate which work assignment process are most often used, for maximum benefit, when managing the workload of educational psychologists.		Sample	
		Managers	Educational psychologists
Structured workload management system	n	4	3
	%	66.7	15.8
Random allocation of work based on urgency and risk factors	n	0	0
	%	0.0	0.0
Give educational psychologists autonomy to manage their workload	n	1	9
	%	16.7	47.4
Combination of the above-mentioned workload management systems and processes	n	1	7
	%	16.7	36.8
Total	n	6	19
	%	100.0	100.0
Missing data	n	0	1

In contrast to the manager cohorts' responses, the majority (47.4 per cent) of the responding educational psychologists (n=9) selected the work assignment process that gives educational psychologists autonomy to manage their workload and caseload size (see Table 5.31; Fig. 5.32). Educational psychologists' endorsement for autonomy correspond with McKenna and Maister's (2005:xxx) observation that professionals are strongly opposed to being managed because of their perceived superior knowledge base, scepticism, and perceptive nature. In addition, this preference for autonomy aligns with the observations of various authors on the predilection of highly qualified professionals to be self-directed, independent, and autonomous (Maister, 2003:168-169, 207-208, 219, 291; McKenna & Maister, 2005:xxx; Broderick, 2011:239).

Structured workload management system was selected by the fewest educational psychologists – only 15.8 per cent. The remaining 36.8 per cent (n=7) did not have a dominant preference and opted for a combination of all three listed workload management systems. Similar to the manager cohort, no educational psychologist selected random allocation of work based on urgency and risk factors as the system most often used for maximum benefit, as illustrated in Table 5.31 and Figure 5.32. Maister (2003:156-157) supported the use of a combination of work assignment processes but this received a trivial endorsement from one manager in the current study. Maister (2003:156-157) argued that professionals develop valuable skills (initiative, influence, negotiation, problem solving) by being exposed to dissimilar workload management systems (see Par. 3.2.2). The manager in question succinctly described the utilisation of the combined workload management system as an *established practice*.

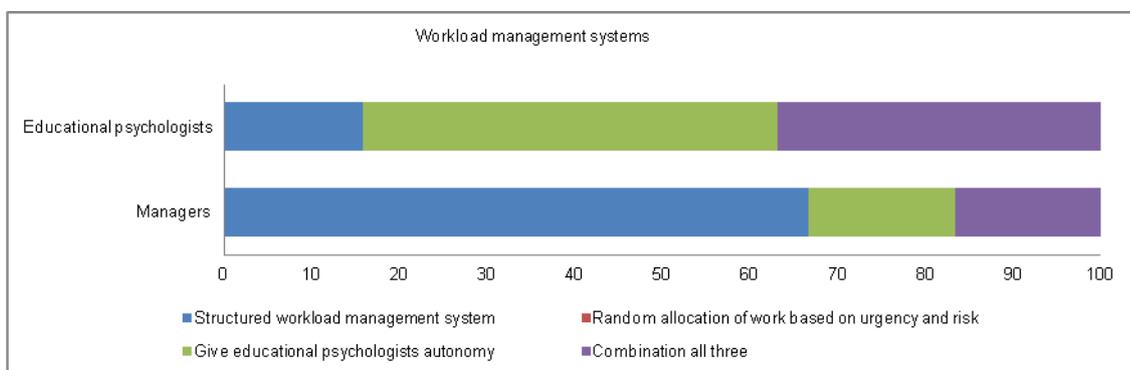


Figure 5.32. Workload management systems.

5.2.5.2 Influence of workload management activities

Eight workload management activities were compiled as documented in Table 5.33. The formulation of these workload management activities were influenced by the researcher’s experiences and observations in the field and data from the scholarly literature (Curtis et al., 2002:30-42; Curtis, 2002; Maister, 2003:168-169, 207-208, 219, 291; Curtis et al., 2004:431-442; Jimerson et al., 2004:278; McKenna & Maister, 2005:xxx; Jimerson et al., 2006:25; Brown et al., 2006:488; Edwards et al., 2007:273; Jimerson, Oakland & Farrell, 2007:1-553; Jimerson et al., 2008a:22; Jimerson et al., 2008b:1-23; NASP, 2010:10; Broderick, 2011:239; Curtis et al., 2012:28-30; Curtis, 2012:1-6; Castillo et al., 2012:4-6; Castillo, 2012:1-6; Merrell et al., 2012:104).

Table 5.33. The influence of workload management activities on the professional performance of educational psychologists.

Please rate the influence that the listed workload management activities have on professional performance of educational psychologists.							
Workload management activities	Respondent	Negative influence	Slight influence	Moderate influence	Big influence	Significant influence	Mean (\bar{x}) Median (Md) Standard Deviation (S) Minimum Maximum Mean Rank Sum of ranks Valid n
		Total=n Percentage	Total=n Percentage	Total=n Percentage	Total=n Percentage	Total=n Percentage	
** Statistical test analysis							
Regular one-on-one workload data discussions	Manager		n=1 16.7	n=1 16.7	n=2 33.3	n=2 33.3	3.83 4.00 1.17 2.00 5.00 14.08 (84.50) 6
	Educational psychologist	n=1 5.6	n=3 16.7	n=6 33.3	n=3 16.7	n=5 27.8	3.44 3.00 1.25 1.00 5.00 11.97 (215.50) 18
** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of the influence of regular one-on-one workload data discussions on the professional performance of educational psychologists, between managers (Md=4.00, n=6) and educational psychologists (Md=3.00, n=18), U=44.500, z=-.654, p=.5.							
Formal structured workload management system and process	Manager		n=1 16.7			n=5 83.3	4.50 5.00 1.22 2.00 5.00 17.58 (105.50) 6
	Educational psychologist	n=2 11.8	n=5 36.6	n=5 36.6	n=3 17.6	n=2 11.8	3.44 3.00 1.25 1.00 5.00 10.03 (170.50) 17
** Mann-Whitney U Test revealed a significant (highly significant) difference in terms of the rating of the influence of formal structured workload management system on the professional performance of educational psychologists, between managers (Md=5.00, n=6) and educational psychologists (Md=3.00, n=17), U=17.500, z=-2.416, p=.016, r=.50. The effect size of r=.50 is considered a large or significant effect size based on Cohen (1988) criteria.							
Clearly set expectation for educational psychologists' workload	Manager		n=1 16.7	n=1 16.7	n=3 50.0	n=1 16.7	3.67 4.00 1.03 2.00

								5.00 12.42 (74.50) 6
	Educational psychologist		n=4 21.1	n=4 21.1	n=4 21.1	n=7 36.8		3.74 4.00 1.19 2.00 5.00 13.18 (250.50) 19
** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of the influence, of clearly set goals and expectations for educational psychologists, on the professional performance of educational psychologists, between managers (Md=4.00, n=6) and educational psychologists (Md=4.00, n=19), U=53.500, z=-.231, p=.817).								
Capability development plans for individual educational psychologists	Manager		n=3 50.0	n=1 16.7	n=1 16.7	n=1 16.7		3.00 2.50 1.26 2.00 5.00 9.42 (56.50) 6
	Educational psychologist		n=3 15.8	n=4 21.1	n=6 31.6	n=6 31.6		3.79 4.00 1.08 2.00 5.00 14.13 (268.50) 19
** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of the influence, of capability development plans for individual educational psychologists, on the professional performance of educational psychologists, between managers (Md=2.50, n=6) and educational psychologists (Md=4.00, n=19), U=35.500, z=-1.414, p=.157).								
Plans for managing educational psychologists' workload pressures	Manager	n=1 16.7	n=1 16.7	n=1 16.7	n=3 50.0			3.00 3.50 1.26 1.00 4.00 9.33 (56.00) 6
	Educational psychologist		n=1 5.3	n=4 21.1	n=8 42.1	n=5 31.6		3.84 4.00 0.96 2.00 5.00 14.16 (269.00) 19
** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of the influence, of plans for educational psychologists' workload pressures, on the professional performance of educational psychologists, between managers (Md=3.50, n=6) and educational psychologists (Md=4.00, n=19), U=35.000, z=-1.477, p=.140).								
Regular feedback on professional performance	Manager		n=2 33.3	n=4 66.7				2.67 3.00 0.52 2.00 3.00 8.83 (53.00) 6
	Educational psychologist		n=4 21.1	n=6 31.6	n=6 31.6	n=3 15.8		3.42 3.00 1.02 2.00 5.00 14.32 (272.00) 19
** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of the influence, of regular feedback on professional performance, on the professional performance of educational psychologists, between managers (Md=3.00, n=6) and educational psychologists (Md=3.00, n=19), U=32.000, z=-1.669, p=.095).								
Random allocation of work based on risk and urgency	Manager	n=2 33.3	n=1 16.7	n=3 50.0				2.17 2.50 0.98 1.00 3.00 10.08 (60.50) 6
	Educational psychologist	n=5 26.3	n=2 10.5	n=5 26.3	n=2 10.5	n=5 26.3		3.00 3.00 1.56 1.00 5.00 13.92 (264.50) 19
** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of the influence, of random allocation of work based on urgency and risk factors, on the professional performance of educational psychologists, between managers (Md=2.50, n=6) and educational psychologists (Md=3.00, n=19), U=39.500, z=-1.151, p=.250).								
Give educational psychologists autonomy to	Manager	n=1 16.7	n=1 16.7	n=1 16.7	n=2 33.3	n=1 16.7		3.17 3.50

manage their workload							1.47 1.00 5.00 8.25 (49.50) 6
	Educational psychologist		n=1 5.3		n=10 52.6	n=8 42.1	4.32 4.00 0.75 2.00 5.00 14.50 (275.50) 19
<p>** Mann-Whitney U Test revealed a statistically significant difference in terms of the rating of the influence, of giving educational psychologists autonomy to manage their workload and caseload size, on the professional performance of educational psychologists, between managers (Md=3.50, n=6) and educational psychologists (Md=4.00, n=19), U=28.500, z=-1.975, p=.048, r=-.40). The effect size of r=-.40 is considered a medium effect size based on Cohen's (1988) criteria.</p>							

Data in Table 5.33 divulged four workload management activities that have the most significant influence on the professional performance of educational psychologists according to responding managers, that is: formal structured workload management systems; regular one-on-one workload data discussions; clearly set goals and expectations for educational psychologists' workload; give educational psychologists autonomy to manage their workload and caseload size. Formal structured workload management systems and processes were reported to have the most significant influence ($\bar{x}=4.50$) on the professional performance of educational psychologists according to the data, 83.3 per cent of responding managers (n=5) reported a significant influence (see Table 5.33 and 5.34).

Two of the first four workload management activities ranked by educational psychologists' respondents correspond with managers' results, that is: clearly set goals and expectations for educational psychologists' workload and give educational psychologists autonomy to manage their workload and caseload size (see Table 5.33). Random allocation of work based on urgency and risk factors received the lowest mean score of all the workload management activities by both responding cohorts (see Table 5.33) and are indicative of the weakest influence.

Table 5.34. Summary of the ranking of the influence of workload management activities on the professional performance of educational psychologists.

Influence of workload management activities on the professional performance of educational psychologists.	
Managers' ranking of the influence of workload management activities	Mean/Median/Standard Deviation
1 st Formal structured workload management system and process	\bar{x} =4.50/Md=5.00/SD=1.22
2 nd Regular one-on-one workload data discussions	\bar{x} =3.83/Md=4.00/SD=1.17
3 rd Clearly set expectations for educational psychologists' workload	\bar{x} =3.67/Md=4.00/SD=1.03
4 th Give educational psychologists autonomy to manage their workload	\bar{x} =3.17/Md=3.50/SD=1.47
5 th Capability development plans for individual educational psychologists	\bar{x} =3.00/Md=2.50/SD=1.26
6 th Plans for managing educational psychologists' workload pressures	\bar{x} =3.00/Md=3.50/SD=1.26
7 th Regular feedback on performance	\bar{x} =2.67/Md=3.00/SD=0.52
8 th Random allocation of work based on risk and urgency	\bar{x} =2.17/Md=2.50/SD=0.98
Educational psychologists' ranking of the influence of workload management activities	Mean/Median/Standard Deviation
1 st Give educational psychologists autonomy to manage their workload	\bar{x} =4.32/Md=4.00/SD=0.75
2 nd Plans for managing educational psychologists' workload pressures	\bar{x} =3.84/Md=4.00/SD=0.96
3 rd Capability development plans for individual educational psychologists	\bar{x} =3.79/Md=4.00/SD=1.08
4 th Clearly set expectations for educational psychologists' workload	\bar{x} =3.74/Md=4.00/SD=1.19
5 th Regular one-on-one workload data discussions	\bar{x} =3.44/Md=3.00/SD=1.25
6 th Formal structured workload management system and process	\bar{x} =3.44/Md=3.00/SD=1.25
7 th Regular feedback on performance	\bar{x} =3.42/Md=3.00/SD=1.02
8 th Random allocation of work based on risk and urgency	\bar{x} =3.00/Md=3.00/SD=1.56

For the most part, ratings from the two respective cohorts were consistent based on the data and statistical results (see Table 5.33). The exceptions were two workload management activities: give educational psychologists autonomy to manage their own workload and formal structured workload management system. Data revealed a significant statistically difference for the latter workload management activity and a medium statistical difference for the former documented workload management activity (see Table 5.33) between the ratings of the manager and educational psychologist cohorts. These differences can be expected based on the data from the literature concerning educational psychologists' strong preference for autonomy in managing their work (Maister, 2003:168-169, 207-208, 219, 291; McKenna & Maister, 2005:xxx; Broderick, 2011:239) (see Par. 3.3.2). On the other hand, it can be anchored in managerial function, role, responsibilities, and purpose to plan, organise, command, coordinate and control and the management principles that underpin managerial leadership (Drucker, 1993:343-346; Smith & Cronje, 2002:40; Cole, 2004:14-16; Chandra, 2013:6) (see Par. 1.6).

Further examination of the influence of the various workload management processes on professional educational psychologists' activities followed. Participants were asked to select the workload management process (structured workload management system/random allocation of work based on urgency and risk/give educational psychologists autonomy to manage their own workload) that would result in the listed educational psychological professional activities (Curtis et al., 2002:30-42; Curtis, 2002;

Curtis et al., 2004:439; Jimerson et al., 2004:278; Jimerson et al., 2006:25; Edwards et al., 2007:265; Soto et al., 2007:304; Jimerson et al., 2008a:22; NASP, 2010:10).

Table 5.35. Influence of specific workload management processes.

Please select the workload management process that would result in the following professional educational psychology activities.					
<i>Educational psychologists' professional activities</i>	Respondent	Structured workload management system Total=n Percentage	Random allocation of work based on urgency and risk Total=n Percentage	Give educational psychologists autonomy to manage their workload Total=n Percentage	Total Percentage
Comprehensive intervention focussed educational psychological services	Manager	n=3 50.0	n=1 16.7	n=2 33.3	n=6 100.0
	Educational psychologist	n=4 21.1		n=15 78.9	n=19 100.0
Preventative educational psychological services	Manager	n=5 83.3		n=1 16.7	n=6 100.0
	Educational psychologist	n=7 36.8	n=1 5.3	n=11 57.9	n=19 100.0
Quality services to students who have special needs	Manager	n=5 83.3		n=1 16.7	n=6 100.0
	Educational psychologist	n=4 21.1	n=2 10.5	n=13 68.4	n=19 100.0
Systems support to facilities	Manager	n=4 66.7	n=1 16.7	n=1 16.7	n=6 100.0
	Educational psychologist	n=11 57.9	n=1 5.3	n=7 36.8	n=19 100.0
Educational psychologists' availability to engage in clinical supervision	Manager	n=6 100.0			n=6 100.0
	Educational psychologist	n=6 31.6	n=3 15.8	n=10 52.6	n=19 100.0

Between half and all of the responding managers selected the structured workload management system as the process that is most likely to result in the five mentioned educational psychological professional activities (see Table 5.35). In contrast to the feedback from the manager cohort, educational psychologist respondents maintained that giving educational psychologists autonomy to manage their workload has the most favourable results on the following activities: 78.9 per cent of responding educational psychologists (n=15) reported comprehensive intervention focussed educational psychological services, 68.4 per cent (n=13) reported quality services to students who have special needs, 57.9 per cent (n=11) reported preventative educational psychological services, and 52.6 per cent (n=10) reported educational psychologists' availability to participate in adequate supervision activities (see Table 5.35; Fig. 5.37). These declarations were not substantiated by empirical evidence and are based on self reporting.

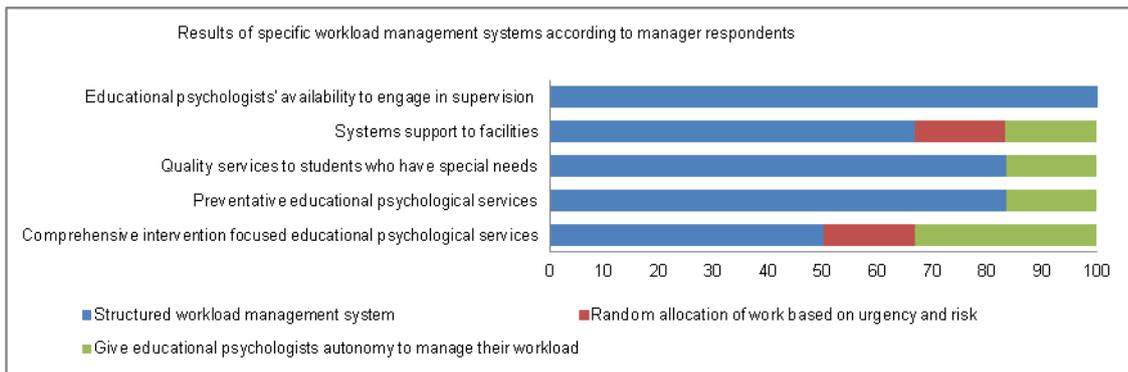


Figure 5.36. Influence of specific workload management systems according to responding managers.

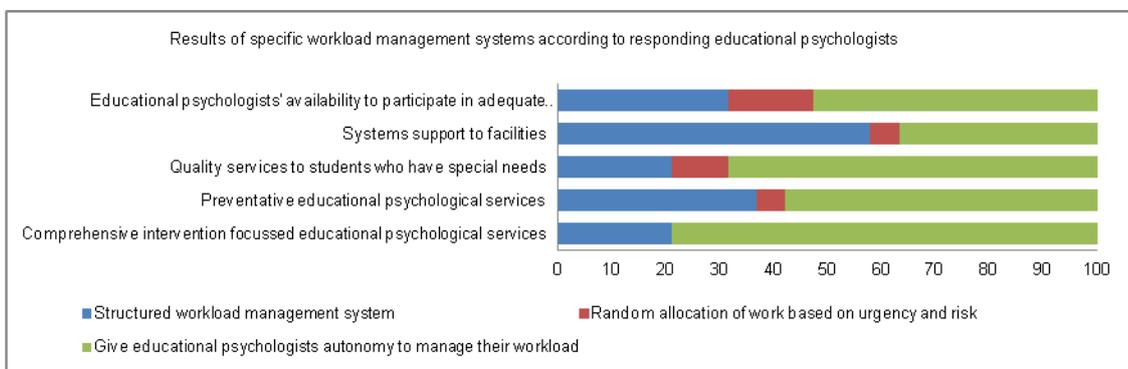


Figure 5.37. Influence of specific workload management systems according to responding educational psychologist.

5.2.5.3 Ideal educational psychologist-to-student ratio

Another element of great importance, related to educational psychologists' workload is the educational psychologist-to-student ratio. This ratio has attracted a lot of attention in scholarly literature (see Par. 3.3.2), (Curtis et al., 2002:30-42; Curtis, 2002; Curtis et al., 2004:431-442; Jimerson et al., 2004:278; Jimerson et al., 2006:25; Brown et al., 2006:488; Edwards et al., 2007:273; Jimerson, Oakland & Farrell, 2007:1-553; Jimerson et al., 2008a:22; Laaksonen, Laitinen & Salmi, 2007:106; Jimerson et al., 2008b:1-23; NASP, 2010:10; Curtis et al., 2012:28-30; Curtis, 2012:1-6; Castillo et al., 2012:4-6; Castillo, 2012:1-6; Merrell et al., 2012:104). The opinion of responding managers (n=6) on the ideal educational psychologist-to-student ratio were equally divided between the two categories (1:500-1000 and 1:2000-3000) (see Fig. 5.38). A different distribution of opinion was evident for responding educational psychologists (n=20), with 70.0 per cent selecting the 1:500-1000 category and the remainder (30.0 per cent) selected the 1:2000-3000 category

as the ideal educational psychologist-to-student ratio with the most positive influence (see Fig. 5.38).

These percentages are in line with the ideal ratio proposed by The National Association of School Psychologists (2010:10) (Curtis, 2004:439; Jimerson et al., 2004:267; Jimerson et al., 2006:25; Edwards et al., 2007:265; Jimerson et al., 2008a:12, 22). Lower educational psychologist-to-student ratios are supported in the literature and strongly associated with improved professional performance of educational psychologists and quality of service delivery with specific mention of comprehensive services to vulnerable children, increased intervention focus activities, effective preventative programmes, and increased levels of educational psychologist involvement with students with special needs (Curtis et al., 2002:30-42; Curtis, 2002; Soto et al., 2007:304; NASP, 2010:10). Conversely, a causal relationship between educational psychologist-to-student ratio and educational psychologist service was not evident in Curtis et al. (2012:30). However, the likelihood of more intervention-focus activities did increase in that study.

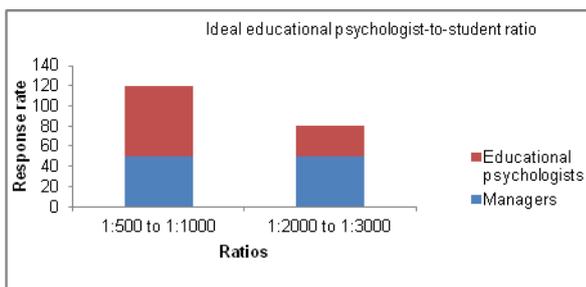


Figure 5.38. Ideal educational psychologist-to-student ratios.

5.2.5.4 Influence of managerial leadership on educational psychologist-to-student ratio

Ranking the influence that managerial leadership of a set of carefully selected factors have on the educational psychologist-to-student ratio received the highest non-response rate from the educational psychologist respondents; 25.0 per cent did not respond to the question. This may be a consequence of the question formulation or the type of question that was asked. The list of factors that influence educational psychologist-to-student ratios was compiled from research data obtained by prominent authorities in the field of educational psychology (Curtis, 2002; Curtis et al., 2004:439; Jimerson et al., 2004:278; Jimerson et al., 2006:25; Edwards et al., 2007:273; Jimerson et al., 2008a:22; Curtis et al., 2012:30) (see Pars. 2.3.3 and 2.3.14).

The researcher did not seek to explore these factors or discover additional factors. The focus is on exploring the extent to which managerial leadership of the listed factors influence the educational psychologist-to-student ratios. Respondents' rankings were displayed independently; managers' responses (see Table 5.39) and educational psychologists' responses (see Table 5.40).

Table 5.39. Ranking of the influence of managerial leadership factors on the educational psychologist-to-student ratio according to managers.

Please rank the influence that managerial leadership, of the listed factors, have on the educational psychologist-to-student ratios. Rank in order of most significant impact to lowest impact.									
Manager	Administrative responsibilities	Employment setting	Type of educational psychologist services	Time	Workload size	Service delivery model	Complexity and severity of cases	Professional capability of educational psychologist	Other responsibilities
1	6	5	3	8	7	4	2	1	9
2	6	4	5	2	1	3	7	8	9
3	-	-	-	-	-	-	-	-	-
4	7	6	5	3	1	4	2	9	8
5	7	6	5	3	2	1	4	8	9
6	8	5	4	3	7	2	1	6	9
Total								n	5
Total								%	100.0
Total	Missing data							n	1

-  First three places for most significant influence.
-  Last three places for least significant influence.

Table 5.40. Ranking of the influence factors on the educational psychologist-to-student ratio according to educational psychologists.

Please rank the influence that managerial leadership of the listed factors have on the psychologist-to-student ratios. Rank in order of most significant impact to lowest impact.									
Educational psychologist	Administrative responsibilities	Employment setting	Type of educational psychologist services	Time	Workload size	Service delivery model	Complexity and severity of cases	Professional capability of educational psychologist	Other responsibilities
1	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-
3	6	4	1	8	3	2	7	5	9
4	-	-	-	-	-	-	-	-	-
5	7	3	4	2	1	6	5	8	9
6	-	-	-	2	2	1	-	3	-
7	5	4	7	1	2	8	6	3	9
8	7	8	3	4	2	1	5	6	9
9	2	7	6	3	1	5	4	9	8
10	6	8	1	7	2	4	3	5	9
11	4	1	3	6	5	2	8	9	7
12	8	3	4	5	1	6	2	7	9
13	-	-	-	-	-	-	-	-	-
14	7	6	5	2	1	4	3	9	8
15	-	-	-	-	-	-	-	-	-
16	6	5	7	3	2	1	4	8	9
17	7	3	1	5	6	2	4	8	9
18	7	8	2	6	5	3	1	4	9
19	3	6	2	4	5	7	8	1	9
20	-	-	-	-	-	-	-	-	-
Total								n	15
Total								%	100.0
Total	Missing data							n	5

-  First three places for most significant influence.
-  Last three places for least significant influence.

Comparable data were provided by manager and educational psychologist respondents. Three out of the four highest-ranked effectively managed factors, according to educational psychologists, correspond with the factors endorsed by the responding manager cohort. Respondents agreed that managerial leadership of time, workload size, and service delivery model, have the most significant influence on the educational psychologist-to-student ratio. At the other end of the continuum, all of the managers (Md=9.00, n=5) and most educational psychologists (Md=9.00, n=13) indicated that management of other responsibilities had the least significant impact on educational psychologist-to-student ratio (see Tables 5.39, 5.40, and 5.41).

The Mann-Whitney U Test revealed no statistically significant difference between managers and educational psychologists in terms of the ranking of the influence of managerial leadership of other responsibilities on educational psychologist-to-student ratios (see Table 5.41). These two independent cohorts concur on two more of the lowest-ranked factors, although managed effectively, which have the least significant impact on the educational psychologist-to-student ratio, these are: professional capacity of educational psychologists and administrative responsibilities (see Tables 5.39, 5.40, and 5.41). Three (60.0 per cent) out of five responding managers ranked professional capability of educational psychologist as having the least significant impact, and the same percentage ranked administrative responsibilities as having the least significant impact. Educational psychologist respondents' ranked professional capacity of educational psychologists (46.7 per cent) and administrative responsibilities (40.0 per cent) as having the least significant impact.

The data revealed that well-managed factors - time, workload size, complexity and severity of cases, and service delivery model - have the most significance influence on the educational psychologist-to-student ratio, according to responding managers. Additionally, even if effectively managed, professional capability of educational psychologists, administrative responsibilities, and other responsibilities do not influence the educational psychologist-to-student ratio significantly.

Table 5.41. Rankings of the influence of listed factors on the educational psychologist-to-student ratio.

Please rank the influence that managerial leadership of the listed factors have on the educational psychologist-to-student ratios. Rank in order of most significant impact (1) to lowest impact (9).	Sample	
	Manager	Educational psychologist
**Statistical test analysis	Mean (\bar{x}) Median (Md) Standard Deviation (S) Minimum Maximum Mean rank (Sum of Ranks) Valid n	Mean (\bar{x}) Median (Md) Standard Deviation (S) Minimum Maximum Mean rank (Sum of Ranks) Valid n
Administrative responsibilities	6.80 7.00 0.84 6.00 8.00 11.50 (57.50) 5	5.77 6.00 1.79 2.00 8.00 57.50 (113.50) 13
** Mann-Whitney U Test revealed no statistically significant difference in terms of the ranking of the influence of management of administrative responsibilities on educational psychologist-to-student ratios, between managers (Md=7.00, n=5) and educational psychologists (Md=6.00, n=13), U=22.500, z=-1.027, p=.304).		
Employment setting	5.20 5.00 0.84 4.00 6.00 9.80 (49.00) 5	5.08 5.00 2.29 1.00 8.00 9.38 (122.00) 13
** Mann-Whitney U Test revealed no statistically significant difference in terms of the ranking of the influence of management of employment setting on educational psychologist-to-student ratios, between managers (Md=5.00, n=5) and educational psychologists (Md=5.00, n=13), U=31.000, z=-0.150, p=.881).		
Type of educational psychologist service	4.40 5.00 0.89 3.00 5.00 12.50 (62.50) 5	3.43 3.00 2.14 1.00 7.00 9.11 (127.50) 14
** Mann-Whitney U Test revealed no statistically significant difference in terms of the ranking of the influence of the management of the type of educational psychologist service on educational psychologist-to-student ratios, between managers (Md=5.00, n=5) and educational psychologists (Md=3.00, n=14), U=22.500, z=-1.171, p=.242).		
Time	3.80 3.00 2.39 2.00 8.00 8.30 (41.50) 5	4.31 4.00 2.10 1.00 8.00 9.96 (129.50) 13
** Mann-Whitney U Test revealed no statistically significant difference in terms of the ranking of the influence of management of time on educational psychologist-to-student ratios, between managers (Md=3.00, n=5) and educational psychologists (Md=4.00, n=13), U=26.500, z=-0.600, p=.548).		
Workforce size	3.60 2.00 3.13 1.00 7.00 11.00 (55.00) 5	2.64 2.00 1.82 1.00 6.00 9.64 (135.00) 14
** Mann-Whitney U Test revealed no statistically significant difference in terms of the ranking of the influence of management of workforce size on educational psychologist-to-student ratios, between managers (Md=2.00, n=5) and educational psychologists (Md=2.00, n=14), U=30.000, z=-0.480, p=.631).		
Service delivery model	2.80 3.00 1.30 1.00 4.00 7.80 (39.00) 5	3.92 4.00 2.33 1.00 8.00 10.15 (132.00) 13
** Mann-Whitney U Test revealed no statistically significant difference in terms of the ranking of the influence of management of service delivery model on educational psychologist-to-student ratios, between managers (Md=3.00, n=5) and educational psychologists (Md=4.00, n=13), U=24.000, z=-0.849, p=.396).		
Complexity and severity of cases	3.20 2.00 2.39 1.00 7.00 7.30 (36.50) 5	4.50 4.00 2.14 1.00 8.00 10.96 (153.50) 14
** Mann-Whitney U Test revealed no statistically significant difference in terms of the ranking of the influence of management of the complexity and severity of cases on educational psychologist-to-student ratios, between managers (Md=2.00, n=5) and educational psychologists (Md=4.00, n=14), U=21.500, z=-1.262, p=.207).		
Professional capability of educational psychologist	6.60 8.00 3.36	6.31 7.00 2.56

	1.00	1.00
	9.00	9.00
	10.50	9.12
	(52.50)	(118.50)
	5	13
** Mann-Whitney U Test revealed no statistically significant difference in terms of the ranking of the influence of management of the professional capability of educational psychologist on educational psychologist-to-student ratios, between managers (Md=8.00, n=5) and educational psychologists (Md=7.00, n=13), U=27.500, z=-0.501, p=.616).		
Other responsibilities	8.60	8.69
	9.00	9.00
	0.55	0.63
	8.00	7.00
	9.00	9.00
	8.60	9.85
	(43.00)	(128.00)
	5	13
** Mann-Whitney U Test revealed no statistically significant difference in terms of the ranking of the influence of management of other responsibilities on educational psychologist-to-student ratios, between managers (Md=9.00, n=5) and educational psychologists (Md=9.00, n=13), U=28.000, z=-0.566, p=.571).		

5.2.5.5 Consequences of ineffective workload management

The final component in the examination of the influence of managerial leadership on the workload of educational psychologists leads to an exploration of the consequences for the professional performance of educational psychologists when their workload is not effectively managed. Both manager and educational psychologist cohorts rated similar consequences as the four that are quite or extremely likely when educational psychologists' workload is not effectively managed. Those are: increased levels of stress, burnout, low levels of job satisfaction, and high staff turnover rates (see Table 5.42; Figs. 5.43 and 5.44). An increased level of stress was ranked as the most likely consequence by both responding groups. Furthermore, 94.8-100.0 per cent of respondents, in both cohorts, rated this consequence as quite or extremely likely.

The only slight variation is that five (83.4 per cent) out of the six responding managers rated burnout and the same number ranked low levels of job satisfaction in third place (see Table 5.43). Educational psychologist respondents ranked these two abovementioned consequences in the exact reverse order (see Table 5.44). Educational psychologists (94.7 per cent) rated low levels of job satisfaction in second place, and 84.2 per cent respondents (n=16) ranked in third place. Three (50.0 per cent) of the six responding managers ranked high staff turnover rates in fourth as a consequence that is quite likely, and by 77.8 per cent of responding educational psychologists (n=14) considered it either quite likely (55.6 per cent) or extremely likely (see Table 5.42; Figs. 5.43 and 5.44).

In addition, two of the three lowest-ranked consequences, which were in the data from responding managers and educational psychologists, were the same. These less likely consequences were: high levels attrition and low levels of professional commitment (see Figs. 5.43 and 5.44).

Table 5.42. Consequences for the professional performance of educational psychologists when their workload is not effectively managed.

Please rate the consequences for the professional performance of educational psychologists when their workload and the education psychologists-to-student ratio are not effectively managed.							
Consequence	Respondents	Not at all likely	Slight likely	Moderate likely	Quite likely	Extremely likely	Mean (\bar{x}) Median (Md) Standard Deviation (S) Minimum Maximum Mean Rank (Sum of ranks) Valid n
		Total – n Percentage					
** Statistical test analysis							
Low levels of job satisfaction	Manager			n=1 16.7	n=4 66.7	n=1 16.7	4.00 4.00 0.63 3.00 5.00 9.25 (55.50) 6
	Educational psychologist			n=1 5.3	n=8 42.1	n=10 52.6	4.47 5.00 0.61 3.00 5.00 14.18 (269.50) 19
** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of low levels of job satisfaction as a consequences for the professional performance of educational psychologists when workload and educational psychologist-to-student ratios are not effectively managed, between managers (Md=4.00, n=6) and educational psychologists (Md=5.00, n=19), U=34.500, z=-1.596, p=.111).							
Poor professional performance	Manager		n=2 33.3	n=2 33.3		n=2 33.3	3.33 3.00 1.37 2.00 5.00 11.00 (66.00) 6
	Educational psychologist		n=1 5.3	n=7 36.8	n=8 42.1	n=3 15.8	3.68 4.00 0.82 2.00 5.00 13.63 (259.00) 19
** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of poor professional performance as a consequences for the professional performance of educational psychologists when workload and educational psychologist-to-student ratios are not effectively managed, between managers (Md=3.00, n=6) and educational psychologists (Md=4.00, n=19), U=45.000, z=-0.799, p=.424).							
Capacity and capability issues	Manager		n=1 16.7	n=2 33.3	n=2 33.3	n=1 16.7	3.50 3.50 0.77 3.00 5.00 11.75 (70.50) 6
	Educational psychologist			n=9 50.0	n=6 33.3	n=3 16.7	3.67 3.50 0.77 3.00 5.00 12.75 (229.50) 18
** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of capacity and capability issues as a consequences for the professional performance of educational psychologists when workload and educational psychologist-to-student ratios are not effectively managed, between managers (Md=3.50, n=6) and educational psychologists (Md=3.50, n=18), U=49.500, z=-0.323, p=.747).							
High levels of attrition	Manager		n=3 50.0	n=1 16.7	n=2 33.3		2.83 2.50 0.98 2.00 4.00 8.75 (52.50) 6
	Educational psychologist		n=2 10.5	n=7 36.8	n=5 26.3	n=5 26.3%	3.68 4.00 1.00 2.00 5.00 14.34 (272.50)

							19
<p>** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of high levels of attrition as a consequences for the professional performance of educational psychologists when workload and educational psychologist-to-student ratios are not effectively managed, between managers (Md=2.50, n=6) and educational psychologists (Md=4.00, n=19), U=31.500, z=-1.682, p=.093).</p>							
Low levels of professional commitment	Manager		n=4 66.7			n=2 33.3	3.00 2.00 1.55 2.00 5.00 11.50 (69.00) 6
	Educational psychologist	n=2 10.5	n=4 21.1	n=4 21.1	n=3 15.8	n=6 31.6	3.37 3.00 1.42 1.00 5.00 13.47 (256.00) 19
<p>** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of low levels of professional commitment as a consequences for the professional performance of educational psychologists when workload and educational psychologist-to-student ratios are not effectively managed, between managers (Md=2.00, n=6) and educational psychologists (Md=3.00, n=19), U=48.000, z=-0.594, p=.553).</p>							
High staff turnover rates	Manager			n=3 50.0	n=3 50.0		3.50 3.50 0.55 3.00 4.00 9.50 (57.00) 6
	Educational psychologist	n=1 5.6	n=1 5.6	n=2 11.1	n=10 55.6	n=4 22.2	3.83 4.00 1.04 1.00 5.00 13.50 (243.00) 18
<p>** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of high staff turnover rates as a consequences for the professional performance of educational psychologists when workload and educational psychologist-to-student ratios are not effectively managed, between managers (Md=3.50, n=6) and educational psychologists (Md=4.00, n=18), U= 36.000, z=-1.318, p=.187).</p>							
Increased levels of stress	Manager				n=1 16.7	n=5 83.3	4.80 5.00 0.45 4.00 5.00 14.20 (71.00) 5
	Educational psychologist			n=1 5.3	n=6 31.6	n=12 63.2	4.58 5.00 0.61 3.00 5.00 12.05 (229.00) 19
<p>** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of increased levels of stress as a consequences for the professional performance of educational psychologists when workload and educational psychologist-to-student ratios are not effectively managed, between managers (Md=5.00, n=5) and educational psychologists (Md=5.00, n=19), U=39.00, z=-1.682, p=.733).</p>							
Burn out	Manager			n=1 16.7	n=1 16.7	n=4 66.7	4.50 5.00 0.84 3.00 5.00 15.83 (95.00) 6
	Educational psychologist		n=1 5.3	n=2 10.5	n=10 52.6	n=6 31.6	4.11 4.00 0.81 2.00 5.00 12.11 (230.00) 19
<p>** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of burnout as a consequences for the professional performance of educational psychologists when workload and educational psychologist-to-student ratios are not effectively managed, between managers (Md=5.00, n=6) and educational psychologists (Md=4.00, n=19), U=40.000, z=-1.173, p=.241).</p>							

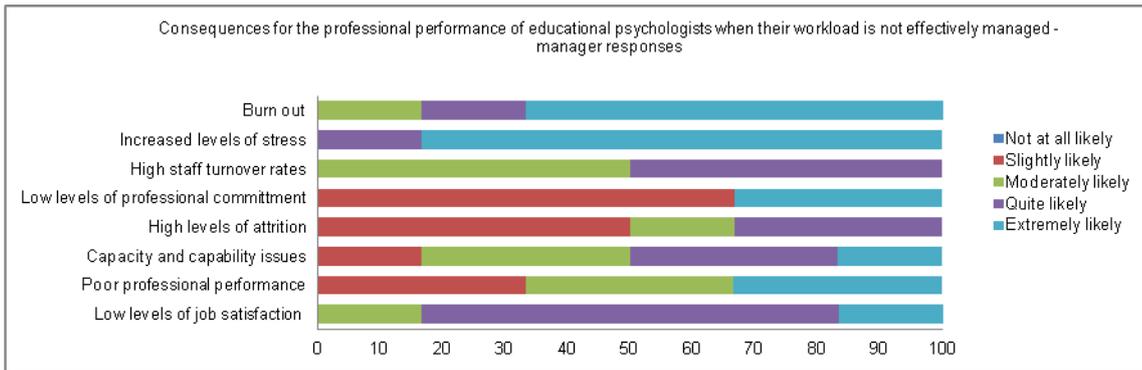


Figure 5.43. Consequences for the professional performance of educational psychologists when their workload is not effectively managed – manager responses.

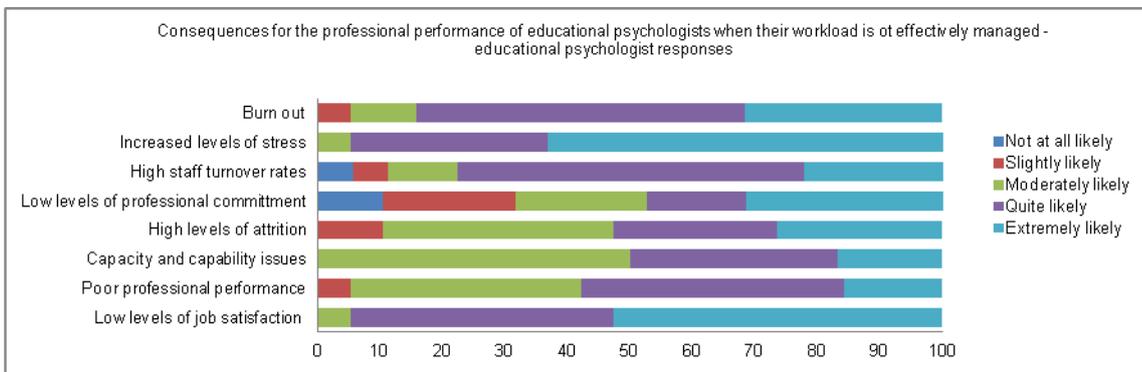


Figure 5.44. Consequences for the professional performance of educational psychologists when their workload is not effectively managed – educational psychologist responses.

Table 5.45. Ranking of the consequences for the professional performance of educational psychologists when their workload is not effectively managed.

Consequences for the professional performance of educational psychologists when their workload is not effectively managed.	
Manager ranking order of consequences	Mean/Median/Standard Deviation
1 st Increased levels of stress	\bar{x} =4.80/Md=5.00/SD=0.45
2 nd Burnout	\bar{x} =4.50/Md=5.00/SD=0.84
3 rd Low levels of job satisfaction	\bar{x} =4.00/Md=4.00/SD=0.63
4 th High staff turnover rates	\bar{x} =3.50/Md=3.50/SD=0.55
5 th Capacity and capability issues	\bar{x} =3.50/Md=3.50/SD=0.77
6 th Poor professional performance	\bar{x} =3.33/Md=3.00/SD=1.37
7 th Low levels of professional commitment	\bar{x} =3.00/Md=3.00/SD=1.55
8 th High levels of attrition	\bar{x} =2.83/Md=2.50/SD=0.98
Educational psychologist ranking order of consequences	
	Mean/Median/Standard Deviation
1 st Increased levels of stress	\bar{x} =4.58/Md=5.00/SD=0.61
2 nd Low levels of job satisfaction	\bar{x} =4.47/Md=5.00/SD=0.61
3 rd Burnout	\bar{x} =4.11/Md=4.00/SD=0.81
4 th High staff turnover rates	\bar{x} =3.83/Md=4.00/SD=1.04
5 th Poor professional performance	\bar{x} =3.68/Md=4.00/SD=0.82
6 th High levels of attrition	\bar{x} =3.68/Md=4.00/SD=1.00
7 th Capacity and capability issues	\bar{x} =3.67/Md=3.50/SD=0.77
8 th Low levels of professional commitment	\bar{x} =3.37/Md=3.00/SD=1.42

5.2.6 Data regarding the influence of managerial leadership on educational psychologists' engagement in clinical supervision

In order to continue with an exploration of the influence of managerial leadership educational psychologists' engagement in clinical supervision, it is necessary to investigate the influence of supervision activities on the professional performance of educational psychologists and the main managerial leadership activities drawn on, to manage educational psychologists' engagement in clinical supervision. This information provides the context in which the influence of managerial leadership on educational psychologists' engagement in regular supervision can be studied. Only then can the consequences of the lack of educational psychologists' engagement in clinical supervision be examined.

5.2.6.1 Influence of managerial leadership on educational psychologists' engagement in clinical supervision

Four supervision activities discussed in the cited literature (see Pars. 3.2.5 and 3.3.5) that resonated with the researcher's managerial leadership experience and observation in the field were pulled together and presented to respondents (Maister, 2003:157-162, 171, 210-212; Cole, 2004:37-39; Jimerson et al., 2004:266, 273-276, 279, 281; Jimerson et al., 2006:13, 20-21, 25-27; Thielking et al., 2006:406-407, 412; Papacosta, 2007:69; Jimerson et al., 2008a:11-12, 17-19, 23; AEP, 2008:1-20; NASP, 2010:1-20; Broderick, 2011:55-60, 209; Kaiser & Ringlsetter, 2011:91; Curtis et al., 2012:28-30; Curtis, 2012:1-6; MOE, 2012) (see Table 5.45). Respondents were asked to rate the influence of these supervision activities on the professional performance of educational psychologists (see Table 5.46).

No statistically significant difference was detected in terms of the ratings of the influence of individually listed supervision activities on the professional performance of educational psychologists, between participating manager and educational psychologist cohorts (see Table 5.46). Manager respondents (75.0 per cent) regarded the influence of providing/receiving professional development during supervision on the professional performance of educational psychologists as noteworthy. However it was not ranked as

the biggest influence whereas explore and acquire new professional responses for future situations was ranked as the most likely influence (see Fig. 5.48; Table 5.49).

Only one responding educational psychologist (n=1) indicated that two of the listed supervision activities will have a negative influence, when rating the influence of providing/receiving professional development during supervision and the influence of reviewing a piece of professional practice, on the professional performance of educational psychologist (see Table 5.46). Respondents from both cohorts agreed that these supervision activities influence the professional performance of educational psychologist, as predicted by previous studies. Thielking (2006:207, 412) asserted that supervision provides a strong foundation for ongoing professional development, new learning, and stress debriefing.

Table 5.46. Influence of supervision activities on the professional performance of educational psychologists.

Please rate the influence that the listed supervision activities have on the professional performance of educational psychologists.							
Supervision activities	Respondents	Negative influence	Slight influence	Moderate influence	Big influence	Significant influence	Mean (\bar{x}) Median (Md) Standard Deviation (S) Minimum Maximum Mean Rank (Sum of ranks) Valid n
		Total=n Percentage	Total=n Percentage	Total=n Percentage	Total=n Percentage	Total=n Percentage	
** Statistical test analysis							
Provide/receive professional development during supervision	Manager				n=3 50.0	n=3 50.0	4.50 4.50 0.55 4.00 5.00 15.75 (94.50) 6
	Educational psychologist	n=1 5.0		n=4 20.0	n=7 35.0	n=8 40.0	4.05 4.00 1.05 1.00 5.00 12.83 (256.50) 20
** Mann-Whitney U Test revealed no statistically significant difference in terms of the influence of providing/ receiving professional development during supervision on the professional performance of educational psychologists, between managers (Md=4.00, n=6) and educational psychologists (Md=4.00, n=20), U= 46.500, z=-0.883, p=.377).							
Review pieces of professional practice (file reviews/case reviews)	Manager		n=1 16.7	n=1 16.7	n=3 50.0	n=1 16.7	3.67 4.00 1.03 2.00 5.00 11.75 (70.50) 6
	Educational psychologist	n=1 5.0		n=5 25.0	n=7 35.0	n=7 35.0	3.95 4.00 1.05 1.00 5.00 14.03 (280.50) 20
** Mann-Whitney U Test revealed no statistically significant difference in terms of rating the influence of reviewing pieces of professional practice (file reviews/case reviews) on the professional performance of educational psychologists during supervision, between managers (Md=4.00, n=6) and educational psychologists (Md=4.00, n=20), U=49.500, z=-0.672, p=5.501).							
Explore and acquire new professional responses for future situations	Manager			n=1 16.7	n=4 66.7	n=1 16.7	4.00 4.00 0.63 3.00

							5.00 11.17 (67.00) 6
	Educational psychologist		n=2 10.0	n=2 10.0	n=6 30.0	n=10 50.0	4.20 4.50 1.01 2.00 5.00 14.20 (284.00) 20
<p>** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of the influence of exploring and acquiring new professional responses for future situations on the professional performance of educational psychologists during supervision, between managers (Md=4.00, n=6) and educational psychologists (Md=4.50, n=20), U=46.00, z=-0.915, p=.360).</p>							
Stress debriefing	Manager			n=2 33.3	n=1 16.7	n=3 50.0	4.17 4.50 0.98 3.00 5.00 14.50 (87.00) 6
	Educational psychologist		n=1 5.0	n=5 25.0	n=7 35.0	n=7 35.0	4.00 4.00 0.92 2.00 5.00 13.20 (264.00) 20
<p>** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of the influence of stress debriefing on the professional performance of educational psychologists during supervision, between managers (Md=4.50, n=6) and educational psychologists (Md=4.00, n=20), U=54.000, z=-0.386, p=.700).</p>							

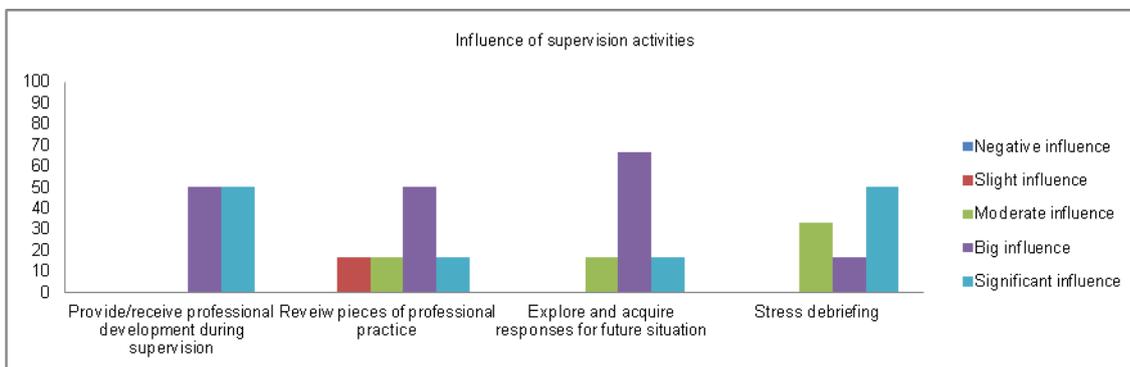


Figure 5.47. Influence of supervision activities on the professional performance of educational psychologists according to managers.

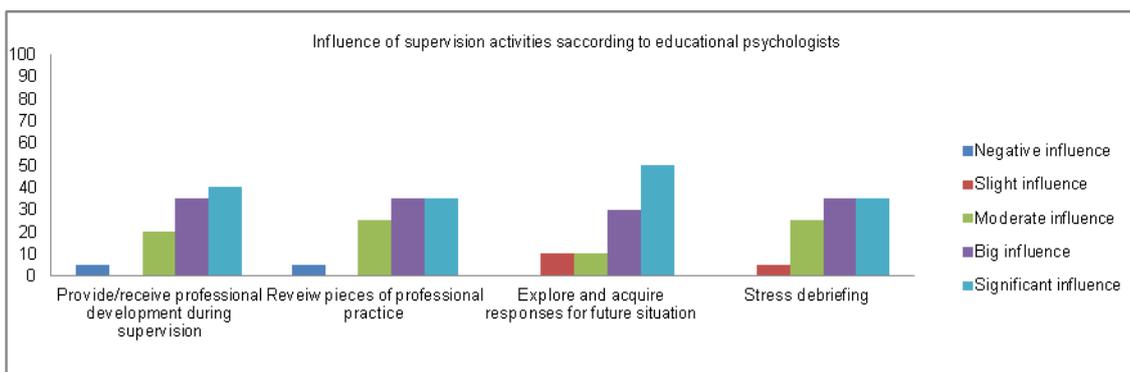


Figure 5.48. Influence of supervision activities on the professional performance of educational psychologists according to educational psychologist.

Table 5.49. Ranking of the influence of supervision activities on the professional performance of educational psychologists.

Influence of supervision activities on the professional performance of educational psychologists.	
Managers' ranking of the influence of supervision activities	Mean/Median/Standard Deviation
1 st Provide/receive professional development during supervision.	\bar{x} =4.50/Md=4.50/SD=0.55
2 nd Stress debriefing.	\bar{x} =4.17/Md=4.50/SD=0.98
3 rd Explore and acquire new professional responses for future situations.	\bar{x} =4.00/Md=4.00/SD=0.63
4 th Review pieces of professional practice.	\bar{x} =3.67/Md=4.00/SD=1.03
Educational psychologists' ranking of the influence of supervision activities	Mean/Median/Standard Deviation
1 st Explore and acquire new professional responses for future situations.	\bar{x} =4.17/Md=4.50/SD=1.01
2 nd Provide/receive professional development during supervision.	\bar{x} =4.05/Md=4.00/SD=1.05
3 rd Stress debriefing.	\bar{x} =4.00/Md=4.00/SD=0.92
4 th Review pieces of professional practice.	\bar{x} =3.95/Md=4.00/SD=1.05

5.2.6.2 Influence of managerial leadership activities on educational psychologists' engagement in clinical supervision

Supervision has been described as a fundamental component of educational psychologists' profession (Thielking et al., 2006:406; Jimerson et al., 2008a:5-28; AEP, 2008:1-20; NASP, 2010:1-12; Curtis et al., 2012:28-30; Curtis, 2012:1-6; MOE, 2012) and is critical for the complex and discreet nature of their roles (AEP, 2008:5-6). It is a legal, ethical, and/or employment requirement in some countries for educational psychologists to engage in clinical supervision during probationary (internship) period and after full registration (Australia, New Zealand, UK, and USA). Thielking et al. (2006:412) stated that it is a manager's responsibility to encourage educational psychologists to engage in continuous and robust supervision. Broderick (2012:57-60) proposed formalised mentoring processes. Data from the longitudinal studies conducted by Jimerson et al. (2004; 2006; 2008a) and Curtis et al. (2012:28-30) showed that not all educational psychologist participants took part in regular systematic professional supervision. This data revealed variability between countries based on the differences in regulations, training programmes, age of respondents, years of experience working as an educational psychologist, and the length of time the profession had existed in the specific country (Jimerson et al., 2006:14; Jimerson et al., 2008a:12). The AEP report (2008:18) stipulated that it is mandatory for educational psychologists to participate in supervision in the UK. Data from more recent research conducted by Curtis (2012:4-5) and Curtis et al. (2012:30) proposed that organisational programmes provided 30.0 per cent of participants in their study with professional supervision. The NASP report (2010:1-12) stipulated that schools are responsible for ensuring that adequate supervision is available to educational psychologists.

The researcher compiled four managerial leadership activities that are used by managers to encourage educational psychologists' engagement in clinical supervision (see Table 5.50). These managerial leadership activities were derived from the researcher's experience, knowledge of regulatory supervision requirements (NZPB – Code of ethics), understanding of organisational supervision guidelines, and related research.

Table 5.50. Influence of managerial leadership on the educational psychologists' engagement in regular supervision.

Please rate the influence of the management items on the educational psychologists' engagement in regular supervision.							
Managerial leadership activities		Not at all likely	Slightly likely	Moderately likely	Quite likely	Extremely likely	Mean (\bar{x}) Median (Md) Standard Deviation (S) Minimum Maximum Mean Rank (Sum of ranks) Valid n
		Total=n Percentage	Total=n Percentage	Total=n Percentage	Total=n Percentage	Total=n Percentage	
** Statistical test analysis							
Supervision session feedback during one-on-one performance conversations between a manager and educational psychologist	Manager			n=2 33.3	n=2 33.3	n=2 33.3	4.00 4.00 0.89 3.00 5.00 15.83 (95.00) 6
	Educational psychologist	n=1 5.0	n=5 25.0	n=4 20.0	n=4 20.0	n=6 30.0	3.45 3.50 1.32 1.00 5.00 12.80 (256.00) 20
** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of the influence of supervision session feedback during one-on-one performance on the educational psychologists' engagement in regular supervision, between managers (Md=4.00, n=6) and educational psychologists (Md=3.50, n=20), U=46.000, z=-0.879, p=.380).							
Formal discussions between a manager and educational psychologist to monitor supervision engagement, progress and outcomes of supervision sessions	Manager		n=1 16.7	n=2 33.3	n=1 16.7	n=2 33.3	3.67 3.50 1.21 2.00 5.00 15.92 (95.50) 6
	Educational psychologist	n=4 20.0	n=3 15.0	n=5 25.0	n=4 20.0	n=4 20.0	3.05 3.00 1.43 1.00 5.00 12.78 (255.50) 20
** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of the influence of formal discussions between a manager and educational psychologist to monitor supervision engagement, progress and outcomes of supervision sessions on the educational psychologists' engagement in regular supervision, between managers (Md=3.50, n=6) and educational psychologists (Md=3.00, n=20), U=45.500, z=-0.903, p=.367).							
Formal process to monitor implementation of organisational supervision guidelines	Manager		n=2 33.3	n=1 16.7	n=3 50.0		3.17 3.50 0.98 2.00 4.00 14.83 (89.00) 6
	Educational psychologist	n=4 20.0	n=4 20.0	n=6 30.0	n=2 10.0	n=4 20.0	2.90 3.00 1.41 1.00 5.00 13.10 (262.00) 20
** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of the influence of a formal process to monitor the implementation of organisational supervision guidelines on the educational psychologists' engagement in regular supervision, between managers (Md=3.50, n=6) and educational psychologists (Md=3.00, n=20), U=52.000, z=-0.498, p=.618).							
Formal process to monitor implementation of compulsory supervision requirements stipulated by the appropriate educational psychological statutory authority	Manager		n=2 33.3	n=1 16.7	n=2 33.3	n=1 16.7	3.33 3.50 1.21 2.00 5.00 14.58 (87.50) 6

	Educational psychologist	n=4 20.0	n=3 15.0	n=5 25.0	n=4 20.0	n=4 20.0	3.05 3.00 1.43 1.00 5.00 13.18 (263.50) 20
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** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of the influence of a formal process to monitor implementation of compulsory supervision requirements stipulated by the appropriate educational psychological statutory authority on the educational psychologists' engagement in regular supervision, between managers (Md=3.50, n=6) and educational psychologists (Md=3.00, n=20), U=53.500, z=-0.404, p=.686).

In the present study, responses from both responding groups reflected data from the scholarly literature. Manager respondents agreed that it is likely (moderately likely - 33.3 per cent/quite likely-33.3 per cent/extremely likely-33.3 per cent), that supervision session feedback during one-on-one performance conversations between a manager and educational psychologist will influence educational psychologists' engagement in regular supervision (see Table 5.50; Fig. 5.51) but, they were divided on how likely it is. All of the manager respondents stated that this particular managerial leadership item have an influence on encouraging educational psychologists' engagement in clinical supervision. The same consistency in rating was not evident in data from educational psychologist respondents but this cohort concurred that it is likely that supervision session feedback would encourage educational psychologists to engage in supervision (see Table 5.50; Fig. 5.52).

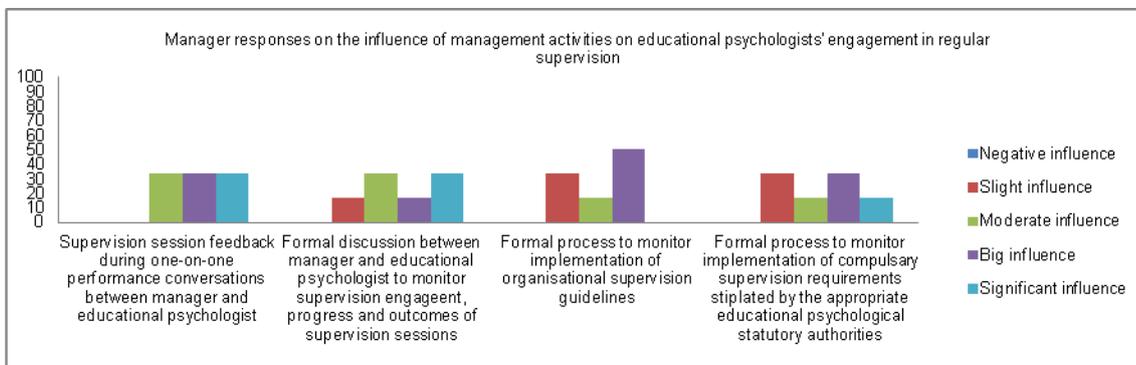


Figure 5.51. The influence of managerial leadership on the educational psychologists' engagement in clinical supervision.

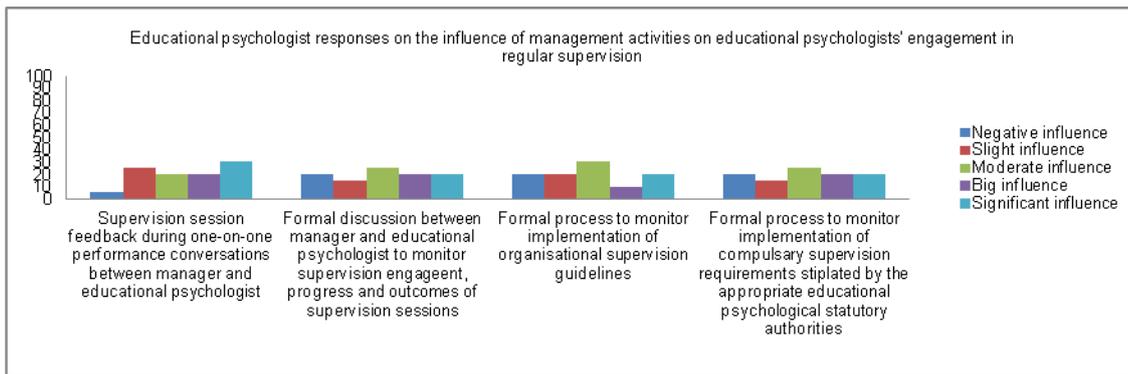


Figure 5.52. The influence of managerial leadership on the educational psychologists' engagement in clinical supervision.

Data attained on the other three managerial leadership items (see Table 5.50) - correspond to a large extent between managers and educational psychologist cohorts. Between 66.7 and 83.3 per cent of managers considered it likely, that these three managerial leadership items will influence educational psychologists' engagement in regular supervision (see Fig. 5.50). Responding educational psychologists did not rate these three items as high as the manager respondents. Nonetheless, between 66.0 and 70.0 per cent of educational psychologists rated it likely that these three managerial leadership items would persuade educational psychologists to engagement in clinical supervision, see Table 5.50 and Figure 5.52 for exact figures on each item. Although not a large number, 20.0 per cent of educational psychologist respondents (n=4) rated it not at all likely that any of the three managerial leadership items would encourage participation in supervision. The first- and second-ranked managerial leadership items indicate a need from both cohorts to collaborate on and discuss clinical supervision progress (see Table 5.53). But based on these ratings, they also agreed that it is likely that a formal process to monitor implementation of clinical supervision requirements stipulated by the appropriate statutory authorities or organisational supervision guidelines will influence educational psychologists' engagement in clinical supervision.

Table 5.53. Influence of managerial leadership activities on educational psychologists' engagement in clinical supervision.

Influence of managerial leadership activities on educational psychologists' engagement in clinical supervision.	
Managers' ranking of the influence of managerial leadership activities on educational psychologists' engagement in clinical supervision	Mean/Median/Standard Deviation
1 st Supervision session feedback during one-on-one performance conversations between managers and educational psychologists	\bar{x} =4.00/Md=4.00/SD=0.89
2 nd Formal discussion between manager and educational psychologist to monitor supervision engagement, progress, and outcomes	\bar{x} =3.69/Md=3.50/SD=0.98
3 rd Formal process to monitor implementation of compulsory supervision requirements stipulated by the appropriate statutory authorities	\bar{x} =3.33/Md=3.50/SD=1.21
4 th Formal process to monitor implementation of organisational supervision guidelines	\bar{x} =3.17/Md=3.50/SD=0.98
Educational psychologists' ranking of the influence of managerial leadership activities on educational psychologists' engagement in clinical supervision	Mean/Median/Standard Deviation
1 st Supervision session feedback during one-on-one performance conversations between managers and educational psychologists	\bar{x} =4.40/Md=3.50/SD=1.32
2 nd Formal process to monitor implementation of compulsory supervision requirements stipulated by the appropriate statutory authorities	\bar{x} =3.05/Md=3.00/SD=1.43
3 rd Formal discussion between manager and educational psychologist to monitor supervision engagement, progress, and outcomes	\bar{x} =3.03/Md=3.00/SD=1.43
4 th Formal process to monitor implementation of organisational supervision guidelines	\bar{x} =2.90/Md=3.00/SD=1.41

Managers' narratives of the main managerial leadership activities they use to encourage educational psychologists to engage in clinical supervision provide further clarification (see Table 5.54). One of the main themes from the verbatim accounts is the connection between manager and educational psychologist, specifically: Explore new responses; stress debriefing; make structured time available; encouragement and value of the activity; dates in diary; discuss in team meetings; regular, formal and informal contact with team members; Discussion of complex and difficult cases; and regular scheduled supervision.

Table 5.54. Summary of verbatim responses from managers with relation to the managerial leadership activities they utilise to support educational psychologists to engage in clinical supervision.

Please describe the three main managerial leadership activities you utilise to support educational psychologists to engage in regular, ongoing, and rigorous supervision.	
Respondent	Verbatim account of response
Managers	<ul style="list-style-type: none"> • <i>Clear job description</i> • <i>Realistic work plans</i> • <i>Good appraisal structure</i> • <i>Review practice</i> • <i>Explore new responses</i> • <i>Stress debriefing</i> • <i>Make structured time available</i> • <i>Service -wide policy</i> • <i>Encouragement and value of the activity</i> • <i>Dates in diary</i> • <i>Include in planning performance development process</i> • <i>Discuss in team meetings</i> • <i>Regular, formal and informal contact with team members</i> • <i>Discussion of complex and difficult cases</i> • <i>Regular scheduled supervision</i>
Total	n=5
Missing	n=1

It is evident from the data in the current study that engagement in clinical supervision has a noteworthy influence on the professional performance of educational psychologists. Most managers reported (verbatim explanations) that they deliberately plan opportunities to collaborate, monitor, support and encourage educational psychologists engagement in supervision (see Table 5.54). It is also likely that the set of management activities in Table 5.49 further influence the engagement of educational psychologists in supervision, to various degrees. Nevertheless, it was stated by Jimerson et al. (2004:281), Jimerson et al. (2006:27), Curtis (2012:4-5), and Curtis et al. (2012:30) that not all educational psychologists engage in professional supervision. The lack of clinical supervision was labelled an internal challenge by educational psychologists (Jimerson et al., 2004:281; Jimerson et al., 2006:27). For that reason, it was necessary to explore the consequences for the professional performance of educational psychologists when they do not engage in adequate professional supervision.

5.2.6.3 Consequences for the professional performance of educational psychologists when they do not engage in clinical supervision

The figures above should be studied with caution when interpreting data. It may seem (at first glance) that increased levels of stress and burnout received the same ratings, which contrasts with previous analysis and rank order. However on closer examination it is clear that the ratings are dispersed by responding managers across different rating scale items.

Table 5.55. Consequences for the professional performance of educational psychologists when they do not engage in clinical supervision.

Please rate the consequences for the professional performance of educational psychologists when they do not engage in adequate professional supervision.							
Consequences	Respondent	Not at all likely	Slightly likely	Moderately likely	Quite likely	Extremely likely	Mean (\bar{x}) Median (Md) Standard Deviation (S) Minimum Maximum Mean Rank (Sum of ranks) Valid n
		Total Percentage	Total Percentage	Total Percentage	Total Percentage	Total Percentage	
** Statistical test analysis							
Low levels of job satisfaction	Manager		n=1 16.7	n=2 33.3	n=1 16.7	n=2 33.3	3.67 3.50 1.21 2.00 5.00 14.17 (85.00) 6
	Educational		n=1	n=2	n=7	n=6	n=4 3.50

	psychologist	5.0	10.0	35.0	30.0	20.0	3.50 1.10 1.00 5.00 13.30 (266.00) 20
<p>** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of low levels of job satisfaction as a consequence for educational psychologists when they do not engage in adequate supervision, between managers (Md=3.50, n=6) and educational psychologists (Md=3.50, n=20), U=56.000, z=-0.253, p=.800.</p>							
Poor professional performance	Manager		n=2 33.3	n=1 16.7	n=1 16.7	n=2 33.3	3.50 3.50 1.38 2.00 5.00 15.33 (92.00) 6
	Educational psychologist	n=2 10.0	n=3 15.0	n=8 40.0	n=6 30.0	n=1 5.0	3.05 3.00 1.05 1.00 5.00 12.95 (259.00) 20
<p>** Mann-Whitney U Test revealed no statistically significant difference in terms of the poor professional performance as a consequence for educational psychologists when they do not engage in adequate supervision, between managers (Md=3.50, n=6) and educational psychologists (Md=3.00, n=20), U=49.000, z=-0.694, p=.488.</p>							
Capacity and capability issues	Manager		n=2 33.3		n=1 16.7	n=3 50.0	3.83 4.50 1.47 2.00 5.00 16.08 (96.50) 6
	Educational psychologist	n=2 10.0	n=2 10.0	n=7 35.0	n=6 30.0	n=3 15.0	3.30 3.00 1.17 1.00 5.00 12.73 (254.50) 20
<p>** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of capacity and capability issues as a consequence for educational psychologists when they do not engage in adequate supervision, between managers (Md=4.50, n=6) and educational psychologists (Md=3.00, n=20), U=44.500, z=-0.970, p=.332.</p>							
High levels of attrition	Manager	n=1 16.7	n=2 33.3	n=2 33.3		n=1 16.7	2.67 2.50 1.37 1.00 5.00 11.67 (70.00) 6
	Educational psychologist	n=2 10.0	n=4 20.0	n=9 45.0	n=3 15.0	n=2 10.0	2.95 3.00 1.10 1.00 5.00 14.0 (281.00) 20
<p>** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of high levels of attrition as a consequence for the educational psychologists when they do not engage in adequate supervision, between managers (Md=2.50, n=6) and educational psychologists (Md=3.00, n=20), U=49.000, z=-0.702, p=.483.</p>							
Low levels of professional commitment	Manager		n=3 50.0	n=2 33.3		n=1 16.7	2.83 2.50 1.17 2.00 5.00

							13.00 (78.00) 6
	Educational psychologist	n=2 10.0	n=7 35.0	n=4 20.0	n=4 20.0	n=3 15.0	2.95 3.00 1.28 1.00 5.00 13.65 (273.00) 20
<p>** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of low levels of professional commitment as a consequence for educational psychologists when they do not engage in adequate supervision, between managers (Md=2.50, n=6) and educational psychologists (Md=3.00, n=20), U=57.000, z=-0.190, p=.849).</p>							
Erosion in the field of educational psychology	Manager			n=4 66.7	n=1 16.7	n=1 16.7	3.50 3.00 0.84 3.00 5.00 15.50 (93.00) 6
	Educational psychologist	n=2 10.0	n=6 30.0	n=4 20.0	n=4 20.0	n=4 20.0	3.10 3.00 1.33 1.00 5.00 12.90 (258.00) 20
<p>** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of erosion in the field of educational psychology as a consequence for educational psychologists when they do not engage in adequate supervision, between managers (Md=3.00, n=6) and educational psychologists (Md=3.00, n=20), U=48.000, z=-0.751, p=.453).</p>							
Lack of motivation	Manager		n=1 16.7	n=4 66.7		n=1 16.7	3.17 3.00 0.98 2.00 5.00 12.67 (76.00) 6
	Educational psychologist	n=4 20.0	n=3 15.0	n=2 10.0	n=6 30.0	n=5 25.0	3.25 4.00 1.52 1.00 5.00 13.75 (275.00) 20
<p>** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of low lack of motivation as a consequence for educational psychologists when they do not engage in adequate supervision, between managers (Md=3.00, n=6) and educational psychologists (Md=4.00, n=20), U=55.000, z=-0.311, p=.756).</p>							
High staff turnover rates	Manager	n=1 16.7	n=3 50.0	n=1 16.7		n=1 16.7	2.50 2.00 1.38 1.00 5.00 10.00 (60.00) 6
	Educational psychologist	n=2 10.0	n=4 20.0	n=6 30.0	n=2 10.0	n=6 30.0	3.30 3.00 1.38 1.00 5.00 14.55 (291.00) 20
<p>** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of low high staff turnover rates as a consequence for educational psychologists when</p>							

they do not engage in adequate supervision, between managers (Md=2.00, n=6) and educational psychologists (Md=3.00, n=20), U=39.000, z=-1.318, p=.188).

Increased levels of stress	Manager			n=2 33.3	n=2 33.3	n=2 33.3	4.00 4.00 0.89 3.00 5.00 13.67 (82.00) 6
	Educational psychologist	n=1 5.0	n=2 10.0	n=4 20.0	n=5 25.0	n=8 40.0	3.85 4.00 1.23 1.00 5.00 13.45 (269.00) 20

** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of increased levels of stress as a consequence for educational psychologists when they do not engage in adequate supervision, between managers (Md=4.00, n=6) and educational psychologists (Md=4.00, n=20), U=59.000, z=-0.064, p=.949).

Burnout			n=2 33.3	n=2 33.3		n=2 33.3	3.33 3.00 1.37 2.00 5.00 12.83 (77.00) 6
		n=1 5.3	n=3 15.8	n=8 42.1	n=4 21.1	n=3 15.8	3.26 3.00 1.10 1.00 5.00 13.05 (248.00) 19

Missing data from educational psychologist n=1

** Mann-Whitney U Test revealed no statistically significant difference in terms of the rating of burnout as a consequence for educational psychologists when they do not engage in adequate supervision, between managers (Md=3.00, n=6) and educational psychologists (Md=3.00, n=19), U=56.000, z=-0.066, p=.947).

Table 5.56. Ranking of consequences for the professional performance of educational psychologists when they do not engage in clinical supervision.

Consequences for the professional performance of educational psychologists when they do not engage in clinical supervision ranked in order of significance.	
Manager ranking order of consequences	Mean/Median/Standard Deviation
1 st Increased levels of stress	\bar{x} =4.00/Md=4.00/SD=0.89
2 nd Capacity and capability issues	\bar{x} =3.83/Md=4.50/SD=1.47
3 rd Low levels of job satisfaction	\bar{x} = 3.67/Md=3.50/SD=1.21
4 th Poor professional performance	\bar{x} = 3.50/Md=3.50/SD=1.38
5 th Erosion in the field of educational psychology	\bar{x} = 3.50/Md=3.00/SD=0.84
6 th Burnout	\bar{x} = 3.33/Md=3.00/SD=1.37
7 th Lack of motivation	\bar{x} = 3.17/Md=3.00/SD=0.98
8 th Low levels of professional commitment	\bar{x} = 3.83/Md=2.50/SD=1.17
9 th High levels of attrition	\bar{x} = 2.67/Md=2.50/SD=1.37
10 th High staff turnover rates	\bar{x} = 2.50/Md=2.00/SD=1.30
Educational psychologist ranking order of consequences	Mean/Median/Standard Deviation
1 st Increased levels of stress	\bar{x} =3.85/Md=4.00/SD=1.23
2 nd Low levels of job satisfaction	\bar{x} =3.50/Md=3.50/SD=1.10
3 rd Capacity and capability issues	\bar{x} = 3.30/Md=3.00/SD=1.17
4 th High staff turnover rates	\bar{x} = 3.30/Md=3.00/SD=1.38
5 th Burnout	\bar{x} = 3.26/Md=3.00/SD=1.10
6 th Lack of motivation	\bar{x} = 3.25/Md=4.00/SD=1.52
7 th Erosion in the field of educational psychology	\bar{x} = 3.10/Md=3.00/SD=1.33
8 th Poor professional performance	\bar{x} = 3.05/Md=3.00/SD=1.05
9 th High levels of attrition	\bar{x} = 2.95/Md=3.00/SD=1.10
10 th Low levels of professional commitment	\bar{x} = 2.95/Md=3.00/SD=1.28

5.2.7 SUMMARY OF QUANTITATIVE DATA

Quantitative data on the biographic characteristics of the sample of managers of educational psychologists in this research form the foundation for developing a profile of this cohort. The scholarly literature review did not include any biographic data for these managers. Data relating to managers' gender, age, ethnicity, language, management experience, experience managing educational psychologists, highest qualification level, and professional background were accumulated in an attempt to compile a comprehensive profile of the managers who manage and lead educational psychologists.

The quantitative findings revealed a cohort of managers dominated by females 66.6 per cent), who are mature (middle aged) (\bar{x} =54.3) and represent a diverse range of ethnic groups (Irish, Caucasian, and South African) and different languages (Afrikaans/English) representative of the countries they live in (Finland, India, Ireland, South Africa, and Switzerland). The managers of educational psychologists in this cohort are very experienced (\bar{x} =18.2) managers with many years of experience managing specifically educational psychologists (\bar{x} =14.3). They hold master's-level (66.6 per cent) and doctorate-level 33.3 per cent) qualifications in a range of disciplines but only one manager held a master's level degree specifically in the management discipline. Professional backgrounds of managers (Education, educational management, counselling psychology, and educational psychology) are associated to the fields of education and psychology which are very relevant to their role of managers of educational psychologists.

Quantitative results relating to the biographical characteristics of educational psychologists are generally consistent with scholarly literature and prominent studies. The educational psychologist cohort, who participated in the current research, continue to show an over representation of females (8.0 per cent) (Curtis et al., 2002:32, 35; Curtis et al., 2004:432; Jimerson et al., 2004:277; Jimerson et al., 2006:21; Brown et al., 2006:488; Worrell, Skaggs & Brown, 2006:143; Jimerson et al., 2008a:24; Jimerson et al., 2010:1; Curtis et al., 2012:2; Merrell, Erwin & Peacock, 2012:112), with a mean age of 41.1 years that ranged from 27 to 64 years (Curtis et al., 2004:433; Jimerson et al., 2004:265; Jimerson et al., 2006:12; Jimerson et al., 2008a:10; Jimerson et al., 2010:1). The data are not indicative of the predicted greying workforce (Worrell et al., 2006:143; Ysseldyke et al., 2006:10). Ethnicity (Cape Malays, Caucasian, Finnish, Indian, Pakistani, and European)

and language (Afrikaans, English, Swedish, and Finnish) of educational psychologists was predominantly representative of the courtiers who participated in the research.

Quantitative results revealed that not all educational psychologists had classroom teaching experience (Jimerson et al., 2004:266; Jimerson et al., 2006:11-12; Edwards et al., 2007:368; Jimerson et al., 2008a:10; Costello, 2010:5; MOE, 2012). Nine educational psychologists had no previous teaching experience. The mean number of 5.4 years classroom teaching experience were calculated for the rest (n=11). Educational psychologists had between 6 months to 15 years of experience practicing as educational psychologists. They hold very high qualification levels with the majority of the educational psychologist cohort holding master's-level degrees and one hold a doctorate-level degree (Maister, 2003:207-208, 291; Dawson et al., 2004:118; McKenna & Maister, 2005:xxii; Edwards et al., 2007:266; AEP, 2008:5; Costello, 2010:5; Jimerson et al., 2010:1-6; Soulbury Report, 2010:4; Broderick, 2011:9; Merrell et al., 2012:98; NZPB, 2012:12).

Educational psychologist and manager respondents had contrasting views with relation to the most effective service delivery model (TM and ERM). Manager respondents (66.6 per cent) selected the TM in contrast to educational psychologist respondents (73.6 per cent) who preferred the ERM. Their views on the influence of these service delivery models on a selection of educational psychological activities (see Table 5.20) were also diverse. Both cohorts agreed that the ideal management appoint would be the appointment of a qualified educational psychologist in a management role or at the very least the appointment of a qualified educational psychologist with management responsibilities to complement the role of a non-educational psychologist manager. Some variation in their views, on the influence of the mentioned management appointments, on a selection of management activities, were revealed. However they still concurred that the appointment of the qualified educational psychologists would have the strongest influence on most of these listed management activities.

Managers preferred structured workload management systems in contrast to educational psychologists who reported that giving educational psychologists autonomy to manage their workload and caseload size, provided maximum benefit when managing their workload. The influence of the workload management system on the professional performance of educational psychologists reflected the different preferences of managers

and educational psychologist respondents. The data show a strong support for formal structured workload management processes. This is reinforced by clearly set goals and expectations for educational psychologists' workload in combination with regular one-on-one caseload discussions and capability plans for individual educational psychologists, and allowing educational psychologists some degree of autonomy that is collaboratively agreed (see Table 5.32; Table 5.33). The five highest-ranked workload management activities, based on the mean value ranging from 3.00 to 4.50, calculated from the managers' responses, correspond with four out of the first five highest mean values, ranging between 3.44 and 4.32, for the educational psychologists' responses (see Table 5.33). Ideal educational psychologist-to-student ratios and the influence of a group of factors on educational psychologist-to-student ratio were explored to reveal no difference in the views of managers and educational psychologists.

Data regarding the influence of managerial leadership on educational psychologists' engagement in clinical supervision showed no statistical difference in terms of the ratings, between manager and educational psychologist cohorts. Supervision session feedback during one-on-one performance conversations between managers and educational psychologists were ranked as the activity that influence educational psychologists' engagement in clinical supervision the strongest.

Finally the consequences for the professional performance of educational psychologists when they do not receive appropriate management, their workload is not effectively managed, and when they do not engage in clinical supervision were explored. Two of the first three ranked consequences across all three previously mentioned domains are the same. Both cohorts ranked Low levels of job satisfaction and increased levels of stress as most likely consequences.

5.3 QUALITATIVE RESEARCH

Six purposefully selected New Zealand and South Africa managers of educational psychologists participated in focus group interviews (see Par. 4.7.2; Fig. 1.26). Five face-to-face interviews were conducted in New Zealand, while one interview was conducted through Skype (face-to-face) because of the international location of the participant. However, all six interviews were audio-taped with a Panasonic audio recorder.

Subsequent to recording the six interviews, qualitative data analysis commenced according to prescribed pre-designed steps (see Par. 4.8.2).

Verbatim transcripts of each interview were drafted and typed up, with field notes and non-verbal communication added to the transcripts. The verbatim drafts were read individually, studied to gain deeper understanding of the data and contemplate information on a deeper level. A range of data presentation options were considered while the transcripts were prepared. Tables, which included pertinent verbatim accounts from each participating manager, with a column for coding and category labels were deemed most suitable. The table eliminates the need for adding quotes to support code and categories labels in the analysis and presentation of results. Themes and category is written in the table directly opposite the supporting verbatim account.

Irrelevant information was discarded by highlighting these sections and omitted when data were transferred to the final tables (Creswell, 2014:195). Transcripts were read several times before the researcher started formally coding the data sets. General themes and categories were marked in the margin of the draft transcripts during preliminary reading. The decision to code the data by hand was based on the researchers desire to be immerge in the analysis process, as intensely as possible. Various descriptors, that are known and expected, presented in the quantitative data, or based on scholarly literature, were considered to label categories accurately, resulting in the development of concise descriptive terms for categories (Creswell, 2014:194-201).

Deliberation, comparison, and association of themes, for individual participants and between different participants, were examined. Interpretation of the themes with relation to relevant scholarly literature provided insight and gave deeper meaning to the data. Analysis and preliminary interpretation of data were represented in narrative format and supported by tables and graphs. Some continues numerical data sets were statistically analysed to calculate the mean, median, standard deviation, minimum, and maximum (see Table 5.57). Preliminary interpretation of the qualitative data was provided, but further in depth analysis of how the qualitative results help explain and expand the quantitative results is documented separately in Paragraph 5.4.

5.3.1 Biographic data of managers

A 100.0 per cent response rate was achieved on the first section and subsequent sections of the interview schedule. Responses, relating to the biographical characteristics of manager participants, were summarised (see Table 5.57) to provide a holistic description of participating managers' biographic profile, followed by an analysis of each demographic characteristic follows under individual headings.

Table 5.57. Summary of manager's biographical data.

Demographic data	Description	Frequency	Percentage	Mean (\bar{x}) Median (Md) Standard deviation (S) Minimum Maximum Valid n
Gender	Male	1	16.7	
	Female	5	83.3	
Total		6	100.0	
Age	35 years	1	16.7	52.5
	46 years	1	16.7	52.0
	47 years	1	16.7	12.7
	57 years	1	16.7	35.0
	58 years	1	16.7	72.0
	72 years	1	16.7	6
Total		6	100.0	
	European	5	83.3	
	British	1	16.7	
Total		6	100.0	
Language	English	6	100.0	
Total		6	100.0	
Management experience	2 years	1	16.7	15.5
	11 years	1	16.7	18.5
	17 years	1	16.7	7.8
	20 years	2	16.7	2.0
	23 years	1	16.7	23.0
Total		6	100.0	6
Experience managing educational psychologists	2 years	2	33.3	6.8
	5 years	1	16.7	5.5
	6 years	1	16.7	5.2
	11 years	1	16.7	2.0
	15 years	1	16.7	15.0
Total		6	100.0	6
Highest qualification level	Diploma	1	16.7	
	Bachelor's degree	1	16.7	
	Master's	4	66.6	
	Doctorate/PhD	0	0.0	
Total		6	100.0	
Highest qualification in management	None	4	66.7	
	Bachelor's degree	1	16.7	
	Master's	1	16.7	
	Doctorate/PhD	0	0.0	
Total		6	100.0	
Professional background	Nursing	2	16.7	
	Educational psychology	1	16.7	
	Education	2	33.3	
	Psychology	1	16.7	
Total		6	100.0	

5.3.1.1 Gender

Data relating to gender indicate a large female representation in this manager cohort. It is the researcher observation that similar over-representation of females in similar management roles is evident in local organisations and governmental departments. Five of the six participating managers were female and only one was male, as illustrated in Table 5.57 and Figure 5.58.

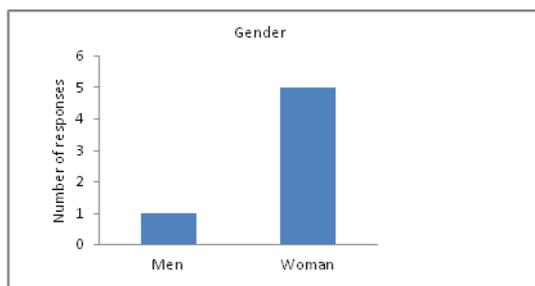


Figure 5.58. Managers' gender.

5.3.1.2 Age

Managers' ages do not follow any particular pattern but they do follow an expected trajectory. In the researcher's experience, managers are expected to have completed high qualification levels – it takes an average of 6 years to complete a qualification in educational psychology, with an additional prerequisite of teaching in some countries, or a master's-level qualification – and have extensive management experience in order, to be considered for the role of a manager of educational psychologists. This results in a managers' cohort that enter their managerial roles later in their careers or after extended studies. It would be highly unlikely for there to be a 25-year-old manager. The mean age of the sample of managers ($n=6$) who participated in the focus group interviews in the current study is 52.5 years ($\bar{x}=52.5$), ranging from 35 to 72 years, with a standard deviation of 12.7 ($S=12.7$) (see Table 5.57; Fig. 5.59).

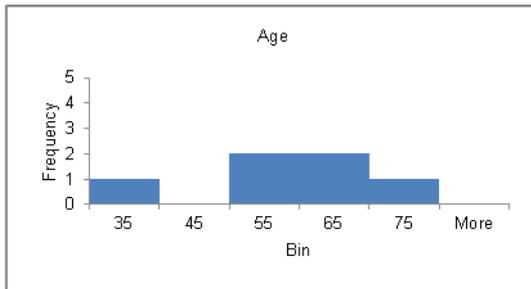


Figure 5.59. Managers' ages.

5.3.1.3 Ethnicity

Participating managers reported ethnic groups that are representative of the New Zealand and South African populations. The researcher observed these ethnic groups when working and living in these two countries. Five of the six participating managers identified as European and one identified as British (see Par. 2.2.4; Table 5.57; Fig. 5.62).

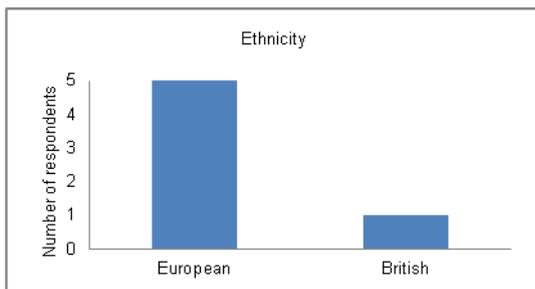


Figure 5.60. Ethnicity of managers.

5.3.1.4 Language

Five of the six participating managers reside and work in New Zealand and one manager lives in South Africa. All six participants reported that they speak/communicate most frequently in English. This is representative of the language that is most often used in New Zealand. English is one of the national languages of New Zealand and is the main language used for communication and writing (see Par. 2.2.5) (HRC, 2013). Similarly, English is also one of South-Africa's official languages. This data is consistent with the language (English) that the researcher communicated in most often when working and living in both these countries.

5.3.1.5 Management experience

Managers of educational psychologists have a high number of years of management experience (see Fig 5.61). Five of the six participants reported having been in management roles for over a decade (11-23 years), with three of these managers having two or more decades of experience (20-23 years). The mean number of years of management experience is 15.5 ($\bar{x}=15.5$), ranging from two to 23 years, with a standard deviation of 7.8 (SD=7.8) (see Table 5.57).

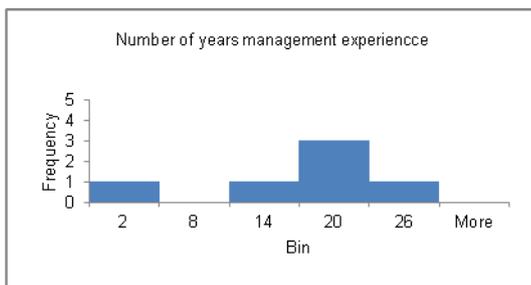


Figure 5.61. Number of years of management experience.

5.3.1.6 Experience managing educational psychologists

Participating managers did not report as many years of experience managing educational psychologists as the manager cohort in the first-phase of the research. Five of the six participants reported 11 or fewer years of experience managing educational psychologists. The younger participants had the fewest years of experience managing educational psychologists as illustrated in Table 5.62.

Table 5.62. Age and years of experience managing educational psychologist comparison

Managers' age	Year experience managing educational psychologists
35	2
46	5
47	6

The mean number of years of experience managing educational psychologists reported by participating managers (n=6) is 6.8 years ($\bar{x}=6.8$), ranging from two to 15 years, with a median of 5.5 (Md=5.5), and standard deviation of 4.8 (SD=4.8) (see Table 5.57; Figure 5.63).

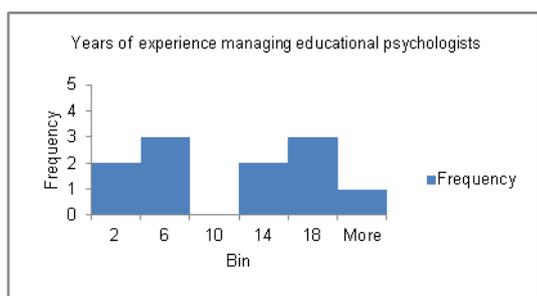


Figure 5.63. Years of experience managing educational psychologists.

5.3.1.7 Highest qualification level

The highest qualification level of participating managers was diploma (16.7 per cent), bachelor's degree (16.7 per cent), and master's-level degree (66.7 per cent) (see Table 5.57). In response to the highest qualification level, specifically in the field of management, one participating manager reported holding a bachelor's-level degree and another one reported holding a master's-level degree in management. The remaining two thirds ($n=4/66.7$ per cent) of the participants held no management qualifications. This is consistent with managers working in the same area as the researcher, where none of the managers of educational psychologists hold any management discipline qualifications.

5.3.1.8 Professional background

Participating managers reported coming from three different professional categories, namely: nursing (33.3 per cent), education (33.3 per cent), and psychology (33.3 per cent) (see Table 5.58). The researcher's colleagues in the field (managers of educational psychologists) come from a range of similar backgrounds that include nursing, educational psychology, clinical psychology, education, social workers, speech language therapy, and physiotherapy.

5.3.2 Data regarding the influence of management appointments on the professional performance of educational psychologists

To explore the influence of management appointments in more depth, managers were asked to grade three competency areas in their managerial leadership role (see Table 5.55), identify the competency in which they were least proficient (see Table 5.55), and

explain which professional development activities supported their learning in their weakest competency area (see Table 5.55).

Four of the managers believed that management and leadership knowledge and experience were the most important competency (60.0-70.0 per cent of their management role), five reported knowledge of the complexities of the school system as the second-most important competency (20.0-35.0 per cent of their management role) and four participants considered educational psychological knowledge and experience to be the least important (5.0-10.0 per cent of their management role) competency needed in their managerial leadership role (see Table 5.64). The data correspond with the researcher's own experience that management and leadership knowledge and experience encompass the largest component and is the most important competency area in her management role. One participant ranked all three competencies equal with 33.3 per cent. This equal spread may be indicative of her competence across all domains based on her number of years of experience managing educational psychologists (20 years), while at the same time continuing to practice as an educational psychologist in educational settings.

The consensus that educational psychological knowledge and experience is the least important competency is consistent with Broderick's (2011:267) view that technical knowledge of the business is not a prerequisite for managers to be successful in professional service organisations. Appointment of qualified educational psychologists in management roles is not a prevalent practice according to scholarly literature, the researcher's observations in the field, and quantitative and qualitative results (AEP, 2008:10-11; Children's Workforce Strategy, 2010:17). Nurses, educators, psychologists, and educational managers are appointed in management positions to provide managerial leadership for educational psychologists, according to the qualitative results (see Table 5.57).

Table 5.64. Summary of manager competencies.

In your opinion, what proportion does each competency encompass in your role as a manager? Must add up to 100 per cent.						
Competency	Participant 1	Participant 2	Participant 3	Participant 4	Participant 5	Participant 6
Knowledge of the complexities of the school system	35.0	20.0	30.0	20.0	33.3	20.0
Educational psychological knowledge and experience	5.0	10.0	10.0	70.0	33.3	10.0
Management and leadership knowledge and experience	60.0	70.0	60.0	10.0	33.3	70.0
Percentage	100.0	100.0	100.0	100.0	100.0	100.0

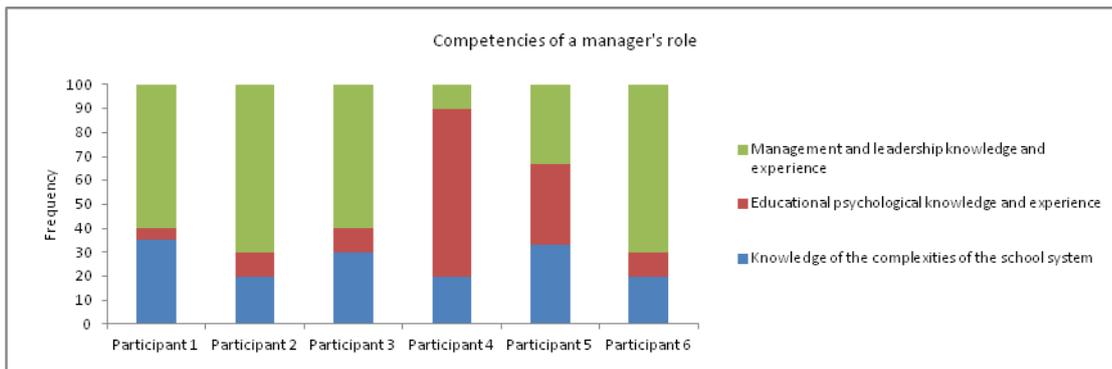


Figure 5.65. Competencies of a manager's role.

Five of the six participants reported that they lacked management and leadership knowledge and experience when they were appointed to management roles. Only one participant reported lacking educational psychological knowledge and experience (see Table 5.66). The demands of this management role require managerial leadership competence, both according to all but one of the participating managers and the AEP Report (2008:3, 5, 8-10).

Table 5.66. Summary of least proficient component.

Which competency were you least proficient in when you were appointed to the role of manager of educational psychologists?		
Participant	Response	Competency
Participant 1	<i>Educational psychological knowledge and experience would be the one I had least knowledge in.</i>	Educational psychological knowledge and experience
Participant 2	<i>I am not a qualified educational psychologist and had limited prior knowledge of the field of educational psychology but my role required knowledge about management and leadership....</i>	Management and leadership knowledge and experience
Participant 3	<i>Must be management and leadership...</i>	Management and leadership knowledge and experience
Participant 4	<i>I'm the manager. I'm not a psychologist (laugh) and I uhm wasn't trying to be one either...</i>	Management and leadership knowledge and experience
Participant 5	<i>This one (Participant pointed at management and leadership knowledge and experience)...</i>	Management and leadership knowledge and experience
Participant 6	<i>Management knowledge and experience I would say... My teaching background did not prepare me for the management challenges I faced.</i>	Management and leadership knowledge and experience
Total	6	100.0

Responses to the open-ended questions included the abbreviated phrase ed psyc, which all managers use consistently to refer to educational psychologists. Participants also referred to the Code of Ethics for psychologists working in New Zealand as the code, ethical code, or ethics. Management competencies can be developed by a range of activities based on the researcher's learning journey, which included: formal academic qualifications, short courses, communities of practice, mentor programmes, coaching, supervision, empirical data, experiences, scholarly literature, in house training packages, conferences, and seminars. All respondents agreed that their managerial leadership competency developed though empirical evidence (see Table 5.67). Four of the six managers utilise the appraisal of scholarly literature in the field of educational psychology

and managerial leadership to support their professional development (see Table 5.67). Two managers (n=2) believe dialogue between managers and educational psychologists provides opportunity to enhance their growth in the management domain (see Table 5.67). Participant 2 described the value and impact of a mentor on her professional development. The mentor was experienced specifically in providing managerial leadership for educational psychologists (see Table 5.67). Participant 5 portrayed supervision as a significant professional development opportunity (see Table 5.67).

Table 5.67. Summary of managers' professional development.

Which professional development activities supported your growth in the area you were least competent in?		
Participants	Response	Themes
Participant 1	<i>Oh, just discussions and talking. I never really had any formal professional development in my life...mmm, other than my tertiary qualifications. ... Uhm, I don't know, that's a tricky question. I learned about the role of ed psycs and their ethics by discussion, by learning on the ground, by having conversations. So, if one of my psycs, uhm, I'm thinking of one particular educational psychologist that I worked with, that when difficult situations arose and uhm, their psychology board ethics stuff gets put up...then I go well how come? Explain that to me? ... So asking for practical uhm, practical examples and uhm, uhm related to rules of the psychology board. So conversation and asking questions on how to manage challenging and situations that arise uhm (pause).</i>	Dialogue No formal professional development opportunities Empirical evidence
Participant 2	<i>The best professional development was from a colleague who had 12 years experience managing educational psychologists. She mentored and coached me for three years before she retired. She shared management readings, we reflected on management principles, uhm (laugh) she challenged me and expanded my comfort levels...she made me study national and organisational policies in my uhm induction plan and showed me the relevance for managing ed psycs... She skilfully unpacked and linked the general management literature with what was needed to manage ed psycs....she made it relevant for our business. But uhm, what helped me most was the coaching... uhm when she modelled how she managed and shared real life examples of her management. She shared her models, documents, and practical examples so uhm she invited me to her team meetings, formal performance appraisals, and presentations. She also reviewed the educational psychologists' ethical code and literature about educational psychology... just the basic. She sometimes attended my team meetings or developed workflow management and team plans with me. Linking the professional domain with management practice proved to be very useful... I think it set me up for success... it was a big loss when she left (pause) all those years of practical experience and knowledge. There were no other formal professional development opportunities and I had to develop my skills through experience in my role.</i>	Mentoring Appraisal of scholarly literature Empirical evidence Appraisal of scholarly literature No formal professional development opportunities Empirical evidence
Participant 3	<i>I learned most of my management skills on the job and uh through trial and error. The organisation provided a handful of professional development opportunities that related to general management practices and self management as part of uh an induction programme. Uh reading management and leadership journals and books that my colleagues shared with me. There is still so much I need to learn about managing ed psycs you know.</i>	Empirical evidence Generic management training Appraisal of scholarly literature
Participant 4	<i>So okay, working alongside educational psychologists. Finding out what they do and working out how to support them. But where I most learnt about what the ed psyc role is, was in participating as a stakeholder on the *** (Omitted name for anonymity reasons). So uhm I was the external stakeholder. So part of that was this whole heap of background reading we had to do. That really helped me understand how an ed psyc is trained. Which is incredibly complex and and listening to the other experts on ... They were really top professionals from Australia and other parts of the world. All participants and put forward their views on the training and role of educational psychologists... Also doing the interviews with *** and other ed psycs and people that has gone through the ed psyc programmes. The uhm Code of Ethics was also taken into consideration and I continued to be part of the ***. (Participant presented a manual and documentation relating the training, role, and context of educational psychologists). After learning about the training and role of ed psycs it was easier to understand the management aspects...Ed psycs are not that different from other professionals...managing ed psycs require the same management principals to uh manage their practice and work. Following traditional pathways to develop management skills seems uhm the norm. Reading management and leadership books, attending seminars, discuss management challenges with my manager, uhm but talking to other managers is very helpful. It's so uhm they face similar challenges.</i>	Empirical evidence Participation in educational psychological committees and advisory groups Appraisal of scholarly literature Empirical evidence Appraisal of scholarly literature Appraisal of scholarly literature Empirical evidence Dialogue
Participant 5	<i>I think I learn from other people. You know that's part of being a psychologist, isn't it... But it is when I'm supervising and practising psychology. For instance I learn as much about management as about psychology from supervising somebody else and when I do my own supervision because the questions they bring, uhm what we discuss is relevant to what we are doing on a daily basis. And we work out strategies or get the information that's needed to meet those identified needs. Management is hard uhm I always stress it's a team uhm and we work together as a team to solve issues. Although, uhm we do get regular uhm notices of workshops and one-day programmes and seminars and uhm obviously speakers and the psyc conference. If there's journals that are relevant to a issue I face uhm not often that management journals address the challenges we face uhm but sometimes I see something relevant. Like uhm then I will read it.</i>	Empirical evidence Supervision Dialogue Appraisal of scholarly literature
Participant 6	<i>The opportunity to work with educational psychologists I would say, uhm provided the best uhm support to grow my understanding and knowledge of how to manage them. Seeing what they do and figuring out how to support them uhm they need support and guidance just like the educators.</i>	Empirical evidence
Total		6 100.0

5.3.3 Data regarding the influence of workload management processes on the professional performance of educational psychologists

Half the managers were confident that they use a formal structured workload managements system: *Yes, we use a formal workload management process... ; We use a formal workload management system... ; We use a system uhm called CAPA... .* Only one participant was able to name the formal workload management system, which could be explained by the fact that some workload management systems are developed internally by organisations based on manager's knowledge and empirical experiences. Workload management guidelines and protocols are developed but seldom named or based on robust research project. The remaining three participants described, in broad terms, a workload management process they use similar to the internal workload management protocols the researcher described. However, the analysis of this data revealed a set of elements that are present and overlap in both formal workload management systems and broader workload management processes reported by managers, namely: set clear service expectations (n=6); set time frame expectations (n=5); work throughput management (n=4); regular meeting to monitor progress (n=4); manage caseload size (n=4); work allocation management – manage demand (n=3); develop a work plan (n=2) (see Table 5.68).

Table 5.68. Summary of formal structured workload management system.

Please describe the formal structured workload management system, most often used, in your practice for maximum benefit when managing the workload of educational psychologists.		
Participating manager	Response	Themes
Participant 1	<i>Yes, we use a formal workload management process. Ok, so everybody, uhm every psychologist, has a caseload. And there is this expectation of services around uh within that, about when they should be working through their pathway with their clients. So here is uhm an expectation of when each piece of work should be done. So it is very transparent and everybody has exactly the same time frames. It makes it very easy to also manage all those uhm ethical issues and timeframes issues. Oh, for our clinicians (looking for confirmation) uhm well again, depending on their experience, so we would... we would say an average a caseload would be, uhm well again depending on the psychologist's knowledge and experience, no more than 15 and probably 12 as the bottom. Fifteen (nodding) they would need to be having a group of clients in assessment, a group of people getting plans written, and a group getting implementation of plans done uhm. And then also a group on their way out of service...</i>	<ul style="list-style-type: none"> Set service expectations Set service pathway expectations Set time frame expectations Manage caseload size Work throughput management
Participant 2	<i>We use a formal workload management process in our organisation to manage referrals and allocation of work, it clearly describes service we have to deliver, like uhm the service delivery model and work flow management plan... The uhm expectation is that managers and educational psychologists meet regularly, uhm every fortnight if possible to discuss their work... Uhm the timely delivery of service and progress of cases are monitored and problems are addressed early on...</i>	<ul style="list-style-type: none"> Work allocation management (manage demand) Manage caseload size Set service expectations Work throughput management Regular meetings to monitor progress Set time frame expectations
Participant 3	<i>Managing educational psychologist's workload is complex you know, it's a combination of case work, report writing, conducting formal assessments, providing in-service training to school staff, presenting to paraprofessionals, supporting organisational initiatives, and supervising new graduates. It's keeping the glass balls in the air you know... Meeting regularly to discuss pressures and demands (pause) support educational psychologists to manage their workload. It's my role to support the psycs with challenges or work pressures but you know I leave them to manage their own workload. They know how to schedule all their work and activities. You know it is too complex to manage all the different activities and time frames for them.</i>	<ul style="list-style-type: none"> Set service expectations Regular meetings to monitor progress Develop work plan
Participant 4	<i>We use uhm a formal system it uhm it's called CAPA – the choice and partnership approach and the seven helpful habits of effective child and adult mental health service. The uhm word helpful stands for – Handle demand/Extend capacity/Let go of families/Process map/Flow management/Use care bundles/Look after staff. So a part</i>	<ul style="list-style-type: none"> CAPA Set service expectations Workload allocation management (manage demand) Work throughput management

	<i>of CAPA uhm is that you do uhm a job plan uhm each clinician does a job plan. Uhm they put in their regular appointments uhm so like supervision and uhm in service training uhm their specific jobs... Work that they are specifically responsible for. So that might be CBT (Cognitive Behaviour Therapy), might be family therapy, or it's uhm professional specific work... So that might be psychometrics... Uhm so they put their times in as blocks of time and everything that's left through a process of maths – which you (Refer to the researcher) can look up, provides a number that confirm the number of cases that they will need to pick up each quarter. We have CAPA days to plan ahead for each quarter... when clinicians present uhm work plans and we discuss and negotiate the work over the next four months.</i>	Develop work plan Workload allocation manage Regular meetings to monitor progres Set time frame expectations Manage caseload size Regular meetings to monitor progress
Participant 5	<i>Uhm, Person A, is our office manager, she uhm keeps a close eye on all the service requests. So every referral goes through her. She will look at the urgency... She will know who has time and space to engage with a new client. Uhm, then if there is any questions at all, person A will come back to me to get confirmation. So she does come through me if she is not sure... Person A has access to everyone's calendar and knows exactly what each clinician has scheduled. She understands the work we have to do and knows the time needs to complete assessments or write reports. She manages every aspect of the clinicians' workload and processes all the invoices....She often helps with typing of assessment reports or making phone calls to schedule meetings and appointments when staff is under pressure. She will share any concern when work is not completed or when clinicians are overloaded...</i>	Workload allocation management (manage demand) Manage caseload size Set service expectations Set time frame expectations Work throughput management
Participant 6	<i>Management should consider the broad scope and spectrum of uhm all aspects that may be addressed in the realm of educational psychology when doing planning for the academic year. Educational psychologists follow the school time table and have allocated blocks for group therapy. Uhm that is six out of the 10 blocks a day. Blocks are 35 minutes each. They also have uhm time allocated after school for individual therapy. The remaining four out of the 10 blocks a day are left for uhm evaluations, incidental incidents that may occur, or for support for educators in the classroom. I monitor their work and discuss their time tables with them at the beginning of each semester but they plan how their time is going to be used.</i>	Develop a work plan Set service expectations Set time frame expectations Set service pathway expectations Regular meetings to monitor progress Develop a work plan
Total		6 100.0

Data regarding the influence of workload management systems and processes on the professional performance of educational psychologists showed some degree of overlap. One, two or in some instances all three of the most prominent themes, revealed during analysis, were reported by all six participants. These themes, with regard to the structured workload management system, were: sets clear service expectations (n=5); sets time frame expectations (n=4); increases work throughput (n=4) (see Table 5.69). A theme that was supported by half of the manager participants was: improves professional performance (n=3) (see Table 5.69). Two participants reported that structured workload management systems help handle demand and, develop problem solving skills and believed that formal workload management systems improve professional performance (see Table 5.69).

Table 5.69. Summary of the influence of formal workload management structures.

In your opinion, what influence does the formal workload management system you use have on the professional performance of educational psychologists?		
Participating manager	Response	Themes
Participant 1	<i>... Although we believed originally if we employ senior educational psychologists with years of experience, we would get better work, uhm it's actually not the case. We're actually finding that some of our senior educational psychologists actually take longer to do things than our young psycs straight out of the university. So it's very interesting we had a lot of issues with those uhm psychologists getting them to actually be much more focussed on how it needs to be done, this is the expected time frames, this is what is expected to be done. This uhm expectation of the service pathway, other processes, and times frames, is actually not set by psychologists of cause, so they believe they can change it. Uhm although it is the organisation's expectations. So it's been quite an eye opener that some of those senior psychologists that we bought in haven't actually performed to the level that we thought they would...</i>	Provides insight into professional performance, capacity, and capability Sets time frame expectations Sets clear service expectations
Participant 2	<i>There is quite an uhm significant influence on the performance of educational psychologists when they actively participate in the workload management system and uhm understand the value thereof. Work through put increases because the psycs know what is expected and they are supported to meet set time frames. They uhm are supported through difficult cases and identify possible alternative solutions during the regular meetings.</i>	Significant influence Increases work through put Sets clear service expectations Sets time frame expectations Improves problem solving skills Improves professional performance
Participant 3	<i>You know it's not a formal workload management system per se but there are</i>	Positive influence

	<i>deliberate steps... I would say these steps support educational psychologist you know and definitely influence their performance positively... I mean I don't manage my team any differently if it's an ed psych or occupational therapist. There is nothing different in my management of their uh workload. The same expectation of their performance, uh you know, everybody is measured in the way.</i>	Improves professional performance Sets clear service expectations
Participant 4	<i>It helps handle demand. With demand exceeding the resource we have all of the time... Because research tells us that the vast majority of our clients uhm will, should be out of our service after uhm between six to eight sessions. These include face-to-face sessions... If you work it out the system allows for leave, sick leave uhm and help staff plan ahead and manage their time better Clinicians know from the start how uhm how many clients they are able to support during the next quarter. The plan provides clinicians with data relating to work that is carried over from previous quarter. These cases uhm that were not completed according to the organisational service path uhm they are reviewed and discussed... It does happen that cases have to be moved back to uhm assessment phase or sometimes be re-assessed. Our service pathway is not linear but circular and allows for adaptation. Clients' needs and circumstances change all the time and we are responsive to these changes. CAPA support clinicians and managers to manage the workload, problem solve difficult situations, uhm... (pause) explore alternative options, and even individualise support programmes.</i>	Helps handle demand Increases work through put Sets time frame expectations Sets clear service expectations Improves problem solving skills Improves professional performance
Participant 5	<i>They are always busy uhm closing some cases but starting with assessment on new cases. So we get enough work to keep everybody having as many clients as they want at the moment. The original aim was to get 14 referrals each week but we always get more than that...</i>	Increases work through put Helps handle demand
Participant 6	<i>In my experience (wait and think), it supports ed psycs to get their work done, an opportunity to focus on specific matters at certain times. If there should be an emergency situation uhm the school program accommodate the situation or student involved in the four blocks that are left open in their time tables when we uhm plan their work. Uhm this time is always filled with unplanned activities and report writing. Ed Psycs are extreme busy because of the demand and complexity of their work. Many situations arise unexpectedly and uhm needs to be addressed in a timely manner. However, having said that, psycs need to stay focussed on the progress of all students. The workload management system provides opportunity for uhm robust assessments process and uhm time for writing the assessment report that includes recommendation for educators and para-professionals...(Participant's mobile then rang and affected the sound quality of the recording making it impossible to record the last couple of sentences).</i>	Increases work through put Sets clear service expectations Sets time frame expectations Sets clear service expectations
Total		6 100.0

5.3.4 Data regarding the influence of managerial leadership on educational psychologists' engagement in clinical supervision

The themes derived from the analyses of data relating to the role of managers to ensure educational psychologists engage in clinical supervision are comparable to the functions of a manager. These manager functions are to plan, organise, command, coordinate, and control (Drucker, 1993:343-346; Smith & Cronje, 2002:39-41; Cole 2004:13-16; Cole, 2006:10-11; Bass, 2008:670-672; Tengblad, 2011:37-38; Chandra, 2013:6; Yukl, 2013:29). Participating managers consistently depicted these management functions in their responses as captured in Table 5.70. Participants did not consciously use the management functions terminology but rephrased and weaved these concepts through their responses.

All six of the participating managers agreed that they influence educational psychologists' engagement in clinical supervision by monitoring their supervisions logs and meeting regularly to monitor progress and engagement in clinical supervision (see Table 5.70). Four participants concurred that organising and appointing supervisors and monitoring supervision contracts are managerial leadership activities that proved successful in ensuring engagement in clinical supervision (see Table 5.70). Half of the managers

reported they apply the New Zealand Psychologists Board-Code of Ethics, whereas two reported applying the compulsory organisational supervision framework (see Table 5.70). Only one and two managers expressed during the interviews that encouraging educational psychologists, co-ordinating supervision session, and collaboration between managers and clinical supervisors was useful (see Table 5.70).

Table 5.70. Summary of the role of a manager to support educational psychologists' engage in clinical supervision.

In your role as a manager of educational psychologists, how do you ensure that educational psychologists have access to regular clinical supervision?		
Participants	Response	Themes
Participant 1	<i>Well it is part of our supervision framework. So every clinician that works for us has a clinical supervisor appointed to them, uhm that they have to go and see. Uhm ...at least once a month or twice a month depending on their psych degree or where they are in you know in their years of experience, past their registration. It's my responsibility to set up the supervision timetable for my team... But it is compulsory, not like negotiable, that everybody has clinical supervision. Psycs negotiable their own supervision contracts based on the template provided in the supervision guidelines... We discuss the contracts once a year but I monitor the supervision logs at our meetings. And it is compulsory that everybody has line management uhm. The uhm line manager must see to it that clinicians engage in appropriate supervision according to the supervision framework.</i>	<ul style="list-style-type: none"> Impose compulsory organisational supervision framework Organise and appoint clinical supervisor Coordinate supervision sessions Monitor supervision contracts Monitor supervision logs Regular meetings to monitor progress and engagement
Participant 2	<i>I believe that supervision is a vital activity for all ed psycs. Every team member is required uh to provide a copy of their current supervision contract and supervision record at performance appraisal reviews. Uh I discuss these documents with them to monitor progress and uh to identify any problems or barriers. I often direct them to take challenges that come up uh to supervision. (Prompt from researcher by repeating the question). Oh, uhm, yes managers encourage educational psychologists to find a qualified educational psychologist supervisor they trust and uhm respect. Sometimes my support is required to help engage a suitable supervisor. Uhm but as I said we leave it up to them.</i>	<ul style="list-style-type: none"> Encourage engagement in supervision Monitor supervision contract Monitor supervision log Regular meetings to monitor progress and engagement Organise and appoint clinical supervisor
Participant 3	<i>It's an organisational requirement that all psychologists take part in supervision. It's my uh, uh role to monitor their engagement according to organisational guidelines and ethical code. We have a group of senior ed psycs who provide clinical supervision. Each one can supervise up to three colleagues. Supervision engagement is discussed when we have our performance appraisal discussions and they share their supervision log with me.</i>	<ul style="list-style-type: none"> Impose compulsory organisational supervision framework Impose New Zealand Psychologists Board – Code of Ethics Organise and appoint clinical supervisor Regular meetings to monitor progress and engagement Monitor supervision logs
Participant 4	<i>The code sets out the uhm supervision requirements for registered educational psychologists. Our organisation arranges a qualified educational psychologist supervisor for each practitioner. So uhm as part of the performance appraisal ed psycs have to provide a copy of their supervision contract and log. And also uhm we have a formal notification process for supervisors to collaborate with the line manager should there be uhm any reason for concern about a clinicians performance or competency.</i>	<ul style="list-style-type: none"> Impose New Zealand Psychologists Board - Code of Ethics Organise and appoint clinical supervisor Regular meetings to monitor progress and engagement Monitor supervision contract Monitor supervision log Collaboration between manager and clinical supervisor
Participant 5	<i>Well, uhm I'm quite strict about that because uhm we're all registered. So that means you're required to have clinical supervision uhm. ...We legally need to meet at least two hours once a month uhm and we do. The dates are documented and what we talk about is documented... The data is used in discussions about performance...</i>	<ul style="list-style-type: none"> Impose New Zealand Psychologists Board - Code of Ethics Monitor supervision log Regular meetings to monitor progress and engagement
Participant 6	<i>It is not my role to provide clinical supervision because I am not a registered psyc. (Participant asked researcher to repeat the question). Oh, you're talking about how to encourage ed psycs to engage in clinical supervision. Promoting strict conditions of confidentiality, uhm only informing the relevant stakeholders of the information needed to guide the child in the uhm classroom or school's social environment. I think keeping up-to-date records of all clinical supervision activities and sessions to monitor their engagement in clinical supervision. Uhm I view and, and we discuss these on a weekly basis. Also regular feedback at weekly meetings to senior management of matters directly affecting the learner's academic progress or social well-being uhm within the school and boarding environments.</i>	<ul style="list-style-type: none"> Encourage engagement in supervision Monitor supervision contract Monitor supervision log Regular meetings to monitor progress and engagement
Total		6 100.0

5.3.5 SUMMARY OF QUALITATIVE DATA

In conclusion, participants' professional contributions during the qualitative research phase present robust contemporary empirical data and provide answers to the research questions. Biographical data analysis divulged a female-dominated, European, English-speaking managers' cohort. Participating managers' average age is 52 and they have

between two and 23 years of management experience, of which 2-15 years involves managing educational psychologists specifically. Although only two of the six participating managers held management qualifications, they all reported either a diploma, bachelor's or master's-level qualification in a range of fields, which included nursing, educational psychology, psychology and education.

Data revealed that management and leadership knowledge and experience is believed to comprise the biggest component of a manager's role, with knowledge and understanding of the school system as the second-largest component. However, educational psychological knowledge and experience were considered the smallest component of the role of a manager of educational psychologists (see Table 5.64 and Fig. 5.65). Five of the managers judged management and leadership knowledge and experience as the component they were least proficient in (see Table 5.66). They described empirical evidence as the single-most influential professional development activity that contributed to their growth in the mentioned component (see Table 5.67). Managers also believed that the appraisal of literature in the fields of management and educational psychology supported their growth (see Table 5.67).

Not all participating managers utilised a formal workload management system but the data revealed workload management processes that correspond as described in Section 5.3.3 (see Table 5.68). In describing the workload management system, data revealed that workload management systems, most often used for maximum benefit, share a set of elements, namely: set clear service expectations, set time frame expectations, manage work throughput, manage caseload size, regular meeting to monitor progress, manage work allocation, and develop work plans (see Table 5.68). Participating managers agreed that these workload management systems and processes influence the professional performance of educational psychologists, as described in Table 5.69: setting clear service expectations, setting time frame expectations, increasing work throughput, and ultimately improving professional performance.

Results revealed that participating managers were of the same mind that they have the strongest influence on educational psychologists' engagement in clinical supervision by monitoring educational psychologists' supervision logs and meeting with them regularly to monitor progress and engage in clinical supervision (see Table 5.70). Additionally, data

disclosed that three and four of the managers believed that organising and appointing clinical supervisors, monitoring supervision contracts, and imposing the New Zealand Psychologists Board - Code of Ethics influenced educational psychologists' engagement in clinical supervision, as explicated in Table 5.70.

5.4 ANALYSIS OF HOW QUALITATIVE FINDINGS EXPLAIN QUANTITATIVE RESULTS

5.4.1 Biographical data of managers

The gender representation of managers (female=83.3 per cent/male=16.7 per cent) who participated in the focus group interviews was comparable to the quantitative results (female = 66.7 per cent/male =33.3 per cent) (see Par. 5.2.1.1 and 5.4.1.1). Qualitative results support the female dominance documented in the quantitative results (see Figs. 5.2 and 5.58)

The analysis of age-related data revealed some differences. The mean age and median of the two cohorts are similar (quantitative: \bar{x} =54.3/Md=54.5; qualitative: \bar{x} =52.5/Md=52) (see Figs. 5.1 and 5.57) but the age ranges of these two manager cohorts are dissimilar. Half of the second cohort of managers is 47 years and younger, compared to only one manager in this age group in the first cohort (see Par. 5.2.1.2 5.3.1.2). There is a 10-year age difference between the two youngest participants from the two manager cohorts. The oldest manager in the second cohort is 12 years older than the oldest manager in the first cohort.

Quantitative and qualitative results relating to ethnicity and language of managers were representative of the countries in which the research was conducted (see Figs. 5.4 and 5.60). Thus, managers of educational psychologist represent a diverse range of ethnic groups and speak a diverse range of languages representative of the country in which they live and work.

On one hand, qualitative data (\bar{x} =15.5 years/n=6) revealed that participants are just as experienced in the field of management as reported in the quantitative phase (\bar{x} =18.2 years/n=5) of the research (see Tables 5.1 and 5.57). On the other hand, there was a

notable difference in the range of years of management experience. Management experience ranges from 13 to 25 years in the quantitative results while the qualitative results revealed a range of two to 23 years. This can be explained by the inclusion of data from the youngest participating manager, who reported having only two years of management experience. If this manager's data is deemed an outlier and omitted from analysis, the qualitative results (n=5) would align with the quantitative results, with a range of 11 to 23 years of management experience.

Quantitative ($\bar{x}=14.3$) and qualitative ($\bar{x}=6.8$) results relating to the mean number of years experience managing educational psychologists were not comparable. On average, the cohort of managers, representative of Finland, India, Ireland, South Africa, and Sweden, have more experience managing educational psychologists than the cohort who participated in the focus group interviews, representative of New Zealand and South Africa (see Par. 5.2.1.6 and 5.3.1.6). Qualitative data relating to the highest qualification level for the managers are also different from the quantitative data, with managers holding either master's-level or doctorate-level degrees in the quantitative phase (see Par. 5.2.1.7 and 5.3.1.7) but diploma and Bachelors-level qualifications in the qualitative phase. Furthermore, qualitative results confirmed that managers predominantly come from educational and psychological backgrounds.

5.4.2 Data regarding the influence of management appointments on the professional performance of educational psychologists

Considering the strong views in the quantitative data, in support of the appointment of qualified educational psychologist in manager roles (see Table 5.20), an unexpected finding was that only four of the 12 managers of educational psychologists who participated in the current research project had the desired educational psychological qualification (see Table 5.20 and Figs. 5.1 and 5.57). There are three qualified educational psychologist managers in the quantitative sample and only one in the qualitative manager sample.

Qualitative results exposed educational psychological knowledge and experience as the least important competency (smallest component) of the managers' role (see Table 5.64). This result contradicts the quantitative data. It does not support the notion that only

appropriately qualified educational psychologists in management roles or in complementary roles to support generic non-educational psychological managers, can provide managerial leadership to educational psychologists (see Par. 3.3.4 and 5.2.4.1; Table 5.20). Two-thirds of managers claimed that educational psychological knowledge and experience cover only 5.0-10.0 per cent of their management role (see Table 5.64; Fig. 5.65).

Quantitative results suggested that educational psychological knowledge and experience is a more important competency and a bigger component than management and leadership knowledge and experience, for example: *To know and understand the work of psychologists, it would be optimal, if the chief of psychologists would have at least the same qualification... ; Only another psychologist can understand the realities and pressures of this profession; It is very important for the manager to be a registered psychologist in order to understand... ; It is quite difficult for someone who does not have the skill or training of a psychologist to understand... ; Understanding the role of educational psychologists better if a manager has the same qualifications... ; Without on-the-ground knowledge and experience of working as an educational psychologist, it is impossible to manage other's workload... ; Need to be managed by an educational psychologist... ; Managers who are also qualified educational psychologists...* (see Table 5.21). However, this was not evident in the qualitative results - management and leadership knowledge and experience were the most essential competency and cover 60.0 to 70.0 per cent of the management role, according to two-thirds of the participants (see Table 5.64; Fig. 5.65).

Furthermore, five out of the six participating managers reported that they had lacked management and leadership knowledge and experience when they were appointed in management role, while one manager lacked educational psychological knowledge (see Table 5.66). Qualitative results exposed professional development that managers engage in to improve their managerial leadership proficiency, namely: empirical evidence (100.0 per cent); appraisal of scholarly literature in the field of managerial leadership (66.7 per cent), dialogue (33.3 per cent), mentoring (16.7 per cent), supervision (16.7 per cent), and participation in educational psychological committees and advisory groups (16.7 per cent), as documented in Table 5.67.

The fact that four of the six participating managers do not have educational psychological qualifications or backgrounds, and reported that they lacked management and leadership knowledge instead of educational psychological knowledge, as predicted by the quantitative data, provides impetus to reconsider the quantitative data and scholarly literature. The preceding qualitative results challenge the perception that managers must have educational psychological qualifications, knowledge, and experience, as delineated by Goleman et al. (2001:42-51) and Broderick (2010:267). Additionally, the qualitative data support the quantitative data with relation to the need for knowledge of the complexities of the school system as raised by Brown (2010:17) and Coleman and Pine (2010:21) (see Table 5.64).

Further exploration of quantitative data revealed that both managers and educational psychologists recognize the influence of a generic non-educational psychologist manager (on their own or supported by a qualified educational psychologist managers) as significant on three specific management activities (see Table 5.23). Half of the educational psychologist respondents and two of the six manager respondents acknowledged the generic non-educational psychologists' role to organisational strategic direction and decision making. Stronger support was afforded when 55.0 per cent of participating educational psychologists (n=11) and 66.7 per cent of the participating managers acknowledged day-to-day operational activities. Human resource management was considered the management activity that is best managed by generic managers who are supported by qualified educational psychologists; this was according to 75 per cent of educational psychologist participants (n=15) and 100.0 per cent of the manager participants. These quantitative results are explained by the qualitative data relating to the most important competencies of a manager's role, management and leadership knowledge and experience, and the need to develop this competency area (see Tables 5.64 and 5.66).

5.4.3 Data regarding the influence workload management on the professional performance of educational psychologists

The qualitative results describe the structured workload management system that 66.7 per cent of managers (n=4) most often use for maximum benefit according to the quantitative phase of the study (see Table 5.31 and 5.32). All six managers who participated in the

qualitative phase reported using either a formal structured workload management system (50.0 per cent) or a formal workload management process (50.0 per cent) (see Par. 5.3.3). The set of mutual elements, revealed in the qualitative data, described the formal workload management systems that:

- Set clear service expectations.
- Set timeframe expectations.
- Work throughput management.
- Manage caseload size.
- Hold regular meetings to monitor progress.
- Manage demand through work allocation management.
- Develop a work plan.

The qualitative data relating to the essential elements of a formal workload management system set clear service expectations (n=6), set timeframe expectations (n=5), set regular meeting to monitor progress (n=4) (see Table 5.68), and the influence of a formal workload management system sets clear service expectations (n=5) and set clear timeframe expectations (n=4/66.7 per cent) (see Table 5.69) strongly correspond with two of the three top-ranked influences of workload management activities in the quantitative data (regular one-on-one workload data discussions ($\bar{x}=3.83/\text{Md}=4.00/\text{SD}=1.17$) and clearly set goals and expectations ($\bar{x}=3.67/\text{Md}=4.00/\text{SD}=1.03$) (see Par. 5.2.5.2; Table 5.33). These data sets confirm the value and significance of using a formal structured workload management system to manage the workload of educational psychologists.

5.4.4 Data regarding the influence of managerial leadership on educational psychologists' engagement in clinical supervision

Quantitative data revealed that managers and educational psychologist respondents agreed that supervision session feedback during one-on-one performance conversations between managers and educational psychologists had the biggest influence (out of four managerial leadership activities) on educational psychologists' engagement in clinical supervision (see Tables 5.50, 5.51 and 5.52). These managers ranked formal discussions between managers and educational psychologists to monitor supervision engagement and progress as the second largest influence. Correspondingly, managers reinforced the latter; during the focus group interviews, they all stated that they ensure educational

psychologists' engagement in supervision by meeting regularly to monitor progress and engage in clinical supervision and by monitoring supervision logs (see Table 5.70). Two-thirds monitor supervision contracts and organise and appoint clinical supervisors to ensure engagement. The qualitative data, derived from open-ended questions, revealed themes that strongly correspond with the quantitative data. The quantitative data were divulged from the question to rate the influence of the management item on educational psychologists' engagement in clinical supervision (see Table 5.50; Figs. 5.51 and 5.52).

Imposing and using formal processes to monitor implementation of compulsory supervision requirements, set by statutory authorities and organisational supervision frameworks, were not the most favoured methods to encourage clinical supervision engagement according to quantitative and qualitative data collected from managers (see Tables 5.53 and 5.70). Only half of the sample of managers (qualitative data) (n=3) reported that they impose the New Zealand Psychologists Board - Code of Ethics by stating: *It's my uh, uh role to monitor their engagement according to organisational guidelines and ethical code... ; The code sets out the uhm supervision requirements for registered educational psychologists... ; Well, uhm I'm quite strict about that because uhm we're all registered. So that means you're required to have clinical supervision...* Educational psychologists on the other hand, ranked the above mentioned formal processes as having the second biggest influence on educational psychologists' engagement in clinical supervision as captured in Figure 5.55.

5.5 SUMMARY

Quantitative data, gathered from a random sample of managers and educational psychologists in Finland, India, Ireland, South Africa, and Switzerland, by administering two surveys, provided contemporary data on the topic under exploration. Qualitative data, collected from a purposefully selected sample of managers of educational psychologists in New Zealand and South Africa, provided more in-depth explanations and empirical evidence. In this chapter, the researcher has analysed the qualitative data, and outlined how the qualitative data explain the qualitative data.

The findings from the quantitative and qualitative phases of the research elucidated the influence of managerial leadership on the professional performance of educational psychologists. Data emerged that describe the biographical characteristics of managers of educational psychologists while the data relating to the biographical characteristics of the educational psychologists contribute to the existing body of data. Data emerged that describe the preferred service delivery models, explicated the most appropriate management appointment, represent the workload management system that are most often used for maximum benefit, and clarify the influence of managerial leadership on educational psychologists' engagement in clinical supervision. The data relating to the influence of the above-mentioned items on the professional performance of educational psychologists were discussed and presented in order to answer the research questions. In addition, data emerged that describes the consequences for the professional performance of educational psychologists when they do not receive appropriate managerial leadership, when their workloads are ineffectively managed, and when they do not engage in clinical supervision.

The next chapter, Chapter 6, will commence with a short overview of chapters one to five. This overview will be followed by presenting the key empirical findings and the research conclusions associated with the research questions and objectives. Recommendations based on the research empirical-, descriptive-, causal-, and theoretical findings and conclusions, will be presented in this chapter. The researcher will offer some concluding remarks that include a reflection on her research experience and personal growth.

CHAPTER 6

SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

The main purposes of this study were to gain understanding of the influence that managerial leadership has on the professional performance of educational psychologists and to answer the research questions:

- What are the demographic characteristics of managers of educational psychologists and educational psychologists?
- What influence do service delivery models have on the professional performance of educational psychologists?
- What influence do management appointments have on the professional performance of educational psychologists?
- What influence does workload management have on the professional performance of educational psychologists?
- What influence does managerial leadership have on educational psychologists' engagement in clinical supervision?
- What are the consequences of ineffective managerial leadership, for the professional performance of educational psychologists?

The significance and influence of managerial leadership on the professional performance of educational psychologists (Jimerson et al., 2004:259-260, 274-276; Jimerson et al., 2006:19-21; Edwards et al., 2007:263-274; Musabelliu, 2007:12; Jimerson et al., 2008a:5, 18-19; AEP, 2008:3-4; Coleman & Pine, 2010:23; Curtis et al., 2012:30; Curtis, 2012:4), in conjunction with the perceived lack of managerial leadership in the educational psychological domain, has been raised in scholarly literature (Jimerson et al., 2004:274-276; Jimerson et al., 2006:19-21; Children's Workforce Strategy, 2007:28-32; Edwards et al., 2007:263-274; Musabelliu, 2007:12; Jimerson et al., 2008a:18-19; AEP, 2008:3-4; Brown, 2010:14-18; Coleman & Pine, 2010:23; Soulbury Committee Report, 2010:5-7; Curtis et al., 2012:30; Curtis, 2012:4). The four most documented areas in need of managerial leadership - management appointment, workload, service delivery model, and

engagement in clinical supervision - guided the researcher's endeavour to meet the research objectives, which were:

- To investigate the demographic characteristics of managers of educational psychologists and educational psychologists (addressed in Chapter 2).
- To investigate the influence of service delivery models on the professional performance of educational psychologists (addressed in Chapter 3).
- To explore the influence of management appointments on the professional performance of educational psychologists (addressed in Chapter 3).
- To examine the influence of workload management on the professional performance of educational psychologists (addressed in Chapter 3).
- To study the influence of managerial leadership on educational psychologists' engagement in clinical supervision (addressed in Chapter 3).
- To explore the consequences of ineffective managerial leadership for the professional performance of educational psychologists (addressed in Chapter 3).

The design and execution of the current research followed a well-thought-through process that corresponds with suggestions by Creswell (2009:216) and Field (2009:3). The researcher developed a research design illustrated in Appendix 3. The current research is positioned in the pragmatic research paradigm that permitted the application of mixed methods explanatory sequential research approach (see Par. 4.2.2). The research commenced with the quantitative approach by administering two independent questionnaires simultaneously to randomly selected samples of managers of educational psychologists (n=6) and educational psychologists (n=20), in five countries (Finland, India, Ireland, South Africa, and Switzerland), with a web-based programme - Lime Survey. The samples were drawn from departments of education, educational psychology associations, and health services in the five countries. Statistical analysis (SPSS) was conducted to interpret and present the initial findings. The qualitative research method followed by conducting six focus group interviews with selected managers of educational psychologists in New Zealand and South Africa. Participants worked in educational settings, health services, departments of education, and educational psychologist services. Interviews were audio-taped, transcribed, and analysed by identifying themes and patterns that were represented in tables. The final phase was the analysis and presentation of how the qualitative data explain the quantitative findings.

Chapter 6, the final chapter, summarises the research findings and conclusions and introduces a set of recommendations. These conclusions provide answers to the research questions. Conclusions are documented under separate sub-headings. Each recommendation is also recorded separately to explicate the audience it is intended for, the required actions, and a motivation for the recommendation. In addition, Chapter 6 focuses on areas for further research and provides a description of the limitations of the current study. The concluding remark will capture a personal reflection from the researcher on her research experience and personal growth.

6.2 SUMMARY OF RESEARCH FINDINGS

The results from the current research not only proved the hypothesis - Managerial leadership influence the professional performance of educational psychologists, but also provided the following findings:

6.2.1 Findings with respect to the demographic characteristics of managers of educational psychologists

In contrast to educational psychologists' biographical data, the biographical characteristics of managers of educational psychologists are absent in the scholarly literature. The empirical, theoretical, and descriptive evidence from the current study revealed new factual findings, new data, and presented an exact explanation of the biographical characteristics of managers of educational psychologists. These managers are middle aged ($\bar{x}=53.4$) (see Par. 5.2.1.2 and 5.3.1.2; Figs. 5.1, 5.3, 5.57, and 5.59), predominantly female (see Pars. 5.2.1.1 and 5.3.1.1; Figs. 5.1, 5.2, 5.57, 5.58) and ethnically diverse. The range of ethnicities is representative of the countries in which the research was conducted (see Par. 5.2.1.3 and 5.3.1.3; Figs. 5.1, 5.4, 5.57, and 5.60). The majority speak/communicate most frequently in English (see Par. 5.2.1.4 and 5.3.1.4; Figs. 5.1, 5.5, and 5.57). Managers of educational psychologists have a considerable number years of management experience ($\bar{x}=16.9$) (see Pars. 5.2.1.5 and 5.3.1.5; Figs. 5.1, 5.6, 5.57, and 5.61). Managers, on average ($\bar{x}=53.4$), have managed educational psychologists longer than educational psychologists ($\bar{x}=8.0$), have practiced educational psychology (see Pars. 5.2.1.6, 5.2.2.6, and 5.3.1.6; Figs. 5.1, 5.7, 5.16, 5.57, and 5.63). Managers of educational psychologists are also highly qualified and their highest qualification level is

comparable to the qualification levels of educational psychologists. The majority of managers hold master's-level qualifications (n=8), while only a few hold diploma (n=1), bachelor's (n=1) or doctorate-level (n=2) qualifications. However, only a handful hold bachelor's (n=1) and master's-level (n=2) qualifications specifically in the field of management. Managers come from a range of professional backgrounds, including psychology (n=6), educational (n=2), and nursing (n=2) backgrounds. Only a small minority (n=3) have educational psychology backgrounds specifically (see Pars. 5.2.1.8 and 5.3.1.8; Figs. 5.1 and 5.57).

6.2.2 Findings with respect to the demographic characteristics of educational psychologists

Educational psychologists' demographical characteristics, in contrast to their managers' demographic characteristics, have been extensively researched and documented in scholarly literature (Curtis et al., 2002:30-42; Jimerson et al., 2004:259-286; Jimerson, et al., 2006:5-32; Jimerson et al., 2008a:5-28; Curtis et al., 2012:1, 28-30). Empirical findings confirmed that consistent biographical profile exists and comparable data across the world is evident to large degree. The field of educational psychology is dominated by a large proportion of females (Curtis et al., 2002:21, 32, 35; Smith, 1984, cited by Curtis, 2004:432; Curtis et al., 2004:432; Jimerson et al., 2004:266, 277; Jimerson et al., 2006:11, 21; Brown et al., 2006:486-488; Worrell et al., 2006:142-143; Jimerson et al., 2008a:9, 21, 24; Jimerson et al., 2010:1; Curtis et al., 2012:2; Merrell et al., 2012:112-113; NZPB, 2013) (see Pars. 2.2.1, 2.2.2, 5.2.2.1, Table 5.8, and Fig.5.9). Their mean age ($\bar{x}=41.1$) (see Par. 5.2.2.2; Table 5.8; Fig.5.10) increased gradually over the years and is indicative of an aging population that will affect the predicted educational psychologists shortage described in Paragraph 2.2.3 (Curtis, 2002; Curtis et al., 2004:433; Jimerson et al., 2004:266, 277; Jimerson et al., 2006:6, 11-12, 24; Worrell et al., 2006:142-143; Ysseldyke et al., 2006:10; Faulkner, 2007:24-25; Jimerson et al., 2008a:9, 21; Curtis et al., 2012:1-6; Merrell et al., 2012:113).

There is ethnic diversity in the field of educational psychology but a lack of representation of minority ethnic groups (Curtis, 2002; Curtis et al., 2004:49-66; NASP, 2005; NASP, 2009; MOH, 2010:1-11; Chandler, 2011:99-127; Griffin & Muniz, 2011:57-76; Merrell et al., 2012:114; Curtis et al., 2012:1, 28, 30; Bocanegra, 2012:1-5, NZPB, 2013) (see Pars.

2.2.1, 2.2.4, 5.2.2.3; Table 5.8; Fig. 5.13). Educational psychologists' ethnic representation is still not representative of the changing diversity of the populations they serve. Educational psychologists include speakers of many different languages (see Par. 5.2.2.4; Table 5.8; Fig. 5.14), most are multilingual, with English as the commonly used second language (Jimerson et al., 2004:266; Jimerson et al., 2006:11-13; Jimerson et al., 2008a:21; Curtis, 2012:2; HCR, 2013) (see Par. 2.2.5). These professionals have extensive numbers of years' experience practising educational psychology ($\bar{x}=8.0$). A strong relationship between age and years experience practising educational psychology is evident in the literature (Curtis et al., 2004:433; Jimerson et al., 2004:266; Jimerson et al., 2006:11; Jimerson et al., 2008a:21) (see Pars. 2.2.7 and 5.2.2.6; Table 5.8; Fig. 5.16). In many countries, it is not a prerequisite to have prior classroom teaching experience before entering the field of educational psychology. As a result, there is variation in the number of years of teaching experience of educational psychologists, with some educational psychologists not having any classroom teaching experience (Jimerson et al., 2004:265-266; Jimerson et al., 2006:11-12; Edwards et al., 2007:368; Jimerson et al., 2008a:10; Costello, 2010:5; Soulbury Report, 2010:4; MOE, 2012) (see Pars. 2.2.6 and 5.2.2.5; Table 5.8; Fig. 5.15). Educational psychologists are highly qualified; the majority of educational psychologists around the world hold master's-level degrees as their highest qualification, with a small number holding doctoral-level degrees (Maister, 2003:207-208, 291; Dawson et al., 2004:118; McKenna & Maister, 2005:xxii; Edwards et al., 2007:266; AEP, 2008:5; Costello, 2010:5; Jimerson et al., 2010:1-6; Soulbury Report, 2010:4; Broderick, 2011:9; Merrell et al., 2012:98; NZPB, 2012:12) (see Par. 5.2.2.7; Table 5.8).

6.2.3 Findings with respect to the service delivery model and its influence on the professional performance of educational psychologists

Organisational structures differ across different organisations, and therefore present variation in the service delivery models they implement to deliver services (Drucker, 1993:193-201; Broderick, 2011:237-263; Cole, 2013:184) (see Par. 3.2.2). Consequently, service delivery models are predetermined by the organisational structure and are not set by managers or teams in an organisation. Service delivery models are directly related to an organisation's performance according to scholarly literature (Drucker, 1993:193-201; Maister, 2003:3-6; Broderick, 2011:237-263; Kaiser & Ringlsetter, 2011:7-8; Cole, 2013:184). Managers of educational psychologists and educational psychologists are

employed by various different organisations, including state departments of education, juvenile justice institutions, health services, social welfare services, national educational psychology services, non-profit organisations, mental health services, tertiary academic institutions, and private practices (Curtis, 2002; Curtis et al., 2002:32; Curtis et al., 2004:343; Brown et al., 2006:487; Edwards et al., 2007:26; Coleman & Pine, 2010:20; Costello, 2010:5, 12; NASP, 2010:1; Curtis, 2012:4; Curtis et al., 2012:28, 30; Merrell et al., 2012:103-104) and deliver educational psychological services according with the organisations' structure. Two different service delivery models are utilised to manage and deliver educational psychological services in organisations: the traditional service delivery model (TM) and expanded role model of service delivery (ERM) (Brown et al., 2006:486-496; AEP, 2008:6-11) (see Par. 5.2.3.1; Table 5.17; Fig. 5.18). There are opposing views relating to the ideal service delivery model (TM/ERM) and its influence on educational psychologists' performance since organisational structures and related service delivery models differ (see Pars. 5.2.3.1 and 5.2.3.2; Tables 5.17 and 5.19; Fig. 5.18). However, there is strong agreement that both these service delivery models support educational psychologists to develop comprehensive individualised intervention-focussed programmes, work collaboratively, develop preventative school wide programmes, and provide quality services to students who have special needs.

6.2.4 Findings with respect to the influence of management appointments on the professional performance of educational psychologists

Empirical findings have established a strong association between managerial leadership and the professional performance of educational psychologists (Jimerson et al., 2004:274-276; Jimerson et al., 2006:19-21; Children's Workforce Strategy, 2007:28-32; Edwards et al., 2007:263-274; Musabelliu, 2007:12; Jimerson et al., 2008a:18-19; AEP, 2008:3-4, 10; Brown, 2010:14-18; Coleman & Pine, 2010:23; Hornby, 2010:26; Soulbury Committee Report, 2010:5-7; Curtis et al., 2012:30; Curtis, 2012:4). However, the lack of scholarly literature pertaining to the management of educational psychologists, has been documented by prominent researchers (Jimerson et al., 2004:259-260, 274-276; Jimerson et al., 2006:19-21; Edwards et al., 2007:263-274; Musabelliu, 2007:12; Jimerson et al., 2008a:18-19; AEP, 2008:3-4; Coleman & Pine, 2010:23; Curtis et al., 2012:30; Curtis, 2012:4). This connection corresponds with the researcher's experience and observations. However, it seems simulated to draw on conventional general management theories or

empirical and scientific data, from other fields to provide managerial leadership to educational psychologists (Kotter, 1947:1-184; Drucker, 1993:3, 5, 7, 9-12; Gordon & Yukl, 2004:360; McKenna & Maister, 2005:xxiii; Bass, 2008:651; Garcia-Vazquez et al., 2010:3-26; Kaiser & Ringlstetter, 2011:6-7, 39, 89-90; Mintzberg, 2011:2, 9, 46, 206; Holmberg & Tyrstrup, 2012:48-49; Sveningsson, Alvehus & Alvesson, 2012:69; Tengblad, 2013:4-6, 8-9, 338).

Managerial leadership of the educational psychologist cohort is as important (Jimerson et al., 2004:274-276; Brown et al., 2006:486-496; Jimerson et al., 2006:19-21; Children's Workforce Strategy, 2007:28-31; Musabelliu, 2007:12; AEP, 2008:10; Jimerson et al., 2008a:18-19; Brown, 2010:13, 15, 17; Coleman & Pine, 2010:21-24; Hornby, 2010:26; Soulbury Report, 2010:4-5; Curtis et al., 2012:30; Curtis, 2012:4; Truong & Ellam, 2014:5-29) as the managerial leadership prescribed for professional service organisations (McKenna & Maister, 2005:xxii; Maister, 2003:289-290; Broderick, 2011:239, 259-260, 266) (see Par. 3.2.3 and 3.3.4; Fig. 3.4) based on the descriptive and causal findings. The scholarly literature has provided a description, with limited interpretation, of characteristics that are required in order to be a successful professional service organisation manager (Maister, 2003:217-221; Goleman et al., 2001:44; Broderick, 2011:265-285) (see Par. 3.2.3 and Fig. 3.5). Others have raised views related to the influence of management appointments on the professional performance of educational psychologists (AEP, 2008:10; Hart, 2007:535, cited by Brown, 2010:15; Brown, 2010:17; Coleman & Pine, 2010:21-24).

Views regarding the ideal management appointment to provide managerial leadership for educational psychologists – that is, appointment of qualified educational psychologists in management roles or educational psychologists with management responsibilities to complement the role of the generic non-educational psychologist manager - are portrayed in the literature (Jimerson et al., 2004:274-276; Brown et al., 2006:486-496; Jimerson et al., 2006:19-21; Children's Workforce Strategy, 2007:28-31; Musabelliu, 2007:12; AEP, 2008:1-20; Jimerson et al., 2008a:18-19; Brown, 2010:13, 17; Coleman & Pine, 2010:21-24; Soulbury Report, 2010:4-5; Curtis et al., 2012:30; Curtis, 2012:4) and expressed by the empirical and descriptive finding from the current study (see Par. 3.3.3 and 5.2.4.1; Tables 5.20 and 5.21; Figure 5.22). Findings also afforded the rationale for the preferred management appointments – the need for managers to understand the role and pressures

educational psychologists face, relevant educational psychological qualifications to better equip managers to support educational psychologists, enhanced ability to give appropriate professional advice, and managers will hold knowledge and understanding of ethical guidelines (empirical and descriptive findings). Furthermore, empirical findings confirmed that the appointment of generic non-educational psychologist managers was not deemed expedient (Children's Workforce Strategy, 2007:28-31; AEP, 2008:10-11) (see Table 5.20; Figs. 5.22). The current reality for organisations is incongruous because the majority of managers appointed to manage educational psychologists are generic non-educational psychologist managers. Empirical and descriptive findings confirmed that non-educational psychologists are appointed in most cases and that most managers are not qualified educational psychologists. There is evidence of a causal link in the quantitative data on the ideal management appointment between managers and educational psychologists. However, the empirical and theoretical evidence from the qualitative data steered in a different direction and confirmed that generic non-educational psychologists fill these management positions and deem management and leadership knowledge and experience the most important competency within the management role (see Par. 5.3.2 and Fig. 5.65). Management and leadership knowledge and experience were expressed as the weakest competency when managers were employed (Par. 5.3.2; Table 5.66). Empirical findings with respect to the professional development in the management and leadership domain revealed that empirical data and experiences, and the appraisal of scholarly literature in the fields of educational psychology and managerial leadership, enhance manager competence (see Par. 5.3.2; Table 5.67). Low levels of job satisfaction and increased levels of stress are the two main consequences of inappropriate management appointments for the professional performance of educational psychologists, according to descriptive findings (see Par.5.2.4.3; Tables 5.27 and 5.28; Figs. 5.29 and 5.30).

6.2.5 Findings with respect to the influence of workload management on the professional performance of educational psychologists

Educational psychologists provide educational psychological services to students who are experiencing social, academic, emotional, and behavioural problems. The educational psychologists' role comprise of numerous different activities. Data on educational psychologists' workload activities are available in large quantities in the scholarly literature (Curtis et al., 2002:30-42; Curtis, 2002; Curtis et al., 2004:431-442; Jimerson et al.,

2004:278; Jimerson et al., 2006:25; Brown et al., 2006:488; Edwards et al., 2007:273; Jimerson et al., 2007:1-553; Jimerson et al., 2008a:22; Jimerson et al., 2008b:1-23; NASP, 2010:10; Curtis et al., 2012:28-30; Curtis, 2012:1-6; Castillo et al., 2012:4-6; Castillo, 2012:1-6; Merrell et al., 2012:104). There are both similarities and some deviation, relating to the workload of educational psychologists, across different countries (Watkins et al., 2001:64; Curtis 2002; Jimerson et al., 2004:269-273; Jimerson et al., 2006:17-19; Brown et al., 2006:492-493; Idsoe, 2006:46-72; Edwards et al., 2007:271; AEP, 2008:1-10; Jimerson et al., 2008a:12-17; Coleman & Pine, 2010:20; Costello, 2010:15-16; Farrell, 2010:581-598; Castillo, 2012:1-6; Castillo et al., 2012:1-6; ISPA, 2012; MOE, 2012; Merrell, 2012:106-109) (see Par. 2.3.3). The ideal educational psychologist-to-student ratio of 1:100 is projected by the National Association of School Psychologists (NASP, 2010:10). This ratio has an effect on the type of service that educational psychologists deliver and their professional performance (Curtis, 2002; Curtis et al., 2002:32-42; Curtis et al., 2004:431-442; Jimerson et al., 2004:278; Brown et al., 2006:488; Jimerson et al., 2006:25; Edwards et al., 2007:273; Jimerson, Oakland & Farrell, 2007:1-553; Jimerson et al., 2008a:22; Jimerson et al., 2008b:1-23; NASP, 2010:10; Coleman & Pine, 2010:23; Curtis et al., 2012:28-30; Curtis, 2012:1-6; Castillo, 2012:1-6; Merrell et al., 2012:104) (see Par. 3.3.4).

Workload management systems, which are most often used for maximum benefit, show a discrepancy in the empirical and descriptive findings (see Par. 5.2.5.1, 3.2.1, and 5.3.3; Tables 5.31, 5.32, and 5.68). Educational psychologists prefer to be given autonomy to manage their own workload in contrast to managers who strongly support the use of formal structured workload management processes (see Par.3.2.1) (Maister, 2003:168, 207-208, 291; McKenna & Maister, 2005:xxii; Broderick, 2011:9). Nine elements that a structured workload management process advance in the empirical and theoretical findings, are: set clear service expectations, set time frame expectations, support work throughput management, support regular meeting to monitor progress, manage caseload size, manage work allocation, support the development of a work plan, improves educational psychologists' performance, and develop their problem solving skills (see Par. 5.3.3; Table 5.68). The formal structured workload management system results in comprehensive intervention-focussed educational psychological services, preventative educational psychological services, systems support to facilities, and increase educational psychologists' availability to engage in clinical supervision. On the other hand, ineffective

workload management has critical consequences for the professional performance of educational psychologists and results in increased levels of stress, burnout, low levels of job satisfaction, and high staff turnover rates (see Par. 5.2.5.5; Tables 5.42 and 5.45; Figs. 5.44 and 5.44).

6.2.6 Findings with respect to the influence of managerial leadership on the educational psychologists' engagement in clinical supervision

Educational psychologists' engagement in clinical supervision is a fundamental element of educational psychological practice (Jimerson et al., 2004:266, 276, 279; Jimerson et al., 2006:13, 21, 25, 27; Thielking et al., 2006:406; Jimerson et al., 2008a:5-28; AEP, 2008:1-20; NASP, 2010:1-12; Curtis et al., 2012:28-30; Curtis, 2012:1-6, MOE, 2012). Regulations regarding educational psychologists' engagement in clinical supervision differ between countries and depend on the country's educational psychologists' training programme, the individual educational psychologists' age and years of experience, the length of time the profession has existed, and regulatory authorities' codes of ethics (Jimerson et al., 2004:273-276; Jimerson et al., 2006:14, 25; Papacosta, 2007:69; AEP, 2008:18; Jimerson et al., 2008a:12, 17-19; NASP, 2010:1-12; Curtis et al., 2012:28-30; Curtis, 2012:4-5) (see Par. 5.2.6.2). There is strong agreement in scholarly literature, descriptive data from the current study, and the researcher empirical experience, that educational psychologists' clinical supervision needs should be met by a qualified educational psychologists (Cole, 2013:37-39; Thielking et al., 2006:404; AEP, 2008:5-6, 10, 18; MOE-Educational Psychologist – Job Description, 2012:1-12) and that managers should encourage educational psychologists to participate in habitual clinical supervision (Thielking et al., 2006:412; NASP, 2010:1-12).

Supervision feedback during one-on-one performance conversations between managers and educational psychologists, formal discussions between managers and educational psychologists to monitor supervision engagement, progress, and outcomes, and formal processes to monitor the implementation of organisational and statutory authorities' compulsory supervision requirements (NASP, 2010:1; Curtis et al., 2012:30; Curtis, 2012:4-5) all influence educational psychologists' engagement in clinical supervision based on the empirical, descriptive, and theoretical findings (see Par 5.2.6.2 and 5.3.4; Tables 5.50, 5.53, and 5.70; Figs.5.52 and 5.52). Additionally, managers encourage

educational psychologists' engagement in clinical supervision when managers organise and appoint supervisors and monitor educational psychologists' supervision logs and contracts (see Table 5.70). The three main consequences for the professional performance of educational psychologists, when they do not engage in clinical supervision, are increased levels of stress, capacity and capability issues, and low levels of job satisfaction (see Par. 5.2.6.3; Tables 5.55 and 5.56).

Educational psychologist's engagement in vigorous clinical supervision with a qualified educational psychologist whom they trust and respect provides professional safety and professional support. According to the empirical, descriptive, and theoretical findings, clinical supervision provides numerous benefits for both the supervisor and supervisee, namely: professional development, stress debriefing, explores and acquires new professional responses for future situations, and opportunity to review pieces of professional practice (see Par. 5.2.6.1; Table 5.46 and 5.49; Figs. 5.47 and 5.48).

6.3 RESEARCH CONCLUSIONS

The research problem is to understand the influence of managerial leadership on the professional performance of educational psychologists with relation to educational psychologists' service deliver models, management appointments, workload management systems, engagement in clinical supervision, and the consequences of ineffective managerial leadership. The conclusions (objective/appropriate/supportive) that were deducted in the current study provide a biographical outline of managers of educational psychologists and educational psychologists, provide evidence that service delivery model, management appointments, and workload management, all influence the professional performance of educational psychologists. Additionally, objective and appropriate evidence reflected on the influence of managerial leadership of educational psychologists' engagement in clinical supervision. The conclusions, consistent with the objective, appropriate, and supportive evidence to the research sub-questions that were derived from the main research aim, will be discussed and presented in conclusion models in subsequent sections.

6.3.1 Conclusions with respect to the demographic characteristics of managers of educational psychologists

It is not possible to relate or evaluate the biographical data of managers against scholarly literature or previous research findings, since none were revealed in the literature. Objective and sufficiently relevant evidence that is relevant to the research purpose, question, and objective presented a comprehensive synopsis of the biographic characteristics of managers (n=12), which describe a female-dominated cohort with a mean age of 53.4 years ($\bar{x}=53.4$). Managers are noticeably older than the educational psychologist cohort. Their ethnicity and language they speak most frequently (Afrikaans n=2/English n=10) are representative of the countries the research was conducted in and where the participants work (see Pars. 5.2.2.3, 5.2.2.4, 5.3.1.3 and 5.3.1.4). These managers (n=12) are very experienced, with an average of 16.9 years of management experience ($\bar{x}=16.9$), ranging from two to 25 years. More specifically, they have an average of 10.6 years ($\bar{x}=10.6$), ranging from two to 20 years, years of experience managing educational psychologists. Managers are highly qualified and hold high qualification levels that are comparable to those of educational psychologists' qualification levels. The majority of managers (n=10) hold master's-level (n=8) and doctorate-level (n=2) qualifications. The remaining two managers hold lower qualification levels: a diploma-level and a bachelor's-level qualification. Conversely, qualifications in the management discipline were rare and only two managers hold management specific qualifications, namely: bachelor's-level and master's-level management qualifications. The professional backgrounds of manager's were not predictable as it was envisaged that all managers ought to be qualified educational psychologists (see Par. 5.4.2.1. and 5.3.2). Managers come from an array of professional backgrounds that included: education, educational management, educational psychology, nursing, and psychology (other scopes of practice) (see Pars. 5.2.1.8 and 5.3.1.8).

6.3.2 Conclusions with respect to the demographic characteristics of educational psychologists

The current study provides objective and scientific evidence with respect to the consistent biographical profile of educational psychologists that the field of educational psychology continues to be dominated by highly qualified Caucasian females. Educational

psychologists' ethnicity, and language in which they communicate most frequently, is representative of the countries (Finland, India, Ireland, South Africa, and Switzerland) in which the research was conducted. This varied ethnic spread is characteristic of a diverse workforce. Educational psychologists' classroom teaching experience ranged from zero to 40 years with an average of 5.4 ($\bar{x}=5.4$) years' experience (see Par. 5.2.2.5). This is reflective of the fact that classroom teaching is not a prerequisite for entering into the field of educational psychology in all countries that participated in the research. Years of experience practicing educational psychology was irregular with a mean number of eight years ($\bar{x}=8$), ranging from six months to 15 years of experience practising educational psychology.

6.3.3 Conclusions with respect to the ideal educational psychologists' service delivery model and its influence the professional performance of educational psychologists

Contradictory perspectives, on the most effective service delivery model (TM and ERM) and its influence of the professional performance of educational psychologists, consistent with scholarly literature, were obtained from managers and educational psychologist respondents (see Par. 5.2.3.1). Nonetheless, there was consistency in that both the TM and ERM influence educational psychological activities which include developing comprehensive individualised intervention-focussed programmes, working collaboratively, developing preventative school-wide programmes, and delivering quality services to students who have special needs. The conclusion is that organisations use both the traditional service delivery model and the expanded role model to deliver educational psychological services and they influence the professional performance of educational psychologist, as illustrated in the service delivery conclusion model (see Appendix 3).

6.3.4 Conclusions with respect to the influence of management appointments on the professional performance of educational psychologists

The appointments of qualified educational psychologists in management roles, or qualified educational psychologists with management responsibilities to complement the generic non-educational psychologist manager, are the preferred management appointments. Contrary to traditional preferences and scholarly literature, in reality and in line with

scientific evidence, generic non-educational psychologists are appointed to management roles to provide managerial leadership for educational psychologists (see Par. 5.2.1.8 and 5.3.1.8) captured in the management appointment conclusion model. Only a handful of these managers are qualified educational psychologists, while the vast majority come from a range of other disciplines as maintained in objective and related evidence. In order for these managers to be successful in driving performance, building capacity, and influencing the professional performance of educational psychologists, they predominantly require management and leadership knowledge and experience based on scientific/objective; such appropriate evidence is sufficiently supported in the data. Managers develop these management and leadership capability through engaging in empirical evidence, appraisal of scholarly literature, dialogue, mentoring, and supervision. The management appointment conclusion model (see Appendix 3) presents the closure of the conceptual circle that was put forward in the conceptual framework (see Appendix 1).

6.3.5 Conclusions with respect to the influence of workload management on the professional performance of educational psychologists

Structured workload management systems and processes are most often used by managers, for maximum benefit, when managing educational psychologists' workload, as indicated in the scientific, appropriate and strong evidence in the current research and depicted in the workload management conclusion model. More specifically, formal workload management systems set clear service expectations and time frame expectations, support work throughput management, monitor progress through regular meetings, manage caseload size, support work allocation management, help educational psychologists to develop work plans, improve educational psychologists' professional performance, and develop educational psychologists' problem solving skills.

Formally structured workload management systems result in preventative educational psychological services, quality services to students who have special needs, systems support to facilities, and comprehensive intervention-focussed educational psychological services, and increase the availability of educational psychologists to engage in clinical supervision (see Appendix 3).

6.3.6 Conclusions with respect to the influence of managerial leadership on educational psychologist' engagement in clinical supervision

Educational psychologists' clinical supervision regulations and requirements vary across countries. Even so, the importance of educational psychologists' engagement in clinical supervision is widely acknowledged and supported. Managers are responsible for ensuring educational psychologists engage in regular robust clinical supervision. Supervision feedback during one-on-one performance conversations is the most effective managerial leadership activity that encourages engagement in clinical supervision. Other activities that are used successfully by managers and relate to management functions are: monitoring supervision log, meeting regularly to monitor progress and engagement in clinical supervision, organising and appointing supervisors, and monitoring supervision contract. Managers occasionally impose Psychologist Boards, – Code of Ethics and/or compulsory organisational supervision frameworks to ensure that educational psychologists engage in clinical supervision (see Appendix 3).

6.3.7 Conclusions with respect to the consequences of ineffective managerial leadership, for the professional performance of educational psychologists

When educational psychologists are not managed by an appropriate manager, when their workload is not effectively managed, and when they do not engage in clinical supervision, there are two main consequences that occur in all cases: increased levels of stress and low levels of job satisfaction. Another two consequences that correspond across all three areas to a great extent are burnout and high staff turnover rates.

6.4 RECOMMENDATIONS FROM THE STUDY

6.4.1 Recommendations with respect to the influence of management appointments on the professional performance of educational psychologists

Design a robust and purposefully tailored induction framework for new managers of educational psychologists that will provide consistency, knowledge, and support in their first year. Induction programmes can be designed and implemented on the national level (national associations/national societies/tertiary providers/social development/health/education/juvenile Justice/schools), the district level (departments of education, health, social development, juvenile justice, hospitals, educational societies and associations), and local community level (schools, private educational psychology practices, non-profit organisations). The induction programme will provide managers with a consistent and clear professional development pathway and address the required competencies for the first year within their management roles and improve their knowledge, skills, and competence in the three required domains (managerial leadership/complexities of the school system/educational psychological role). The induction programme will provide clarity regarding managers' roles, responsibilities, individual objectives and competencies; set organisational expectations; meet individual professional development needs; address the main competency areas of the role of a manager; and monitor progress. This will result in confident and competent managers who have the necessary skills and knowledge to provide effective managerial leadership within organisational and educational psychological policies and guidelines. Consequently, the professional performance of educational psychologists will improve.

A related recommendation is for universities and educational psychologists' statutory authorities to develop a management development programme that is specifically customised for managers of educational psychologists. The aim is to equip managers of educational psychologists with the resources and knowledge they need to develop into appropriately qualified managers who can manage and lead educational psychologists effectively. The management development programme will provide learning and understanding of the integration and application of the three competencies required in this unique managerial leadership role.

6.4.2 Recommendations with respect to the influence of workload management on the professional performance of educational psychologists

Design a formal structured workload management model to increase educational psychologists' capability, capacity, efficiency, and the quality of educational psychological services. National, district, and community-based educational psychological services can benefit from the formal structured workload management model to manage workload of educational psychologists. Even managers at private entities who employ educational psychologists can benefit from a formal structured workload management model. Managers can use the formal workload management process to manage the workload of educational psychologists effectively. This model should consist of domains that focus on specific components, which can include:

- A schedule for regular (yearly/monthly/fortnightly) one-on-one meetings to plan and monitor educational psychologists' workloads.
- Clear service expectations and service pathways.
- Clear time frame expectations.
- Clear expectations with relation to compilation of workloads, specifically caseload size.
- Formal team and individual work plans – yearly, quarterly, and monthly.
- Workload allocation process, include process for managing work when demand exceeds capacity or when staffing is a challenge.

Governmental departments and organisations will benefit from the implementation of a formal structured workload management model and, as a consequence, make effective use of resources, deliver quality services within tight fiscal restraints, profit growth, meeting set targets, efficient and effective workforce, and delivering on priorities and goals. The formal workload management process will provide managers of educational psychologists with an accurate and efficient model to manage all elements of an educational psychologists' workload in a planned and systematic manner. Managers will be able to monitor, support, and guide educational psychologists according to consistent and clear organisational expectations, specifically: balanced workload, manageable caseload size, work throughput, educational psychological service delivery of a consistent quality, equal work distribution, and job satisfaction for managers and educational psychologists. Educational psychologists will benefit from having clarity of expectations and a structured

plan to guide their work in a safe and non-threatening manner. They will also have timely access to support and feedback in regular meetings.

Formal structured workload management system will result in comprehensive intervention focussed educational psychological services, preventative educational psychological services, quality educational psychological services to students with special needs, system support to schools, and educational psychologists' engagement in clinical supervision.

6.4.3 Recommendations with respect to the influence of managerial leadership on educational psychologists' engagement in clinical supervision

Develop a guideline for managers relating to educational psychologists' supervision requirements and policies. All managers who are tasked with the managerial leadership of educational psychologists in government agencies, organisations, local community resources, schools, and private entities can use robust supervision guideline to impose, support, monitor, and encourage educational psychologists' engagement in clinical supervision.

The recommendation with respect to the influence of managerial leadership on educational psychologists' engagement in clinical supervision can be included in the robust purposefully tailored induction framework recommendation with respect to the influence of management appointments on the professional performance of educational psychologists, or developed on its own accord.

The supervision guideline for managers should focus on and include the following components:

- Educational psychologist statutory authority's supervision policy, guidelines, and requirements.
- Organisational supervision policy, guidelines, and requirements for educational psychologists.
- Professional development in clinical supervision process for educational psychologists and supervisors.
- Identification, appointment, allocation, and access to appropriately qualified and experienced educational psychologist supervisors.

- Clinical supervision sessions requirements and schedule.
- Clinical supervision engagement, monitor, and progress reviews: one-on-one feedback sessions/supervision contract/supervision log.
- Process for formal collaboration, feedback, and transparency between managers, clinical supervisors, and supervisees with relation to clinical practice.

Formal supervision guidelines for managers of educational psychologists will develop managers' competency to support educational psychologists' engagement in habitual clinical supervision in a consistent, confident, capable, and effective manner. Educational psychologists will receive managerial leadership in accordance with their professional policies and requirements and gain confidence that their manager understands their clinical professional needs. Additionally, educational psychologists' engagement in clinical supervision will provide professional development, stress debriefing, exploration and acquisition of new professional responses for future situations, opportunities to review components of professional practice, and improve clinical practice.

6.5 AVENUES FOR FURTHER RESEARCH

The current research was the first trans-disciplinary study that aimed to understand the influence of managerial leadership, on the four most documented areas in need of managerial leadership with regard to professional performance of educational psychologists. Further mixed method explanatory/exploratory research is required in order to gain a more comprehensive understanding and in-depth knowledge of specific managerial leadership activities, their influence on the professional performance of educational psychologists, and best managerial practice. The current research can be duplicated over time, similar to the longitudinal studies conducted by Jimerson and Curtis, to add to the knowledge base, improve managers' and educational psychologists' practice and performance, and inform policy debates. Specific topics that arose from developments in the current research and areas that were uncovered during the research include:

- Conduct similar research (quantitative or qualitative) in order to add to the body of data relating to the demographic characteristics of managers of educational psychologists.
- Conduct qualitative research to explore the generic non-educational psychologist manager appointment competency areas in more depth.

- Conduct mixed methods explanatory research to investigate the workload management systems that are utilised to manage educational psychologists, workloads.
- Conduct quantitative research to study the relationship (new questions) between the service delivery model and workload management systems.
- Conduct quantitative research to explore the relationship between the management appointment and the workload management system.
- Conduct mixed methods explanatory research to investigate the relationship between managers' professional backgrounds and manager appointments.
- Conduct qualitative research to investigate appropriate professional development opportunities for managers of educational psychologists to build capability.
- Duplicate the current study to broaden understanding of the influence of managerial leadership on the professional performance of educational psychologists.

6.6 CONTRIBUTION OF THE STUDY

The findings from the current research not only provided answers to the research questions and fulfilled the research objectives, but also contributed to the three reasons for conducting any research, as discussed in Paragraph 1.9: research adds to knowledge, improves practice, and informs policy debates. New empirical data were generated that add to the knowledge base, namely:

- A biographical profile of managers of educational psychologists.
- The influences of service delivery models (TM/ERM) on the professional performance of educational psychologists (see Appendix 4).
- The components of a workload management system that positively influence the professional performance of educational psychologists (see Appendix 4).
- The influences of a formal workload management system on the professional performance of educational psychologists (see Appendix 4).
- Managerial leadership activities that positively influence the professional performance of educational psychologist (see Appendix 4).

Additionally, the theoretical research findings improve practice. Results provide in-depth understanding and explanation of the influence of managerial leadership and empirical data that can be integrated into managerial leadership practices to influence the professional performance of educational psychologists (see Appendix 4). The research results may also inform policy debates. Policymakers can use the data to determine and develop: the ideal service delivery model, most appropriate management appointment, induction programmes for managers of educational psychologists, formal structured workload management systems, and guidelines for the professional training models for managers. The results also provide managers' perspectives on their experiences and empirical data on their managerial leadership role and the perceived influences.

6.7 LIMITATIONS OF THE STUDY

Like many former research students, the researcher faced time and resource (financial/human/technology) limitations during the research process. These included the following:

- Typist, language editor, academic editor, printing, graphic designer, statistician, supervision and mentoring were the main financial expenditures that exceeded the set budget.
- These professionals' timeframes placed strain on the researchers planning and progress throughout the research – the researcher had to revise the research plan to accommodate delays.
- Early stages of research in the area of management of professional performance of educational psychologists. It was time consuming to search the scholarly literature. The lack of pertinent data resulted into wide ranging data collection procedures.
- The span of the current research limited the extent of the exploration of each individual component.
- Access to the UNISA library posed challenges in terms of receiving and returning material; post services were unreliable.
- The researcher experienced a major setback and delay when the initial research approval and ethical clearance for insider research was withdrawn after an organisational restructure (researcher's employer) in her second year. The newly appointed senior management team viewed insider research as a risk for the

organisation and the researcher. After contemplating withdrawing from the doctoral studies the researcher regained renewed interest and confidence to rewrite her proposal and rethink the research methodology and design. This led to the current research which was conducted in a few selected countries with limited time to visit research sites.

- Applications to conduct research and ethical approval processes of departments of education, health and social development, schools, educational psychologist associations, and educational psychological societies in different countries was labour and time intensive.
- Although the managers' sample size appears small, it is representative of the research sites because of the low incidence of the role.
- The educational psychologist response rate was disappointing. On reflection, the researcher is of the opinion that higher response rates will occur if face-to-face engagement and negotiation with each research site can be achieved. Time and financial constraints made it impossible to meet with respondents at each research site.
- The researcher's professional background and qualifications made it problematic to gain access to educational psychologist associations' data and distribution list and research post sites. Being a qualified registered educational psychologist was a requirement to gain support for the research from most educational psychologists associations and societies.
- Access to managers of educational psychologists was complicated to navigate, and time constraints limited the exploration of creative ways to access these managers.

6.8 CONCLUDING REMARKS

Reflecting back over the complete research project reminded the researcher of her initial feelings about embarking on an unknown and complex learning experience. It was anxiety-provoking but exhilarating. These feelings subsided and evolved into positive feelings that enhanced the researcher's learning processes and task behaviour and provided a stronger stimulus for new learning and exploring. This ultimately resulted in new understanding, appreciations, skills, and learning on the topic of interest, and elucidated the relationship between theory and practice. The purpose of the individual research project is to

understand the influence of managerial leadership on the professional performance of educational psychologists. This resulted in a cross-disciplinary study that combines the fields of management and leadership, management of professional service organisations, and educational psychology. Managers of educational psychologists, managers of psychologists from other scopes of practice, educational psychologists, principals, universities, policy makers, and graduate scholars may find the study valuable to add to knowledge, improve practice, and inform policy debates.

In anticipation of the research experience the researcher explored her prior research knowledge and skills (quantitative and qualitative) from her two master's-level degrees, engaged in supervision/mentoring from highly regarded professionals from the educational psychological domain and from a manager of educational psychologist, and studied the demands and scope of a doctorate-level research project. Ongoing regular supervision provided the researcher with valuable support, learning, and direction to explore and challenge expectation from the research, guide the research approach selection process, investigate research paradigms, discuss different research questions and objective to answer the research problem, keep researcher focussed, analyse and interpret situations never encountered before and difficult scholarly literature, track progress against research plan, review progress, explore profession specific areas, and explore different perspectives.

On a personal level, the research developed self-awareness through continues reflection throughout the research project. The researcher gained a clear pragmatic perspective of herself, her strengths, weaknesses and resources, and her motivators. This self-awareness enables the researcher to set achievable goals, expectations, and time frames, and allowed for positive behavioural modification and growth. Her ability to remain focussed, to persevere through tough challenges, and to deconstruct and synthesise complex concepts and ideas during the research, became stronger. Over time the researcher acknowledge her need for self-actualisation. The researcher contemplated her personal needs and her expectations from her life and her professional career. This has influenced her future professional endeavours as she is preparing for a more senior management and leadership role.

On a professional level, the research purpose, objectives, finding, and knowledge are transferable to the context of the researcher's role as a manager of educational psychologists. The researcher's professional managerial leadership practice and performance improved as the researched progressed. In addition, her ability to share and influence educational psychologists and other managers' became evident and a consistent feature in her managerial leadership practice. The research enhanced the researcher's technical skills, knowledge of the educational psychological domain, critical thinking skills, critical analysis skills, strategic thinking skills, presentation of ideas, managerial leadership skills, planning, prioritisation, and organisational skills. All of this gave the researcher an increased understanding of the influence of managerial leadership on the professional performance of educational psychologist.

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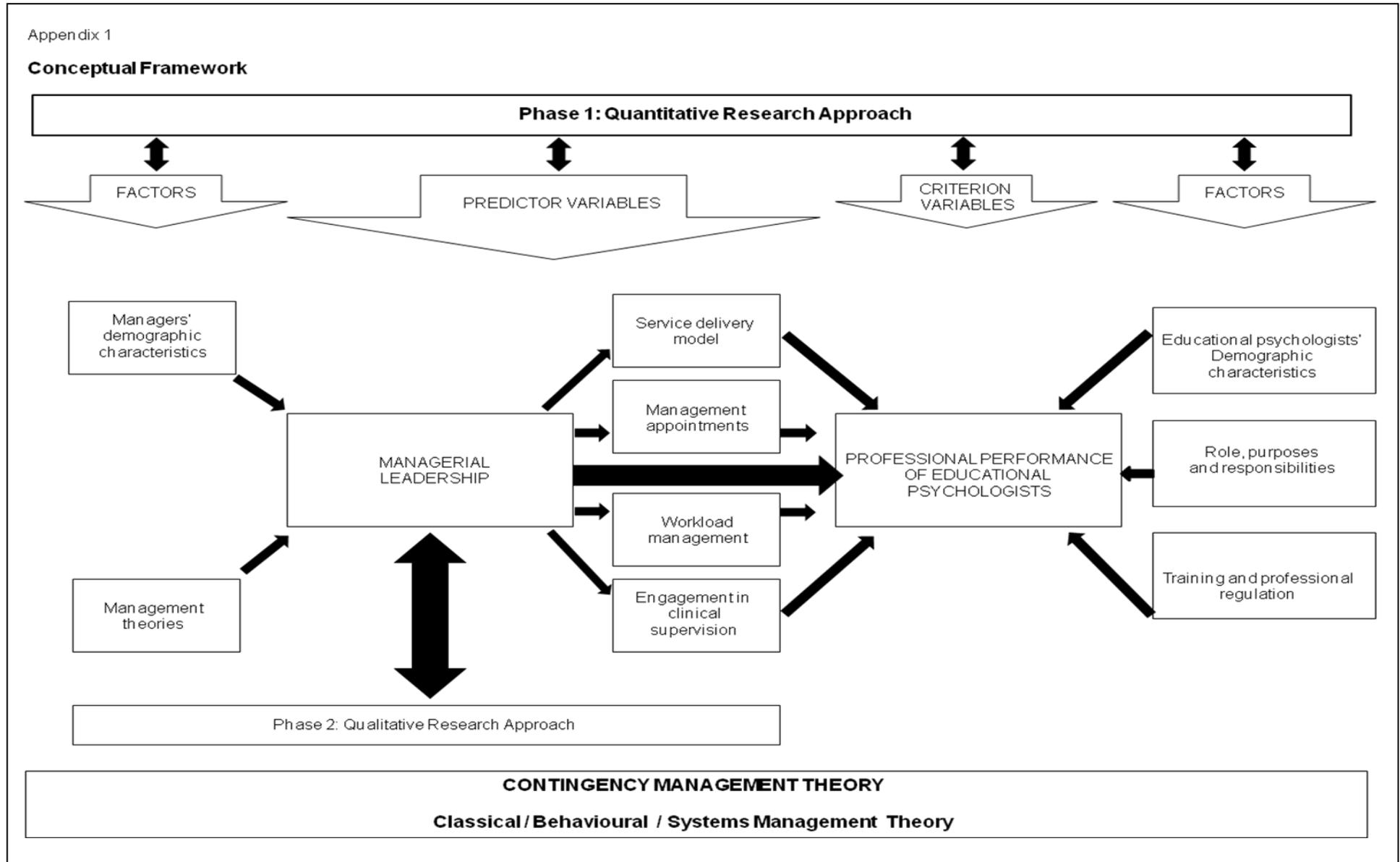
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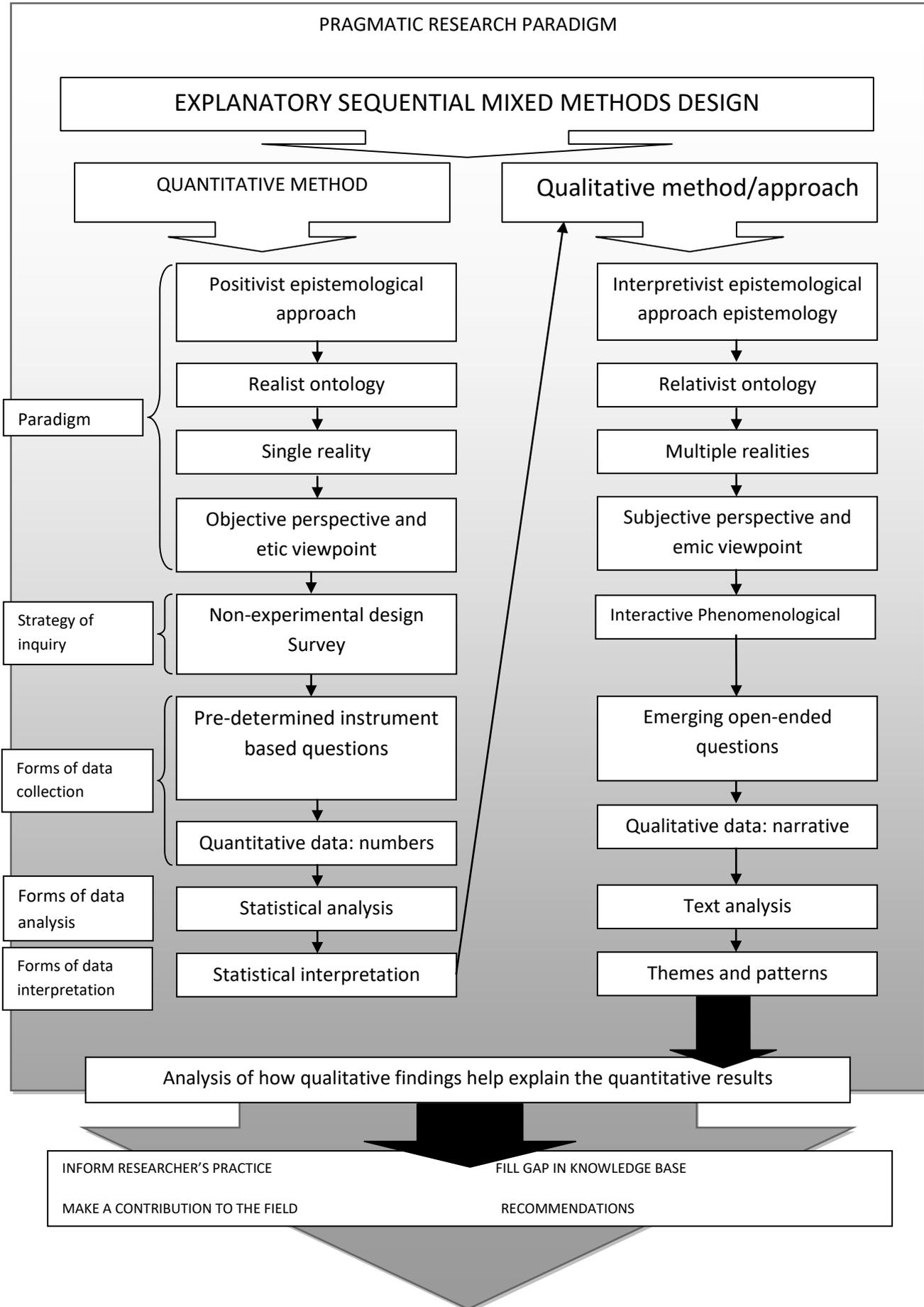
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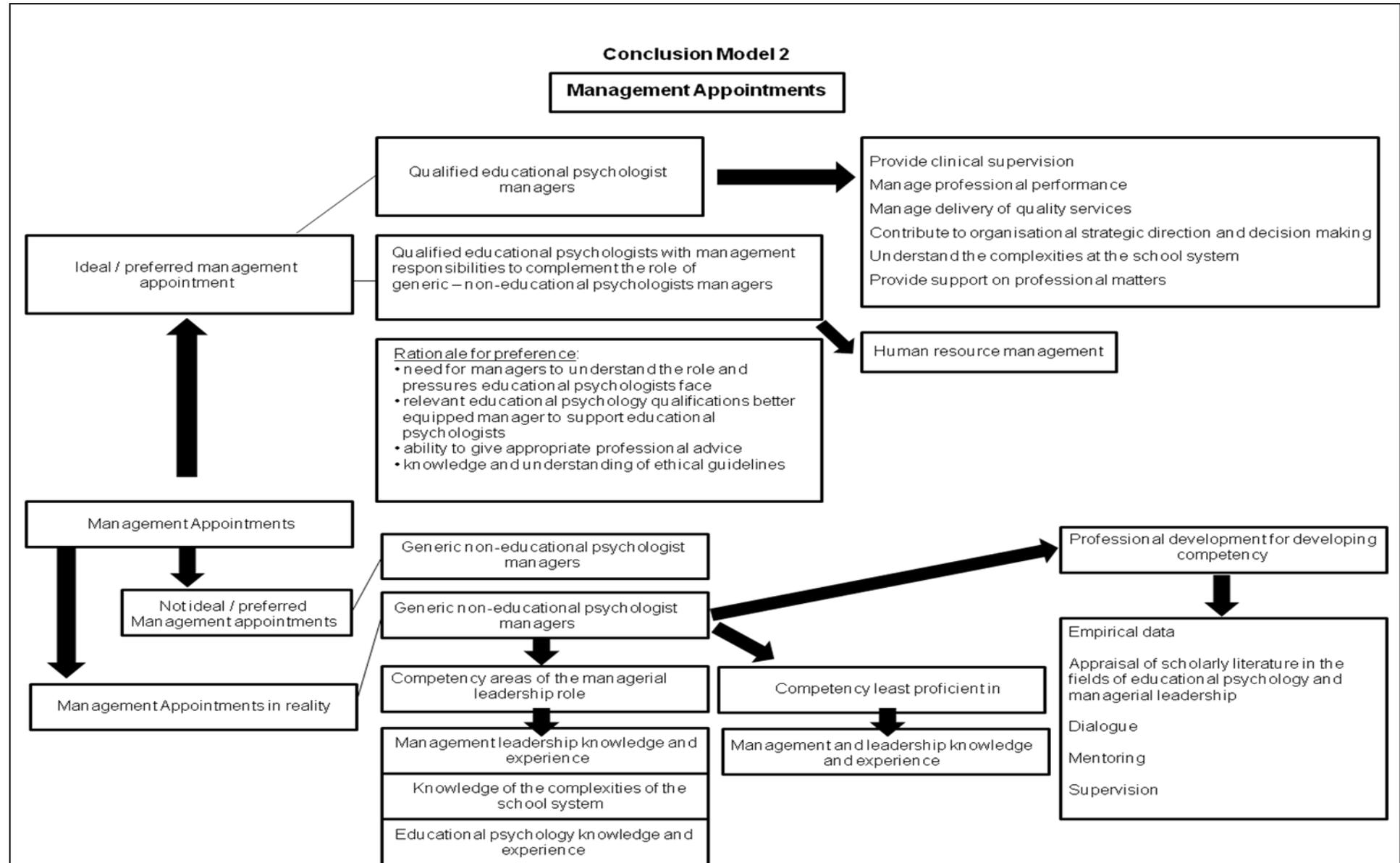
APPENDIX 1. CONCEPTUAL FRAMEWORK.

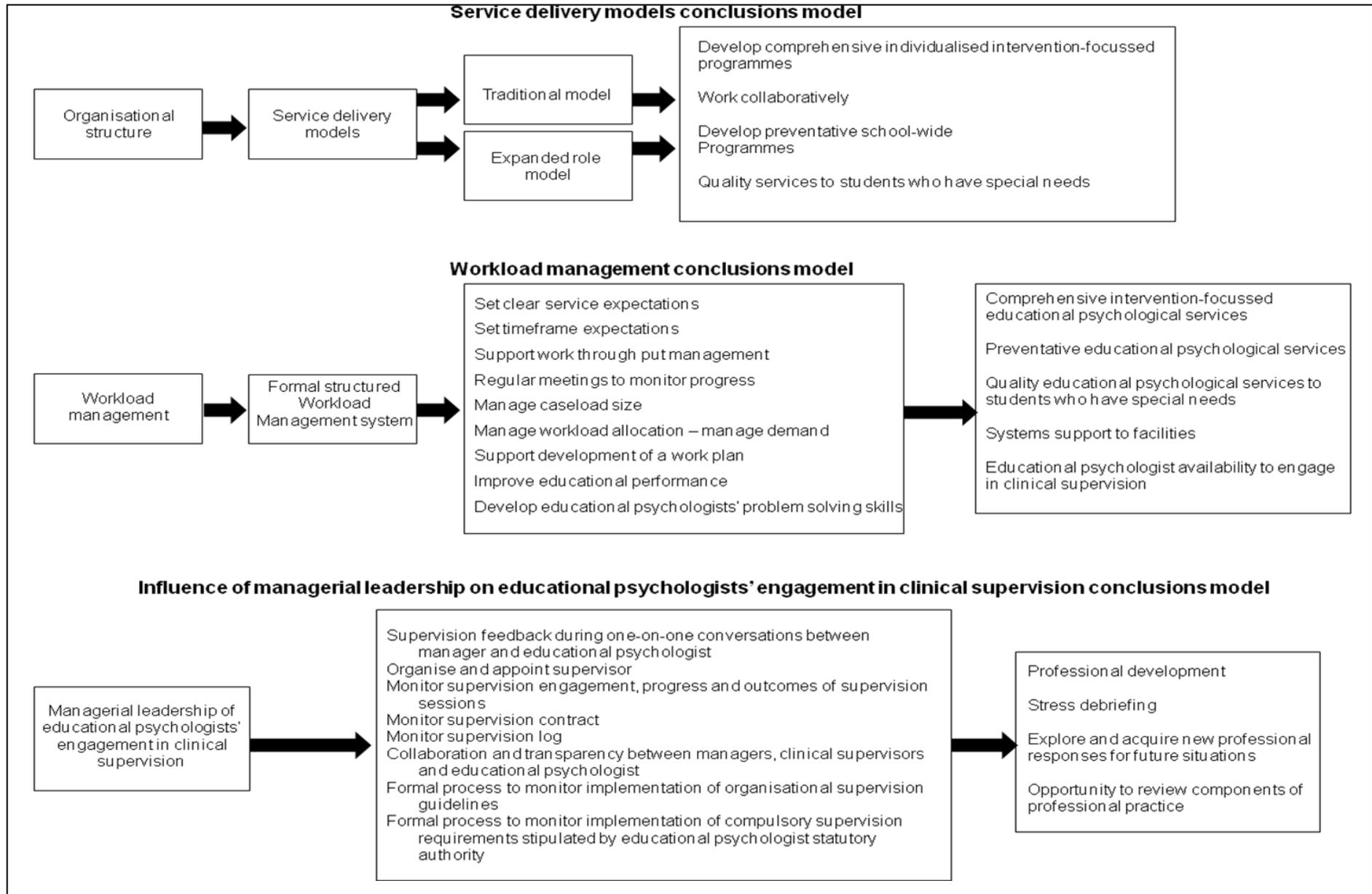


APPENDIX 2. RESEARCH DESIGN.



APPENDIX 3. CONCLUSION MODELS.





APPENDIX 4. SURVEY EMAIL INVITATION.

Dear Manager

Project title: The influence of managerial leadership on the professional performance of educational psychologists in a few selected countries.

My name is Elda Botes and I am conducting research with Prof. Nico (RJ) Botha (Mobile number: 00 27 824116361/ email address: bothari@unisa.ac.za) at the University of South Africa. I am conducting a research project that aims to understand the influence of managerial leadership on the professional performance of educational psychologists in a few selected countries. The project is being conducted with Prof. Nico (RJ) Botha as part of a Doctor of Education – Educational Management and Leadership degree.

I would like to invite you to take part in the project by completing an online survey. The survey will take approximately 15 minutes to complete and closes on 30 December 2015. There are two questionnaires: one for educational psychologists and one for managers who manage educational psychologists. Your experience and knowledge is extremely important and will contribute to a better understanding and clarification of the influence of managerial leadership on the professional performance of educational psychologists.

Participation in this research project is anonymous, confidential, and entirely voluntary. Participants can withdraw at anytime by clicking the **EXIT AND CLEAR BUTTON** at the bottom of each page of the survey. However, it will not be possible to withdraw once the survey is submitted.

The research has been approved by the University Of South Africa College Of Education Research Ethics Committee, reference number: 2014 August /30670616/MC.

If you would like to discuss any aspect of this study with a member of the research team, please contact me on the email address provided below. If you wish to speak with an independent person please contact my supervisor Prof. Nico (RJ) Botha.

The cover letter of the survey contains more information and the consent form. If you have had all questions about the project answered to your satisfaction, and are willing to participate, please click the appropriate link below:

EDUCATIONAL PSYCHOLOGIST QUESTIONNAIRE (ID 942159)

<http://survey.unisa.ac.za/index.php/942159/lang-en>

MANAGER QUESTIONNARE (ID 964849)

<http://survey.unisa.ac.za/index.php/964849/lang-en>

Thank you for participating in the study

Mrs. Elda (FE) Botes

Doctor of Education – Educational Management Student

University of South Africa

30670616@mylife.unisa.ac.za

APPENDIX 5. FOCUS GROUP INTERVIEW INVITATION.

Dear Manager

Project title: The influence of managerial leadership on the professional performance of educational psychologists in a few selected countries.

My name is Elda Botes and I am conducting research with Prof. Nico (RJ) Botha (Mobile number: 00 27 824116361/ email address: bothari@unisa.ac.za) at the University of South Africa. I am conducting a research project that aims to understand the influence of managerial leadership on the professional performance of educational psychologists in a few selected countries. The project is being conducted with Prof. Nico (RJ) Botha as part of a Doctor of Education – Educational Management and Leadership degree.

I would like to invite managers who are responsible for managing educational psychologists to take part in the project. In order to address the managerial leadership challenge of the educational psychologist cohort, it seems fundamentally superficial to make direct use of conventional management theories, scientific data, and empirical data from managers' work practices in other contexts and fields. Your experience and knowledge is extremely important and will contribute to a better understanding of the influence of managerial leadership on the professional performance of educational psychologists. More specifically, the main objectives of the research are:

- To investigate the demographic characteristics of managers of educational psychologists and educational.
- To investigate the service delivery models and its influence on the professional performance of educational psychologists.

- To explore the influence of management appointments on the professional performance of educational psychologists.
- To examine the influence of workload management on the professional performance of educational psychologists.
- To study the influence of managerial leadership on educational psychologists' engagement in clinical supervision.
- To explore the consequences of ineffective managerial leadership for the professional performance of educational psychologists.

I seek access managers who are responsible for managing and leading educational psychologists to participate in a 20 minute focus group interview.

Participation in this research project is entirely voluntary and you are under no obligation to consent to participation. If any member of a participant group decides to participate and then later changes their mind, they are able to withdraw their participation. Participants can withdraw at anytime.

There will be no consequences relating to any decision by an individual regarding participation, other than those already described in this letter. Decisions made will not affect the relationship with the research team or University of South Africa.

Information that identifies anyone will be removed from the data collected. Responses will be kept confidential at all times. Participant privacy, anonymity and the confidentiality of information disclosed by participants, is assured at all other times. The record kept of your responses does not contain any identifying information about you. You can rest assured that the identifying token is not kept with your responses. Answers (anonymous data) may be reviewed by people responsible for making sure that research is done properly, including the transcribers, external coder, and members of the Research Ethics Committee. The data will be

stored for a minimum period of 5 years, after which it will be destroyed. This will be achieved by using a professional service specialising in destroying confidential material.

A summary of the research findings will be available to the participants on request. The research has been approved by the University Of South Africa College Of Education Research Ethics Committee, reference number: 2014 August /30670616/MC.

If you would like to discuss any aspect of this study with a member of the research team, please contact me on the number provided below. If you wish to speak with an independent person about the conduct of the project, please contact Dr. M Claassens (CEDU REC Chairperson) on mcdtc@netactive.co.za or my supervisor Prof. Nico (RJ) Botha.

If you have had all questions about the project answered to your satisfaction, and are willing to participate, please complete the **Consent Form** on the following page. Please send completed Consent form to 30670616@mylife.unisa.ac.za

This information letter is for you to keep.

Mrs. Elda (FE) Botes

Doctor of Education – Educational Management and Leadership Student

University of South Africa

9 Jelas Drive

Riverhead

New Zealand

0820



Consent Form

- I have read this document and understand the aims, procedures, and risks of this project, as described within it.
- For any questions I may have had, I have taken up the invitation to ask those questions, and I am satisfied with the answers I received.
- I am willing to become involved in the research project, as described.
- I understand that participation in the project is entirely voluntarily.
- I understand that I am free to withdraw its participation at any time, without affecting the relationship with the research team or University of South Africa.
- If any member of a participant group decides to participate and then later changes their mind, they are able to withdraw their participation. Participants can withdraw at anytime.
- I understand that this research may be submitted for publication, but individual participants and sites will not be identifiable in any way in such a report.

Name of Manager (printed):

Signature:

Date: / /

APPENDIX 6. QUESTIONNAIRE FOR MANAGERS

Dear respondent

In order to address the managerial leadership challenge of the educational psychologist cohort, it seems fundamentally superficial to make direct use of conventional management theories, scientific data, and empirical data from managers' work practices in other contexts and fields. Your management and leadership experience and knowledge is extremely important and will contribute to a better understanding and clarification on the influence of managerial leadership on the professional performance of educational psychologists. More specifically, the main objectives of the research are:

- To investigate the demographic characteristics of managers of educational psychologists and educational psychologists.
- To investigate the service delivery models and its influence on the professional performance of educational psychologists.
- To explore the influence of management appointments on the professional performance of educational psychologists.
- To examine the influence of workload management on the professional performance of educational psychologists.
- To study the influence of managerial leadership on educational psychologists' engagement in clinical supervision.
- To explore the consequences of ineffective managerial leadership for the professional performance of educational psychologists.

Managers were randomly selected from a population of managers who manage and lead educational psychologists. They were deemed most knowledgeable and information rich and were representative of a wider population.

Please note that your participation in this survey is entirely voluntary and you are under no obligation to consent to participation. However, it will not be possible to withdraw once the questionnaire is submitted. Your responses will be kept

confidential at all times. Your name will not be recorded anywhere and no one will be able to connect you to the answers you provide.

Answers (anonymous data) may be reviewed by people responsible for making sure that research is done properly, transcribers, external coder, and members of the Research Ethics Committee. A report of the study may be submitted for publication, but individual participants will not be identifiable in such a report.

The survey will take approximately 15 minutes to complete.

Please feel free to contact me at 30670616@mylife.unisa.ac.za, should you have further questions or comments.

Thank you for your participation in the research project.

Elda (FE) Botes

Academic data: Doctor of Education - Educational management student,

University of South Africa

Student number 30670616

A note on privacy

This survey is anonymous.

The record kept of your survey responses does not contain any identifying information about you unless a specific question in the survey has asked for this. If you have responded to a survey that used an identifying token to allow you to access the survey, you can rest assured that the identifying token is not kept with your responses. It is managed in a separate database, and will be updated to indicate that you have (or haven't) completed the survey. There is no way of matching identification tokens with survey responses in this survey.

Exit and clear survey

Next

CONSENT TO PARTICIPATE IN THIS STUDY

By clicking the NEXT button you agree to the following:

- *You confirm that the person asking your consent to take part in this research has explained the nature, procedure, and potential benefits.*
- *You have read and understood the study as explained in the e-mail initiation.*
- *You have had sufficient opportunity to ask questions and you are prepared to participate in the study.*
- *You understand that your participation is voluntary and that you are free to withdraw at any time without penalty.*
- *You are aware that the findings of this study are anonymously processed into a research report and/or journal publication.*
- *You agree to complete the online survey.*

Thank you for participating in the study.

*If you do not wish to participate in the study, please click on **EXIT AND CLEAR SURVEY**.*

Exit and clear survey

Next

SECTION A

This section will explore the biographic characteristics of managers who are responsible for providing managerial leadership to educational psychologists.

1. What is your gender?

Female	
Male	

2. What is your age?

3. What is your ethnicity?

4. What language do you speak/communicate in most frequently?

5. How many years of management experience do you have?

6. How many years of experience do you have managing educational psychologists?

7. What is the highest level of qualification you have completed?

8. What is the highest level of formal qualification you have completed in management?

9. What is your professional background?

Exit and clear survey

Next

SECTION B

This section will explore the service delivery models and its influence on the professional performance of educational psychologists.

1. In your opinion, which service delivery model is most effective for delivering educational psychological services?

Educational psychologists working in an expanded role model (ERM) (e.g., <i>educational psychologists are based in and work in single schools</i>).	
The traditional educational psychologists' service delivery model (TM) (e.g., <i>educational psychologists are based in one school or local district office and servicing multiple schools</i>).	

2. Rate the
influence that the service delivery model, selected in Question 1, has on the professional performance of educational psychologists.

	Significant influence	Big influence	Moderate influence	Slight influence	Negative influence
Develop comprehensive individualised intervention-focussed programmes.					
Work collaboratively.					
Develop preventative school-wide programmes.					
Quality services to students who have special needs					

Exit and clear survey

Next

SECTION C

This section will explore the influence of management appointments on the professional performance of educational psychologists

- In your opinion, which management appointment provides the most effective managerial leadership of the professional performance of educational psychologists?

Appointment of generic non-educational psychologist managers (generic managers).	
Appointment of qualified educational psychologists in management roles.	
Appointment of qualified educational psychologists with management responsibilities to compliment the role of generic non-educational psychologist managers.	

- Please provide the reason for your answer in Question 1.

- Please select the management appointment that would have the strongest influence on the listed managerial leadership activities.

	Generic non-educational psychologists manager	Qualified educational psychologist manager	Qualified educational psychologists with management responsibilities to compliment the generic non-educational psychologist
Provide clinical supervision of educational psychologists.			
Manage professional performance of educational psychologists.			
Manage delivery of quality educational psychological services.			
Manage day-to-day operational activities.			
Understand the complexities of school systems.			
Provide support on professional matters and cases.			
Human resource management.			

- Based on your management experience, please indicate if the following statements are true or false.

	TRUE	FALSE
Educational psychologists require distinctive organisational and professional management from within the educational psychological domain.		
Managerial leadership for the professional performance of educational psychologists can only be provided by qualified educational psychologist managers.		

Educational psychologists should have direct access to qualified educational psychologist to meet their clinical supervision needs.		
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5. Please rate the consequence for the professional performance of educational psychologists when they do not receive appropriately combined day-to-day management of operational and professional management.

	Extremely likely	Very likely	Moderately likely	Slightly likely	Not at all likely
Low levels of job satisfaction.					
Poor professional performance.					
Capacity and capability issues.					
High levels of attrition.					
Low levels of professional commitment.					
High staff turnover rates.					
Increased levels of stress.					
Burnout.					

Exit and clear survey

Next

SECTION D

This section will explore the influence of workload management on the professional performance of educational psychologists

1. Please indicate which work assignment process are most often used, for maximum benefit, when managing the workload of educational psychologists:

Structured work load management system.	
Random allocation of work based on urgency and risk factors.	
Give educational psychologists autonomy to manage their workload and caseload size.	
Combination of the above work assignment processes.	

2. Please provide the main reasons for the use of the selected work assignment process in Question 1.
-

3. Please rate the influence that the listed workload management activities have on the professional performance of educational psychologists.

	Significant influence	Big influence	Moderate influence	Slight influence	Negative influence
Regular one-on-one workload data discussions.					
Formal structured workload management system and process.					
Clearly set goals and expectation for educational psychologists' workload.					
Capability development plans for individual educational psychologists.					
Plans for managing educational psychologists' workload pressures.					
Regular feedback on professional performance.					
Random allocation of work based on risk and urgency.					
Give educational psychologist autonomy to manage their workload and caseload size.					

4. In your opinion, which is the ideal educational psychologist-to-student ratio in terms of having the most positive influence on the professional performance of an educational psychologist?

1:500 to 1:1000	1:2000 to 1:3000

5. Please provide the main reason for your answer to Question 4.

6. Please select the work assignment management process that would result in the following professional educational psychologist activities.

	Structured workload management system	Random allocation of work based on urgency and risk	Give educational psychologists autonomy to manage their workload
Comprehensive intervention focussed educational psychological services. Preventative educational psychological services. Quality services to students who have special needs. Systems support to facilities. Educational psychologists' availability to participate in adequate supervision activities.			

7. Please rank the influence that managerial leadership of the listed factors have, on the psychologist-to-student ratios. Rank in order of most significant impact to lowest impact.

	Ranking
Administrative responsibilities Employment setting Type of educational psychologist services Time Workforce size Service delivery model Complexity and severity of cases Professional capability of educational psychologist Other responsibilities	

8. Please rate the consequence for the professional performance of educational psychologists when their workload and the educational psychologist-to-student ratio are not effectively managed.

	Extremely likely	Very likely	Moderately likely	Slightly likely	Not at all likely
Low levels of job satisfaction.					

Poor professional performance.					
Capacity and capability issues.					
High levels of attrition.					
Low levels of professional commitment.					
High staff turnover rates.					
Increased levels of stress.					
Burnout.					

Exit and clear survey

Next

SECTION E

This section will study the influence of managerial leadership on educational psychologists' engagement in clinical supervision

1. Please rate the influence that the listed supervision activities have on the professional performance of educational psychologists:

	Significant influence	Big influence	Moderate influence	Slight influence	Negative influence
Provide/receive professional development during supervision.					
Review pieces of professional practice.					
Explore and acquire new professional responses for future situations.					
Stress debriefing.					

2. Please describe the three main managerial leadership activities you utilise to support educational psychologists to engage in regular, ongoing, and rigorous supervision.

3. Please rate the influence of the listed items to manage educational psychologists' engagement in regular supervision practices.

	Significant influence	Big influence	Moderate influence	Slight influence	Negative influence
Supervision session feedback during one-on-one performance conversations between a manager and educational psychologist.					
Formal discussions between a manager and educational psychologist to monitor supervision engagement, progress and outcomes of supervision sessions.					
Formal process to monitor implementation of organisational supervision guidelines.					
Formal process to monitor implementation of compulsory supervision requirements stipulated by the appropriate educational psychological statutory authority.					

4. Please rate the consequence for the professional performance of educational psychologists' when they do not receive adequate professional supervision.

	Extremely likely	Very likely	Moderately likely	Slightly likely	Not at all likely

Low levels of job satisfaction.					
Poor professional performance.					
Capacity and capability issues.					
High levels of attrition.					
Low levels of professional commitment.					
High staff turnover rates.					
Increased levels of stress.					
Burnout.					

Exit and clear survey

Next

APPENDIX 7. QUESTIONNAIRE FOR EDUCATIONAL PSYCHOLOGISTS.

Dear respondent

In order to address the managerial leadership challenge of the educational psychologist cohort, it seems fundamentally superficial to make direct use of conventional management theories, scientific data, and empirical data from managers' work practices in other contexts and fields. Your management and leadership experience and knowledge is extremely important and will contribute to a better understanding and clarification on the influence of managerial leadership on the professional performance of educational psychologists. More specifically, the main objectives of the research are:

- To investigate the demographic characteristics of managers of educational psychologists and educational psychologists.
- To investigate the service delivery models and its influence on the professional performance of educational psychologists.
- To explore the influence of management appointments on the professional performance of educational psychologists.
- To examine the influence of workload management on the professional performance of educational psychologists.
- To study the influence of managerial leadership on educational psychologists' engagement in clinical supervision.
- To explore the consequences of ineffective managerial leadership for the professional performance of educational psychologists.

Educational psychologists were randomly selected from a population of educational psychologists who work at departments of education and educational psychological associations. They were deemed most knowledgeable and information rich and were representative of a wider population.

Please note that your participation in this survey is entirely voluntary and you are under no obligation to consent to participation. However, it will not be possible to

withdraw once the questionnaire is submitted. Your responses will be kept confidential at all times. Your name will not be recorded anywhere and no one will be able to connect you to the answers you provide.

Answers (anonymous data) may be reviewed by people responsible for making sure that research is done properly, transcribers, external coder, and members of the Research Ethics Committee. A report of the study may be submitted for publication, but individual participants will not be identifiable in such a report.

The survey will take approximately 15 minutes to complete.

Please feel free to contact me at 30670616@mylife.unisa.ac.za, should you have further questions or comments.

Thank you for your participation in the research project.

Elda (FE) Botes

Academic data: Doctor of Education - Educational management student,
University of South Africa
Student number 30670616

A note on privacy

This survey is anonymous.

The record kept of your survey responses does not contain any identifying information about you unless a specific question in the survey has asked for this. If you have responded to a survey that used an identifying token to allow you to access the survey, you can rest assured that the identifying token is not kept with your responses. It is managed in a separate database, and will be updated to indicate that you have (or haven't) completed the survey. There is no way of matching identification tokens with survey responses in this survey.

Exit and clear survey

Next

CONSENT TO PARTICIPATE IN THIS STUDY

By clicking the NEXT button you agree to the following:

- *You confirm that the person asking your consent to take part in this research has explained the nature, procedure, and potential benefits.*
- *You have read and understood the study as explained in the e-mail initiation.*
- *You have had sufficient opportunity to ask questions and you are prepared to participate in the study.*
- *You understand that your participation is voluntary and that you are free to withdraw at any time without penalty.*
- *You are aware that the findings of this study are anonymously processed into a research report and/or journal publication.*
- *You agree to complete the online survey.*

Thank you for participating in the study.

*If you do not wish to participate in the study, please click on **EXIT AND CLEAR SURVEY**.*

Exit and clear survey

Next

SECTION A

This section will explore the biographic characteristics of managers who are responsible for providing managerial leadership to educational psychologists.

10. What is your gender?

Female	
Male	

11. What is your age?

12. What is your ethnicity?

13. What language do you speak/communicate in most frequently?

14. How many years of classroom teaching experience do you have?

15. How many years of experience practicing educational psychology do you have?

16. What is the highest level of qualification you have completed?

Exit and clear survey

Next

SECTION B

This section will explore the service delivery models and its influence on the professional performance of educational psychologists.

3. In your opinion, which service delivery model is most effective for delivering educational psychological services?

Educational psychologists working in an expanded role model (ERM) (e.g., <i>educational psychologists are based in and work in single schools</i>).	
The traditional educational psychologists' service delivery model (TM) (e.g., <i>educational psychologists are based in one school or local district office and servicing multiple schools</i>).	

4. Rate the
 influence that the service delivery model, selected in Question 1, has on the professional performance of educational psychologists.

	Significant influence	Big influence	Moderate influence	Slight influence	Negative influence
Develop comprehensive individualised intervention-focussed programmes.					
Work collaboratively.					
Develop preventative school-wide programmes.					
Quality services to students who have special needs					

Exit and clear survey

Next

SECTION C

This section will explore the influence of management appointments on the professional performance of educational psychologists

6. In your opinion, which management appointment provides the most effective managerial leadership of the professional performance of educational psychologists?

Appointment of generic non-educational psychologist managers (generic managers).	
Appointment of qualified educational psychologists in management roles.	
Appointment of qualified educational psychologists with management responsibilities to compliment the role of generic non-educational psychologist managers.	

7. Please provide the reason for your answer in Question 1.

8. Please select the management appointment that would have the strongest influence on the listed managerial leadership activities.

	Generic non-educational psychologists manager	Qualified educational psychologist manager	Qualified educational psychologists with management responsibilities to compliment the generic non-educational psychologist
Provide clinical supervision of educational psychologists.			
Manage professional performance of educational psychologists.			
Manage delivery of quality educational psychological services.			
Manage day-to-day operational activities.			
Understand the complexities of school systems.			
Provide support on professional matters and cases.			
Human resource management.			

9. Based on your experience, please indicate if the following statements are true or false.

	TRUE	FALSE
Educational psychologists require distinctive organisational and professional management from within the educational psychological domain.		
Managerial leadership for the professional performance of educational psychologists can only be provided by qualified educational psychologist managers.		
Educational psychologists should have direct access to qualified educational psychologist to meet their clinical supervision needs.		

10. Please rate the consequence for the professional performance of educational psychologists when they do not receive appropriately combined day-to-day management of operational and professional management.

	Extremely likely	Very likely	Moderately likely	Slightly likely	Not at all likely
Low levels of job satisfaction.					
Poor professional performance.					
Capacity and capability issues.					
High levels of attrition.					
Low levels of professional commitment.					
High staff turnover rates.					
Increased levels of stress.					
Burnout.					

Exit and clear survey

Next

SECTION D

This section will explore the influence of workload management on the professional performance of educational psychologists

9. Please indicate which work assignment process are most often used, for maximum benefit, when managing the workload of educational psychologists:

Structured work load management system.	
Random allocation of work based on urgency and risk factors.	
Give educational psychologists autonomy to manage their workload and caseload size.	
Combination of the above work assignment processes.	

10. Please rate the influence that the listed workload management activities have on the professional performance of educational psychologists.

	Significant influence	Big influence	Moderate influence	Slight influence	Negative influence
Regular one-on-one workload data discussions.					
Formal structured workload management system and process.					
Clearly set goals and expectation for educational psychologists' workload.					
Capability development plans for individual educational psychologists.					
Plans for managing educational psychologists' workload pressures.					
Regular feedback on professional performance.					
Random allocation of work based on risk and urgency.					
Give educational psychologist autonomy to manage their workload and caseload size.					

11. In your opinion, which is the ideal educational psychologist-to-student ratio in terms of having the most positive influence on the professional performance of an educational psychologist?

1:500 to 1:1000	1:2000 to 1:3000

12. Please provide the main reason for your answer to Question 4.

13. Please select the work assignment management process that would result in the following professional educational psychologist activities.

	Structured workload management system	Random allocation of work based on urgency and risk	Give educational psychologists autonomy to manage their workload
Comprehensive intervention focussed educational psychological services. Preventative educational psychological services. Quality services to students who have special needs. Systems support to facilities. Educational psychologists' availability to participate in adequate supervision activities.			

14. Please rank the influence that managerial leadership of the listed factors have, on the psychologist-to-student ratios. Rank in order of most significant impact to lowest impact.

	Ranking
Administrative responsibilities Employment setting Type of educational psychologist services Time Workforce size Service delivery model Complexity and severity of cases Professional capability of educational psychologist Other responsibilities	

15. Please rate the consequence for the professional performance of educational psychologists when their workload and the educational psychologist-to-student ratio are not effectively managed.

	Extremely likely	Very likely	Moderately likely	Slightly likely	Not at all likely
Low levels of job satisfaction. Poor professional performance. Capacity and capability issues. High levels of attrition. Low levels of professional commitment.					

High staff turnover rates.					
Increased levels of stress.					
Burnout.					

Exit and clear survey

Next

SECTION E

This section will study the influence of managerial leadership on educational psychologists' engagement in clinical supervision

5. Please rate the influence that the listed supervision activities have on the professional performance of educational psychologists:

	Significant influence	Big influence	Moderate influence	Slight influence	Negative influence
Provide/receive professional development during supervision.					
Review pieces of professional practice.					
Explore and acquire new professional responses for future situations.					
Stress debriefing.					

6. Please rate the influence of the listed items to manage educational psychologists' engagement in regular supervision practices.

	Significant influence	Big influence	Moderate influence	Slight influence	Negative influence
Supervision session feedback during one-on-one performance conversations between a manager and educational psychologist.					
Formal discussions between a manager and educational psychologist to monitor supervision engagement, progress and outcomes of supervision sessions.					
Formal process to monitor implementation of organisational supervision guidelines.					
Formal process to monitor implementation of compulsory supervision requirements stipulated by the appropriate educational psychological statutory authority.					

7. Please rate the consequence for the professional performance of educational psychologists' when they do not receive adequate professional supervision.

	Extremely likely	Very likely	Moderately likely	Slightly likely	Not at all likely
Low levels of job satisfaction.					
Poor professional performance.					
Capacity and capability issues.					
High levels of attrition.					
Low levels of professional commitment.					
High staff turnover rates.					
Increased levels of stress.					

Burnout.					
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Exit and clear survey

Next

APPENDIX 8. MANAGER INTERVIEW SCHEDULE.**SECTION A****Biographical characteristics.**

a. What is your gender?

b. What is your age?

c. What is your ethnicity?

d. What language do you speak/communicate most frequently in?

e. How many years of management experience do you have?

f. How many years of experience do you have managing educational psychologists?

g. What is your highest level of qualification?

h. What is the highest level of formal qualification you have completed in management?

i. What is your professional background?

SECTION B

Influence of manager appointment on the professional performance of educational psychologists.

There has been an ongoing debate in the literature about whether qualified educational psychologists are better suited to provide managerial leadership to educational psychologists than generic non-educational psychologist managers. The literature and quantitative data from the current study strongly suggest that the management of educational psychologists should be left to appropriately qualified educational psychologist managers or a combination of appropriately qualified educational psychologists with management responsibilities to complement the role of generic non-educational psychologist managers.

Appropriately qualified educational psychologists in management roles understand the work, roles and pressures that educational psychologists face; have the relevant educational psychological qualifications and experience to better support educational psychologists; are able to provide appropriate professional and clinical advice; and have knowledge of educational psychological ethical guidelines.

Also, appropriate qualified educational psychologist in management roles are able to provide support on professional matters and cases, understand the complexities of school systems, contribute to organisational strategic direction and decision making, manage professional performance and accountability of educational psychologists, and provide professional supervision.

The combination of appropriately qualified educational psychologists with management responsibilities to complement the role of generic non-educational psychologist managers was also strongly supported by managers (Jimerson et al., 2004:274-276; Brown et al., 2006:486-496; Jimerson et al., 2006:19-21; Children's Workforce Strategy, 2007:28-31; Musabelliu, 2007:12; AEP, 2008:1-20; Jimerson et al., 2008a:18-19; Brown, 2010:13, 17; Coleman & Pine, 2010:21-24; Soulbury Report, 2010:4-5; Curtis et al., 2012:30; Curtis, 2012:4; Truong & Ellam, 2014:5-29). Managers stated that the combination will provide better clinical supervision and better understanding of the role of an educational

psychologist. Thus, appropriately qualified educational psychologist in management roles manage clinical educational psychological matters, provide professional management, and provide robust clinical supervision. Generic non-educational psychologist managers, on the other hand provide managerial leadership of the day-to-day operational management and habitual general management. However, it is common practice for organisations to employ generic non-educational psychologist managers.

The literature suggests that there are three distinct components to the role of a manager of educational:

- Knowledge of complexities of the school system _____
 - Educational psychological qualifications, knowledge, and experience _____
 - Management and leadership qualification, knowledge, and experience _____
- 100%

- a. In your opinion, what percentage does each competency encompass in your role as a manager? *The total must equate to 100 per cent.*
- b. Which competency were you least proficient in when you were appointed to the role of manager of educational psychologists?
- c. Which professional development activities supported your growth in the area you were least competent in?

SECTION C

Influence of workload management processes on the professional performance of educational psychologists.

In the current study, managers reported a formal structured workload management system that was most often used for maximum benefit to manage the workload of educational psychologists. Educational psychologists supported the practice of giving educational psychologists autonomy to manage their workload and caseload size.

- a. Please describe the formal structured workload management system, most often used in your practice for maximum benefit to manage the workload of educational psychologists.

- b. In your opinion, what influence does the formal workload management system you use have on the professional performance of the educational psychologists you manage?

SECTION D

Influence of managerial leadership of educational psychologists' engagement in clinical supervision on the professional performance of educational psychologists.

Supervision is described as a fundamental component of educational psychology and is critical for the complex and discreet nature of their roles. It is a legal, ethical, and/or employment requirement for educational psychologists to engage in professional clinical supervision in some countries. The managerial leadership activities that encourage educational psychologists to engage in clinical supervision the most are supervision feedback during one-on-one performance conversations between a managers and educational psychologist, and formal discussions between a manager and educational psychologist to monitor supervision engagement, progress and outcomes of clinical supervision sessions.

- a. In your role as a manager of educational psychologists, how do you ensure that educational psychologists have access to regular clinical supervision?