The role played by management’s commitment, education and ethics on organisational entrepreneurship in Gauteng non-profit organisations

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A Masters dissertation submitted in fulfilment of the requirements for the degree of the Master of Commerce (Marketing) in the School of Economic and Business Science at the University of the Witwatersrand

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22nd May 2015
DECLARATION

I, Rukudzo Pamacheche declare that this dissertation is a true presentation of my original research work as a student for the Master of Commerce at the University of the Witwatersrand. To the best of my knowledge, where contributions of others are involved, every effort is made to acknowledge and indicate this, with due reference to the literature used in the research. This dissertation has not been previously submitted in full or partial fulfilment of the requirements for an equivalent or higher qualification at any other recognised education institution.

______________________________
Rukudzo Pamacheche

22nd May 2015
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Abstract

The objectives of the study were to explore the extent to which three management characteristics related to organisational entrepreneurship in not-for-profit organisations (NPOs) in Gauteng, as well as the relation between organisational entrepreneurship and the organisational performance. The research was based on a quantitative approach which involved a random sample of 257 NPO managers who responded via a self-administered questionnaire. The research instrument measured management’s commitment to their occupation, management’s continuous education and management ethics, as well as organisational entrepreneurship and organisational performance.

Data analysis techniques comprised of structural equation modelling which focused on confirmatory factory analysis to confirm conceptual relations and path model analysis to determine the causal relations between each management characteristics with organisational entrepreneurship, and organisational entrepreneurship with organisational performance. Path analysis results returned significant at the 99% confidence level that management’s continuous education and management’s ethics had strong positive causal relations to organisational entrepreneurship, as well as the positive relation of organisational entrepreneurship with organisational performance.

The research noted implications for NPO management teams, including the renovation of business model structures to incorporate continuous learning and constructive risk-taking in order to take advantage of the performance benefits derived from organisational entrepreneurship. The study also recommends further research into potential citizenship bodies for NPO management team to foster commitment to their occupation in the non-profit sector.

Keywords: non-profit organisation, organisational entrepreneurship, management commitment, management ethics, management’s continuous education.
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CHAPTER I: OVERVIEW OF THE STUDY

Chapter outline

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1.1. **INTRODUCTION**

Various studies on entrepreneurship have seen different versions and uses of entrepreneurship in helping the individual to earn a living (Stevenson, et al., 1985; Austin, et al., 2006), companies to continue to make profits (Department of Trade and Industry, 2005) and not-for-profit activities to thrive (Dees, 1998; Weerawardena & Mort, 2006). A nation thrives on human activities that support diverse consumer needs, such as the need for food, shelter, care or material goods (Marshall, 2009), by creating valuable goods and services which are exchanged in a market (Gans, King, Stonecash, & Mankiw, 2012). The market can be understood to have two core motives: the motive to serve the needs of consumers, and the motive to generate commercial profit (Bush, 1992; Grobman, 2008).

Entrepreneurship can be applied to organisations that are driven by a profit motive, which can be identified as for-profit organisations, and those motivated to address social needs, which can be identified as non-profit organisations (NPOs) (Weerawardena & Sullivan-mort, 2008). Whether an organisation’s core objective is to make financial profit or serve social needs, the key ingredient for operating in a market is the ability to offer value to consumers (Kotler & Keller, 2012). Both NPOs and for-profit enterprises engage in exchanges with other entities so as to benefit themselves and the other entities. This research is interested in exploring how management characteristics in NPOs might relate to the extent of innovativeness of NPOs, and furthermore, how this relates to the performance of the NPO.

1.2. **CONTEXT OF THE STUDY**

This study is written in the context of NPOs in Gauteng, focusing on management characteristics that may be impacting how NPOs provide value to consumers who depend on them for various needs, such as food, shelter, education and care, among other needs. There are for-profit organisations that provide similar services (Drucker, 1989; Chalmers & Balan-Vnuk, 2012), but interest has been generated in NPOs due to NPOs being considerable contributors of needed services to vulnerable consumers.
1.2.1. What is an NPO?

A non-profit organisation (NPO) is essentially an organisation that operates to provide a particular value offering without the intention to profit (Grobman, 2008). In cases where the organisation reports a surplus over its expenses, surplus funds are not distributed to shareholders or owners, but are re-invested into the organisation to help fulfil the goals of the organisation (Harris, 2012). NPOs have been generally known to provide services that governments consider important but for-profit organisations deem to be either not-profitable, and therefore do not provide, or profitable and offer them at prices that cannot be afforded by everyone who needs the service (Austin, Stevenson & Wei-Skillern, 2006; Hartigan, 2006). The value that NPOs create is termed social value because it appeals to the needs of beneficiaries, or those who need the essential services (Austin, et al., 2006; Yujuico, 2008) but are not able to access them from for-profit organisations. Examples of NPOs include charitable organisations, environmental, animal and other foundations, public associations, trade unions and other humanitarian associations (Crutchfield & Grant, 2012).

NPOs in South Africa are registered in terms of the South African Nonprofit Act 71 of 1997 (Department of Social Development, 2014), which recognises NPOs as not-for-profit companies registered in terms of Section 21, trusts or associations of persons that are set up to fulfil a public service. As defined above, the income or property of NPOs cannot be distributed to members of the NPO, except when it is reasonable to compensate the member for rendering services to the NPO (Horwood, 2007; Department of Social Development, 2014). Among other types of NPOs, The Act recognises NPOs in the following forms:

- community-based organisations (CBOs), where community members congregate to meet particular needs, for example, a stokvel;
- faith-based organisations (FBOs), such as religious or faith organisations;
- non-governmental organisations (NGOs), which are organisations that may be funded by governments but are not run by government council (Martens, 2002), such as Oxfam or Medecins sans frontieres (Doctors without borders), and
- not-for-profit voluntary associations, where most operations are facilitated by volunteers.
With 56,244 NPOs registered with the Department of Social Development (DSD), Gauteng province has the highest at 32%, followed by Kwa-Zulu Natal with 20% (Department of Social Development, 2009). This is illustrated in the map in Figure 1 on the following page.

**Figure 1: Map: Registered NPOs per Province**

Adapted from: Department of Social Development, (2009, p. 10) and Recoveri (2014)

### 1.2.2. Voluntary NPOs

The current research deals with voluntary NPOs, which rely extensively on volunteers to perform major activities in line with the goals of the organisation. Voluntary organisations in the NPO sector are initiatives at the local level of a community that are mostly voluntarily funded by donors and sponsors, and staffed with volunteers (Macphail, Conatantino, Buckman, Barclay & Clement, 1998). Volunteer-intensive NPOs differ from other types of NPOs in that members actively sacrifice their time and effort to provide valuable social
services to beneficiaries who would otherwise not have access to the services because they are not provided by for-profit organisations (Macphail, et al., 1998; Martens, 2002; Huck, Al & Rathi, 2011). Beneficiaries vary according to the relevant NPO category, but include patients in health care providers, recipients of donated resources such as food and clothing, orphans, students, street persons and rehabilitating persons, among others. For the purpose of this research, they shall collectively be referred to as beneficiaries or consumer groups. Similarly, the terms “non-profit organisation” and “voluntary organisation” shall be used inter-changeably.

Different categories of voluntary NPOs in South Africa set up to create social value, and these may take the forms of special health care, advocacy for rights for certain groups of the population, animal welfare, awareness about diseases and other epidemics, development foundations, education and mentor groups, and orphanages and homes, among others (Kilbey, 2011; Department of Social Development, 2014). The South African DSD holds a register of nonprofit organisations, and facilitates voluntary registration of the NPOs (Department of Social Development, 2014). Although NPOs are overseen by boards of managers, most of the financial support comes from external donors and sponsors, and major activities are facilitated by volunteers (Huck, et al., 2011). Hancook (1989) asserts that voluntary organisations are well motivated and accountable because of the pressure to use their resources sparingly to achieve the best results in providing value to their beneficiaries. However, NPOs face numerous challenges that have the potential to negatively impact their services to their consumer segments, such as under-valued skills for staff (Kilbey, 2011), competition with other organisations for resources and difficulties in achieving cost-effectiveness (Berman, et al., 2012; Weerawardena & Sullivan-mort, 2008).

1.2.3. Challenges for voluntary organisations

Introduction

NPOs face various challenges that affect how well they operate and continue to provide needed services to their beneficiaries. Some of the challenges have to do with under-valued skills of the employees or volunteers working at the organisation (Kilbey, 2011), the competition they face against other NPOs for funding from social authorities (Weerawardena
& Sullivan-mort, 2008), as well as concerns of ineffective cost-structures. Each of these challenges is dealt with in the following sections.

**Under-valued skills**

Kilbey (2011) identifies that NPOs have increasingly become inefficient due to employing personnel who are not skilled or educated for their respective positions. This act undervalues the integrity of positions (Berman, Bowman, West & Wart, 2012) in NPOs and negatively impacts the standard of service offered by the NPO. There is a misconception that, because membership is not compulsory since it is a voluntary organisation (Huck, et al., 2011), and that anyone is free to be part of the organisation, managers need not be educated or skilled in the particular field that the organisation is involved (Kilbey, 2011). Due to low expertise and value creation, consumer groups receive less value from the NPOs, which negatively affects vulnerable consumer groups dependent on NPOs to deliver good services. The relevance of education and training in certain fields, (such as child care or rehabilitation facilitation) is as vital in NPOs as it is in for-profit organisations because NPO members deal with similar consumer needs (which are child caring and rehabilitation facilitating) (Drucker, 1989; Austin, et al., 2006; Grobman, 2008).

The South African Minister of Social Development, Ms Bathabile Dlamini, emphasises the need for NPOs to transform (Khumalo, 2012), given that NPOs play a vital role in adding value and improving the lives of vulnerable beneficiaries supported by the NPOs. However, under-valued skills in some NPOs may be attributed to over-resources NPOs being concentrated in more economically developed areas and fewer in less economically developed areas (Khumalo, 2012).

**Competition with other organisations**

Although NPOs are recognised by the DSD as a particular type of organisation, they do not operate in isolation of other organisations offering similar services (Weerawardena & Sullivan-mort, 2008). They therefore source similar resources, such as funding, materials and expertise, to produce goods and provide services for their consumer groups (Harris, 2012). The South African National Lottery Distribution Trust Fund (NTDTF) allocates funds to NPOs through the Charities Distributing Agency in South Africa, and requires at least 50% of the funds to support NPOs and other charities (National Lottery Distribution Trust Fund,
2014). With over 16,000 registered NPOs in Gauteng alone (Department of Social Development, 2009), not all organisations receive the funding they need. This suggests that NPOs may need to prove the economic viability of their programmes when applying for funding or grants (Berg, Siebrits & Lekezwa, 2010) through the DSD, and compete with other NPOs for funding from other organisation, like Grassroots Grant Aid or Tsikululu Social Investments.

Voluntary organisations, such as resource relief like Foodbank South Africa, that collect and distribute food and clothing to less fortunate communities (Foodbank South Africa, 2014), are also seen as being humanitarian by prioritising the human need for food and clothing over the ability of the community members to pay for them. Because the food and clothing are donated by persons in more economically developed areas (Gower, 2014), and distributed to homes of those who are far less economically developed, critics argue that this creates unsustainable dependency on the more economically affluent, and breeds familiarity on those who depend on donated food and clothing (Hancook, 1989; NGO Forum, 1996; Kearns, 2010). The argument that when needs are continually satisfied with little or no effort from the beneficiary in trying to satisfy those needs, the beneficiary becomes familiar with the situation and begins to depend on resource relief groups to provide for their needs (Schuster & Holtbrügge, 2010). This increases their expectations on relief groups to continually provide resources, such that the beneficiaries no longer have the intention to provide for their needs through their own efforts. As a result, dependency leads to complacency, which reduces productivity of the dependent consumer groups.

**Cost-ineffectiveness**

Public hospitals that operate as non-profit making organisations offer health care services at prices they consider to be reasonable enough to cover their costs, without the intent to profit from their patients and clients (Wood, Bhuian & Kieker, 2000). The underlying assumption of these health care providers is that all patients and clients are reasonably able to afford the prices they charge for health care, which the case is not necessarily so. Voluntary health care NPOs, such as hospices for elderly patients, or patients with HIV/AIDS, acknowledge the importance of the care they provide to their patients (Hartigan, 2006), and that they may not be able to access such care from other hospitals as they cannot afford to pay for the services.
The NPOs prioritise health and support care to beneficiaries who need it over the beneficiaries’ ability to pay for the service (Medecins Sans Frontieres, 2012).

On one hand, this is considered to be humanitarian because the primary concern is to increase the quality of life of people as they are part of the human race, irrespective of their economic situations (Hartigan, 2006). On the other hand, some critics view the decision not to require patients to pay a certain fee in exchange for the services as a reflection of the organisations’ cost-inefficiency (Hancook, 1989). The American Institute of Philanthropy recognises NPOs that spend at least 75% of their funding on primary outcomes of the NPO and the remainder on administrative expenditure (Mahapatra, 2013) efficient NPOs as those

The challenges outlined above present the research with an opportunity to explore indirectly how management characteristics might relate or be utilised by NPOs to overcome the challenges. The challenges give the research perspective with regards to problems that NPOs face that could be resolved by studying how management characteristics may relate to, for example, cost-ineffectiveness. Essentially, they assist the research to understand the context of the NPOs and potentially consider whether, for example, internally generated entrepreneurship, may be considered to be a potential solution for the challenges that face.

1.3. DIRECTION OF RESEARCH

This research acknowledges various challenges faced by NPOs and indirectly attempts to address them by studying the extent of entrepreneurship that managers in the NPOs contribute to improving their organisational performance, that is, the impact on their consumer groups. The research proposes investigating how three important managerial characteristics, namely management’s commitment to their occupation in the non-profit sector, management’s continuous education and management’s ethics, may internally enhance entrepreneurial behaviour in NPOs (Wood, et al., 2000), and further improve the performance of NPOs in meeting the needs of their consumer groups.

In NPOs, the initiative to take constructive yet risky approaches to solve social problems brings together the essence of business and social mission (Peredoa & McLean, 2006; Harris, 2012). The essence of business is generally thought to be the collaboration and coordination of various kinds of expertise to bring greater benefit to the members who contribute the expertise (O'Sullivan, 2000; Mort, Weerawardena & Carnegie, 2003). Collaborating expertise
so that they successfully generate synergy calls for creativity and flexibility for the business to accommodate the various expertise (Baker & Sinkula, 1999; Sopelana, KUNC, & Hernaez, 2011). Most importantly is the ability to take advantage of opportunities when they arise.

According to Jean Baptiste Say (Dees, 1998), entrepreneurship involves transferring economic benefits so that they bring greater yield to the consumer, thus inspiring improvement to the consumers’ lives through increased value creation. For commercial organisations, value is created for clients who are able to afford and are willing to pay a certain price in a value-exchange process (Dees, 1998; Gans, et al., 2012). Although the market facilitates this value-exchange process, not all consumers who need the value are able to buy at the market price (William, 2003). The role of most NPOs is to provide value by offering essential services for the benefit of them that need the services but are cannot afford them in the market (Mort, Weerawardena & Caregie, 2003). Therefore, NPOs accommodate consumers that other for-profit market participants inherently would not satisfy (Austin, et al., 2006).

It is widely accepted that both for-profit organisations and NPOs rely on entrepreneurial skills (Bush, 1992; Dees, 1998; Stevenson, 2000; Austin, et al., 2006), and contributions to the organisation’s entrepreneurship must come from those that lead and manage the organisations to fulfil their mandates (Kao, Kao & Kao, 2005). Senior management teams of many organisations are responsible for making and implementing decisions that affect the organisation’s performance (Van Raaij & Stoelhorst, 2008). It follows that key decision-makers play a vital role in contributing to the organisation’s entrepreneurship.

1.4. PROBLEM STATEMENT

Capabilities of managers in NPOs in South Africa are not being harnessed sufficiently to improve the impact that the organisations have on their consumer segments (Kilbey, 2011; Khumalo, 2012). This is problematic because individuals who contribute financial and other resources have difficulty securing their interests in the organisations as it is not certain how to improve organisational performance (Bush, 1992). Unlike organisations in the for-profit sector whose primary operational objective is to make profits (Weerawardena & Sullivan-mort, 2008), NPOs operate primarily to provide service to their consumers (Schuster & Holtbrügge, 2010).
While for-profit organisations may measure their operational performance in terms of profits, NPOs measure theirs by the effect they have on their consumers (Wood & Bhuian, 1993). Stakeholders and organisations that contribute to the NPO have interests in the performance of the organisation, but are not necessarily involved in the running of the organisation for various reasons (Kao, et al., 2005). Performance of the organisation in delivering services to its market may therefore be dependent on the management teams that run the organisation. However, little is known about the contribution of capabilities of such managers in volunteer intensive organisations in South Africa, to contribute to entrepreneurship and consequently affect the organisation’s performance.

1.5. **PURPOSE OF THE STUDY**

The purpose of this research is to determine the relationships between certain management characteristics and organisational entrepreneurship, and organisational performance of NPOs. By understanding how the capabilities influence operational performance, contributors and management teams would be better able to determine how to improve the organisational performance of the NPO (Weerawardena & Sullivan-mort, 2008). Management characteristics such as professional commitment, professional education, professional ethics and contribution towards organisational entrepreneurship have an impact on organisational entrepreneurship (Wood, et al., 2000). The focus in this study is on management’s commitment to their occupation in the non-profit sector, management’s continuous education, and management’s ethics as internal contributors to the organisation’s entrepreneurship.

In the market discipline, organisations that are able to compete with others are those that perform well at serving their consumers (Austin, et al., 2006). Studies on managers’ professional commitment, education, ethics and entrepreneurial contribution in not-for-profit hospitals in the United States of America (Wood, et al., 2000) have shown these capabilities to be influential on organisational performance. This study is based on voluntary organisations in Gauteng as they account for over 90% of NPOs registered in South Africa (Department of Social Development, 2009), as shown in Figure on the next page.
An umbrella principle of the market is that organisations’ success is based on their abilities to continuously provide value for stakeholders (investors, clients, employees, etcetera) (Kotler & Keller, 2012). With decreases in donor funding from national agencies in South Africa (Stuart, 2013), it would be interesting to discover how entrepreneurial capabilities of managers in voluntary organisations can sustain the organisations such that they continue to provide value to members of their communities.

### 1.6. RESEARCH OBJECTIVES

The research has theoretical and empirical objectives. It is important to clarify both types of objectives because, although they speak to the research topic, they play different roles in developing the research study (Burns & Bush, 2006). Theoretical objectives provide the grounding theories in literature (Holden & Lynch, 2004) that relate to NPOs and their management, and the aim is to theoretically support the arguments presented in the research. The ultimate purpose of the empirical objectives is to allow the results of the research to be measurable (Kumar, 2005) against the aims of the research. As an element of quantitative methods, mathematical calculations make it easier to analyse the relationships that the research is investigating (Creswell, 2009).
1.6.1. Theoretical objectives

The theoretical objectives of the research are to review literature around the constructs (Myers, Well & Lorch, 2010) of the research in order to understand current knowledge about the constructs. These constructs are the management characteristics (management’s commitment to the occupation, management’s continuous education, and management ethics), organisational entrepreneurship and organisational performance. Arguments developed in the literature review are useful for supporting the purpose of the research (Creswell, 1994), that is, understanding the role played by senior managers of NPOs in the organisation’s entrepreneurship and performance as a result of their characteristics. The constructs are dealt with in greater detail in the Literature Review in chapter 2.

The theoretical objectives are:

- To explore literature on management of NPOs;
- To explore literature on management commitment, ethics and education as contributors to organisational entrepreneurship, and
- To explore literature on organisational performance in NPOs.

1.6.2. Empirical Objectives

The empirical objectives of the research are to examine statistically the relationships between the construct variables in order to support the arguments in the research (Myers, et al., 2010).

The empirical objectives are:

- To investigate the correlation between management’s commitment to their occupation on organisational entrepreneurship;
- To investigate the correlation between management’s continual education on organisational entrepreneurship;
- To investigate the correlation between management’s ethics on organisational entrepreneurship, and
- To investigate the correlation between organisational entrepreneurship on organisational performance.
1.7. SUMMARY

NPOs provide value to consumers who are not accommodated by for-profit organisations due to the unprofitable nature of the value offering. In order to remain relevant in the market and continue providing essential services, it is important for NPOs to consider how their management teams can impact their performance as organisations. The central focus of this research is on developing knowledge about internally generated entrepreneurship in NPOs, as contributed by senior and operational managers. The importance of the relationships between the constructs is critical in observing how the managers’ capabilities affect their organisations’ entrepreneurship.

1.8. OUTLINE OF REMAINING CHAPTERS

Chapter 1 has introduced the research, set the context and outlined the objectives of this study in investigating how three management capabilities can contribute to organisational entrepreneurship in NPOs in Gauteng. The remaining chapters for research are outlined as follows:

Chapter 2: Literature Review contains the literature studied to support the purpose of the research. It details important theories concerning organisational entrepreneurship and theory explaining how the management capabilities can contribute to organisational entrepreneurship, and how organisational entrepreneurship leads to organisational performance for NPOs in Gauteng.

Chapter 3: Conceptual Model and Hypotheses Development contains the conceptual model and hypotheses, and explores the assumptions made about the relationships between the management capabilities and organisational entrepreneurship, and between organisational entrepreneurship and organisational performance for the NPOs in the study. This approach is directed by the positivist philosophy.

Chapter 4: Research Methodology contains the research method and design of the study used for the research. It which explains how the study is prepared based on the positivist perspective of acquiring knowledge and outlines the research and sample designs for of NPO managers, as well as the questionnaire design.
Chapter 5: Findings, Data Analysis and Results analyses, presents and discusses the results of the data collected, and responds to the assumptions made about the relationships between the management capabilities and organisational entrepreneurship, and organisational entrepreneurship and organisational performance of the NPOs.

Chapter 6: Conclusions and Recommendations concludes on the influences of the management capabilities on organisational entrepreneurship from NPOs in the study and makes recommendations for NPO managers and researchers based on findings in the research.
CHAPTER II: Literature Review

Chapter outline

- Introduction
- Theoretical framework
- Empirical review
- Summary
2.1. **INTRODUCTION**

The literature review encompasses of two major sections; the theoretical framework used in applied in the research and the empirical review showing the relations between the constructs. The theoretical framework outlines three underlying theories that from the basis of theoretical arguments in the research. The empirical review focuses on each of the five constructs that are the centre of the research.

2.2. **THEORETICAL FRAMEWORK**

The theoretical framework comprises of literature that helps to understand the concepts surrounding the research more broadly (Creswell, 1994; Burns & Bush, 2006). Three main theories help to explain the underlying concepts surrounding this research, and these are theories of innovative enterprise, organisational learning and marketing orientation. They are considered to be the pivotal theories in this research because they explain fundamental concepts used by the research and provide a central point of reference for arguments generated in the research (Easterby-Smith, et al., 1991; Johnson & Christensen, 2008). The theory of innovative enterprise explores the need for any organisations to be innovative in order to succeed while organisational learning helps to explain how learning can facilitate innovation and positive change in organisations. Both of these are considered to be important in the theory of market orientation.

2.2.1. **Theory of Innovative Enterprise**

The function of enterprises in the economy is to transform resources into valuable goods and services that can be consumed (Drucker, 1998). Such an economic theory about the enterprise suggests that three major activities contribute to the enterprise’s success, namely the enterprise’s strategy, its organisation and its finances (Schuster & Holtbrügge, 2010). Through its strategy, the enterprise develops its human and physical capabilities by allocating resources that will enable the enterprise to better create value for its consumers (Burns & Stalker, 1961; Naidoo, 2011). Concurrently, the theory presents a perspective of entrepreneurship that highlights an organisation’s ability to allocate and use its available resources (Drucker, 1998; Austin, et al., 2006). This is considered as a central aspect of the organisation’s ability to continuously create new value for its clients. As there are other
enterprises in the market, entrepreneurial strategies help to enable the enterprise to compete with other enterprises through the creation of new technologies and various forms of innovation.

The theory of innovative enterprise suggests that, because organisations operate under a market discipline (Austin, et al., 2006), innovation through entrepreneurial approaches plays a role in facilitating creativity and the development of new capabilities is vital (William, 2003). Such capabilities enable management teams make efficient use of available capital, labour and offerings in the market. Managers, as part of the human capital of organisations, therefore take the responsibility of leading their organisations using entrepreneurial activities that allow the organisation to appeal more effectively to its clients (O'Sullivan, 2000). This alludes to the importance of managers affecting their organisational performance. Jaworski and Kohli (1993) suggest that performance of organisations is highly influenced by the level of knowledge that the decision-makers have in the organisation and how they use it to remain competitive in their markets.

An emerging generation of non-profits in South Africa recognises that NPOs are filling in the social value gap as the government calls on more assistance providing for less economically developed sectors of the population (Khumalo, 2012; Stuart, 2013). As NPOs get more involved with providing social value, better interactions between NPO members and beneficiaries becomes important. In order to assess the extent of innovation in NPO managers, this study includes senior and operational managers because they interact with beneficiaries at the micro level (Berman, et al., 2012), and are more informed about the needs of beneficiaries.

The theory of innovative enterprise also suggests that organisational innovation refers to the ability of the enterprise to structure itself such that the value-creation process is made easier and more efficient (Drejer, Christensen & Ulhoi, 2004; Kim, et al., 2013). This is critical as the market structure requires market participants to bring value to the market. The enterprise’s finances help the enterprise to maintain its processes of transforming resources into better valuable offerings (Drejer, 2006). NPOs, like for-profit organisations, have to compete with other NPOs for resources, including human capital and funding (Mort, et al., 2003). As they operate in a space where they also provide value to consumers, their non-profit nature does not exclude them from competing for resources needed to create and communicate that value (William, 2003). This alludes to the possible impact that
entrepreneurship may have on the performance of NPOs in becoming more creative in their approaches to obtain resources and continue to use them effectively to serve their communities (Austin, et al., 2006; Yujuico, 2008).

Although organisations may not be able to determine in advance the extent of financial or other gains of investing in innovation (Mahmoud & Yusif, 2012), it remains important for NPOs to invest in innovation to continue to support vulnerable segments of consumers who need their services. The purpose of innovation or entrepreneurship is not limited to remaining competitive in the market but is motivated by the structure of the market to attract, maintain and increase value in the market (Huarng & Yu, 2011; Kuratko, et al., 2007). To promote higher quality offerings and lower costs of producing the offerings, organisations need to integrate skills and abilities across all levels of their hierarchical structure (Berman, et al., 2012). Pooling the abilities and facilitating learning at all levels of the organisation are essential for innovation, and hence for NPOs in providing better services to their consumers.

### 2.2.2. Organisational Learning

Argote and Miron-Spektor (2011) describes organisational learning as a series of processes in an enduring cycle where the experience is converted to knowledge. Outside the organisation, the learning happens within an environmental context affected by consumers or political, climatic, competitive or legal factors. Organisational learning in organisational theory recognises that employees in organisations need to continuously acquiring new knowledge and skills beyond the context or present scope of the organisation (Drejer, 2000) in order for the organisation to experience a positive change in its knowledge base (Foil & Lyles, 1985). Two elements that remain persistent in the running of organisations are their innovation and marketing (Drucker, 1998), which continuously require employees to effect positive changes by learning and developing new ways of improving the value being offered by their organisation.

As mentioned under the theory of innovative enterprise, the human capital or employees of the organisation bring to the organisation professional and technical capabilities that enable the organisation to function. Because markets are not static but are ever-evolving due to innovation (Drucker, 1998; Drejer, 2006), the learning abilities of the employees are crucial to the innovation and entrepreneurship of the organisation. Particularly because new knowledge motivates new capabilities (Therin, 2003), it is important for managers of
organisations to engage in continuous education to develop capabilities that help to satisfy ever-changing needs of their clients.

Organisational learning impacts the ability of the employee to develop entrepreneurial thinking within the organisation (Therin, 2003), which Drejer, Christensen & Ulhoi (2004) describe as intrapreneurship. Rather than engaging in innovation and creativity for starting up an enterprise, employees act on their knowledge to engage in new ideas that make the organisation more inventive in producing more value and capital in line with its operations (Drucker, 1998; Berman, et al., 2012). By encouraging their managers to behave as entrepreneurs for the benefit of the organisation, the potential of the organisation to learn and evolve through failed and successful attempts increases (Stevenson, Roberts & Gousbeck, 1985; Dees, 1998). This not only contributes to the organisation, but increases value to consumers as well as creates a vibrant market (Drejer, 2006).

Learning that facilitates internally generated entrepreneurship plays on the strength of the organisation to take calculated risks and the potential of providing more value at lower costs (Drejer, et al., 2004). Managers and other members of NPOs alike are capable of bringing to the organisation knowledge, skills and abilities that make the organisation resilient in its abilities to make the best use of its resources, which is typical to entrepreneurial thinking (Drejer, 2006). The theory of organisational learning is supported by theory around market orientation, and is useful in this research for establishing how important learning and knowledge are for translating management’s occupational development through entrepreneurial ideas (Weerawardena & Sullivan-mort, 2008) that help the voluntary organisations perform better than their competitors (Drucker, 1998). Marketing management and strategy development in the organisation rely on how decision-makers use the intelligence they gather about their industry and market (Wood et al., 2000). The learning organisation can harness the benefits of knowledge generation by orienting itself in the market. The market orientation of an organisation is its ability to generate, share and use marketing information to make organisational decisions (Van Raaij & Stoelhorst, 2008), and is dealt with in the next section of this report.

### 2.2.3. Market orientation

Market orientation is a business philosophy based on the notion that the needs of the consumer determine the goods and services that an organisation provides (Wood, et al., 2000;
Kumar, Jones, Venkatesan & Leone, 2011), and any changes in the goods and services provided by the organisation are motivated primarily by the consumers’ changes in demands (Hult, 2011). This differs from a product orientation, which considers the product or service to be more important than consumer needs, and hence expects consumers to adapt their needs to the products (Kotler & Keller, 2012).

Organisations that are market oriented depend on responses from their consumers to design value offerings that are appropriate to the consumers (Lautamäki, 2010), and therefore invest in three key functions (Narver & Slater, 1990; Wood & Bhuian, 1993; Hult, 2011):

1. **generating** market intelligence from continual research about consumer demands and trends;
2. **disseminating** the marketing intelligence across their all sectors of the organisation to ensure that all departments in the organisation are aware of current and future needs of the consumer, and
3. **responding** appropriately based on the market intelligence.

Generating intelligence requires NPO managers to gather and analyse information about the current and future needs of their beneficiaries in order to create value offering that are beneficial to them (Wood, et al., 2000). Given the competition that NPOs face with other NPOs and for-profit organisations, it is also vital for NPOs managers to research extensively about factors outside their immediate industry that may affect their future, such as economic trends, government regulations and other external environmental issues (Naidoo, 2011). This includes using primary and secondary, as well as formal and informal means to know what competitors are getting involved in so as to remain competitive (Weerawardena & Sullivan-mort, 2008). The essence of sharing information with all members of the organisation is to unify and direct managers (Cho & Huang, 2012) of the NPO towards a common purpose for innovating their value offerings to suit changing needs of their beneficiaries.

The concept of market orientation explored by Wood et al... (2000) recognises the importance of professional commitment of management in affecting the performance of the organisation, as well as management’s ethics, and continuous education, among other antecedents. The conceptual model on market orientation above (Wood, et al., 2000) recognised seven variables as precursors of market orientation, three of which are management characteristics. Based on research conducted on senior management teams in a not-for-profit hospital, the
market orientation of the hospital was considered dependent on management characteristics (commitment, education and ethics), as well as the organisation’s entrepreneurship. Commitment was considered to be important in orienting the organisation towards the consumer so that value continues to be transferred to the consumer (Bagaim, 2003). The impact of professional education of the management teams was in ensuring more efficient management of the NPO (Wood, et al., 2000), such that the organisation is able to respond to changes discovered through marketing intelligence. Also important in orienting the NPO is the management’s professional ethics which contribute to managers focusing on dedicating their profession (Kearns, 2010) and being responsible for providing value continuously to their beneficiaries.

This research proposes in its conceptual model that management’s commitment to their occupation affects the organisation’s entrepreneurship, and this is based on the significance of commitment in market orientation, as well as in the concept of entrepreneurial intensity. Entrepreneurial intensity refers to the degree and frequency of entrepreneurial thinking and behaviour (Kuratko, et al., 2007), which is resembled by management levels. The combination of the degree and frequency of entrepreneurial activities that management engage in determine the extent of the organisation’s performance (Morris, 2015). The framework on market orientation, in conjunction with entrepreneurial intensity, allows the research to explore the extent of management’s commitment to their occupation in contributing to the organisation’s entrepreneurship, and further (Angle & Perry, 1981; Kuratko, et al., 2007).

2.2.4. An innovative and learning organisation with a market orientation

The contributions of the three theories explored thus far have provided a theoretical basis for the research. Having a market orientation allows the innovative organisation to initiate consumer-based innovations, which are motivated by evolving needs and desires of consumers (Cambra-Fierro, et al., 2011) rather than product-oriented innovations. Product-driven innovations are useful for long-term succession of technologies (Kumar, et al., 2011), however being consumer-centric may be beneficial for NPOs given the pressure on NPOs to make effective positive changes to the lives of their beneficiaries. This draws attention to the entrepreneurship and performance of the organisation,
The theories of the innovative enterprise and organisational learning drew attention to the importance of continual research and knowledge generation, which are facilitated by continuous learning of members of the organisation. This also points to the need for management to make informed decisions affected by risk, rather than uninformed decisions (Matey, Bolcas, Badea & Carstea, 2010), thus alluding to the importance of management ethics.

2.2. **EMPIRICAL REVIEW**

In line with the empirical objectives, it is important to review literature surrounding the relationships between the constructs. The underlying assumptions of the hypotheses are based on the reasoning in the empirical review (Myers, et al., 2010) and in the conceptual model, as outlined in chapter 3. As mentioned, it is critical to explain how management characteristics contribute to the organisation’s entrepreneurship in order to determine how to improve the performance of NPOs. The review discusses each of the constructs in detail, as well as their relevance to organisational entrepreneurship, and of organisational entrepreneurship to organisation performance.

2.2.1. **Organisational entrepreneurship**

Organisational entrepreneurship can be described as the eagerness of the organisation to be creative, flexible and be able to take calculated risks (Stevenson et al., 1985; Wood, et al., 2000), as effected by its members. Woodman, Sawyer & Griffin (1993) refers to a three-phased model that describes the sequential process of creativity within an organisation, called the interactionist model of organisational creativity (Barrett, Balloun &Weinstein, 2005). This model proposes that an individual’s ability to transpose thoughts and ideas into visible results depends not only on knowledge capacity and skills development, but is greatly influenced, and influences, the individual’s surrounding environment (Woodman, et al., 1993). It also acknowledges that creativity within an organisation compounds sequentially, from an individual’s creativity, to group creativity, and finally to organisational creativity (Lee & Lee, 2014).

Individual creativity is therefore facilitated by an environment that encourages creative thinking and brings together groups of individuals to share and compound their creative
ideas, which resultantly leads to developing creativity of the organisation. This establishes that organisational entrepreneurship is attributable to the interactive effect initiated by individual creativity. Members of the organisation collectively generate the entrepreneurship within an organisation (Kuratko, Ireland, Covin & Hornsby, 2005; Yujuico, 2008), which allows the organisation to look beyond the limitations of its resources and explore opportunities in its market (Stevenson & Jarillo, 1990). Opportunities are explored by remaining informed about changes and developments in the industry (Drucker, 1998), and continuous learning and sharing contributes to this (Woodman, et al., 1993; Weerawardena & Sullivan-mort, 2008).

The organisation’s creativity, flexibility and risk-taking abilities are dependent on the members’ own propensity to be creative, flexible and willing to take risks for the benefit of the organisation (Wood, et al., 2000). In order for managers to apply entrepreneurial thinking on behalf of their organisations, it becomes important to describe certain entrepreneurial characteristics that define what an entrepreneur is. These are explained in terms of four perspectives of entrepreneurship.

**Perspectives of entrepreneurship**
Numerous authors have defined entrepreneurship based on various abilities of the entrepreneur (Dees, 1998; Peredoa & McLean, 2006; Stevenson & Jarillo, 1990). The early 17th century economist Jean Baptiste Say described the entrepreneur as one who is able to transfer economic benefits from their origin to an area where they produce more yield, thus inspiring improvement of standards of living through increase value creation (Dees, 1998). In the 20th century, Joseph Schumpeter described the entrepreneur as one that is motivated by change to innovate through the “creative-destructive” process in a capital intensive economy (Schumpeter, 1943; Boyle & Mezias, 2002; Mitchell, 2013). Essentially, the outcome is to create more value to develop the economy using reformed production processes. Contemporary literature bases its definition of entrepreneur on characteristics concerned with innovating change to effect economic success (Peredoa & McLean, 2006; Nicholas, 2003), otherwise known as the Say-Schumpeter tradition.

Following the Say-Schumpeter tradition, various theories surrounding entrepreneurship have emerged (Dees, 1998; Drucker, 1998; Stevenson, 2000). Drucker (1998), although agreeing with Say’s definition, highlights that in addition to transferring economic benefits from an area of lower to higher yield, entrepreneurship should encompass the ability to exploit the
opportunity to effect change in a community. The opportunity is therefore to create value from the difference in the lower and higher yield potentials. Entrepreneurship is therefore not limited to start-up business enterprises, but must be motivated to make change that brings more value to stakeholders (Peredoa & McLean, 2006).

Stevenson (2000) suggests that entrepreneurship also does not require a profit motive but rather that it is made effective through resourcefulness when exploiting an opportunity. This infers that it is necessary for the entrepreneur to possess the ability to make good use of the resources available to achieve the objectives of the organisation (Harris, 2012). With regards to managing entrepreneurship, entrepreneurs differ from other administrative practitioners who often limit their vision and abilities to the present capacity of the resources available (Kuratko et al., 2005; Stevenson, 2000, 2005). A summary of these perspectives of entrepreneurship is illustrated in Figure 3 below.

Figure 3: Perspectives of entrepreneurship

Adapted from: Drucker (1998)

The four perspectives of entrepreneurship outlined above highlight three important elements of the entrepreneur that are the main focus of organisational entrepreneurship in this research. These are:

- **Creativity** in effecting change using new or ground-breaking processes and ideas, in order to create and enhance value from better implemented production processes (Mitchell, 2013);
• **Flexibility** in the way that resources are used to their best capacity to fulfil the objectives of the organisation (Sopelana, et al., 2011); and

• **Risk-bearing ability** needed when exploiting new opportunities that can lead to change (Drucker, 1998).

**Creativity**

Creativity can be defined as the ability to bring to life useful and novel ideas and concepts, usually for the purpose of solving a problem (Gryskiewicz, 1987; Goswami, 1996). The creativity of employees in an organisation allows them to foster new or improved methods of creating and delivering value to their consumers (Jaworski & Kohli, 1993; Lee & Lee, 2014). In line with the theory of the innovative enterprise, when managers are encouraged to acquire new knowledge through learning, they are better able to come up with new creative methods of improving the way the organisation provides for its consumers (Baker & Sinkula, 1999).

The NPO *Food and Trees for Africa* (FTA) teamed up with Makhulong a Matala and the Johannesburg Development Agency (JDA) to plant food rooftop gardens within Johannesburg inner city, to solve the problem of food scarcity (Creamer Media Reporter, 2014). Operational managers in adult and children’s homes within the city may also solve problems their food shortages by implementing a similar strategy to enhance food security for their residents. The ability of managers to internally generate entrepreneurial thinking can be explained by the theory of the creative climate (Isakson, 1984; Rhodes, 1961), which illustrates how a conducive environment facilitates creativity within an organisation.

**Creativity: The creative climate**

The creative climate is theoretically a community of themes operating within as internal environment that allows for an individual to be creative (Barrett, et al., 2005). In accordance with the marketing orientation (Cambra-Fierro, et al., 2011), the objective is for creativity to produce goods or provide services with superior value to their consumer groups (Wood, et al., 2000). Rhodes (1961) describes the creative climate in terms of four key elements, namely personal creativity, processes for creativity, products of creativity and the context of creativity. The extent of an individual’s creativity is said to depend on the overlapping of these three elements within an environment that receives and encourages the realisation of novel ideas. The model for these three Ps within the creative climate (Barrett, et al., 2005) adopted by Isakson (1984) is depicted in Figure 4 on the next page.
Personal creativity refers to the individual’s ability to manifest ideas from imagination to tangible or felt experiences (Goswami, 1996). Idea generation can be spontaneous or as a result of a culmination of learning experiences that lead to a ‘eureka’ moment (Steyn & Buys, 2011). Learning experiences that aid creativity are important for bridging gaps in knowledge, which is why strong emphasis is placed on individuals engaging continuously in learning and skills improvement (Baker & Sinkula, 1999; Chiva, et al., 2010). This supports the argument that creativity of management teams in NPOs is dependent on their expertise and learning abilities. Rhodes (1961) also considers an individual’s curiosity about life and openness to unseen opportunities to be important characteristics of personal creativity.

The process of creativity can be initiated by a motivation to solving a problem or taking advantage of an opportunity (Barrett, et al., 2005), which determines the products or outputs of creativity. As this research bases some of its theoretical framework on marketing orientation, the essence of the product is therefore to provide superior value to the consumer (Baker & Sinkula, 1999). The context in which creativity occurs is the employee’s working environment, where the sharing of ideas and expertise culminates to make the organisation as a whole creative (Rhodes, 1961). This context appears important for NPOs because their ability to accommodate creativity of their individual members for the benefit of the organisation may be helpful in improving their performance as social providers to their consumer groups (Bush, 1992; Macphail, et al., 1998). However, creativity alone cannot facilitate entrepreneurial behaviour for the organisation, and the organisation’s management teams need to be adaptive to situations that need creative thinking or that arise as a result of creativity (Khandwalla, 1977; Mitchell, 2013).
**Flexibility**

Within the context of organisational entrepreneurship, flexibility can be determined by the answer to the question, “How adaptive is the organisation’s administration in accommodating situations in which drastic or systematic changes arise?” (Khandwalla, 1977; Barrett, et al., 2005). The more adaptive the organisation is to progressively respond to change, the more flexible it is. This refers not only to the organisation’s structure, but is relevant to the organisation’s ability to make the best use of its current resources to respond to those changes (Dees, 1998; Stevenson, 2000; Sopelana, et al., 2011). The organisation’s flexibility in adapting to changes as and when required is influenced by how well the employees are knowledgeable about changes in technologies, and resources’ capacities and uses, in the market (Graham, 1995; Kim, et al., 2013).

Flexibility relies on employees’ competence in performing continuous and extensive research and development activities around their particular industry, and being able to respond accordingly. In the case of elderly care, the practice of nurses making home visits has become popular among cancer patients in the United States of America (National Cancer Institute, 2014) as it reduces the strain of elderly patients from making travel and other arrangements to seek health care. Managers of such care facilities demonstrate flexibility in their operational structure, and adapt their service delivery channels to suit the needs of their beneficiaries.

Mary Parker Follet, a management theorist in the 1920s (Barrett, et al., 2005) refers to an organic structure in organisations, which is essentially an organisation structure that allows the organisation to be able to adapt to changes as required. Flexibility is made easier by decentralised decision-making, shorter hierarchies of authority, and broader job specialisations (Burns & Stalker, 1961; Sopelana, et al., 2011), in addition to ever-current knowledge about the industry. In the case of NPOs, managers would be able to make informed decisions about changes in how the NPO offers particular services or products to their consumers. Changes may occur as a result of opportunities or threats to the organisation (Graham, 1995; Harris, 2012), and the need to anticipate and take risk in decisions becomes important for NPOs.

**Risk-taking**

Risk-taking involves relying on existing knowledge to take advantage of opportunities for the organisation during uncertain times (Wood & Bhuian, 1993), and it resonates well with
entrepreneurial behaviour. The chances of success or failure due to the decision, as well as the organisation’s ability to support itself beyond the decision, make up the risk (Fairlie & Holleran, 2012). Employees’ risk-taking abilities rely on how knowledgeable they are on changes and developments in the environment, and how well they are able to integrate them to benefit the organisation (Peredoa & McLean, 2006). Calculation of risk before taking opportunities is necessary for NPOs and for-profit organisations alike, because failure has to be absorbed by the organisation as a whole (Wood, et al., 2000). Given that most NPOs are externally funded, justifying taking risky opportunities requires some expertise, as the outcome of the venture may not be known before the chance is taken.

Managerial ethics are important to consider during the process of taking risk so ensure that managers do not become over-ambitious with the organisation’s resources (O’Sullivan, 2000). Assessing the amount of risk that an organisation can bare would require managers to make ethical considerations, particularly in respect of the organisation’s funds and other resources (King Committee on Corporate Governance, 2009). The tendency of NPOs to be risk averse may stem from fear of failure or uncertainty for the future (Huarng & Yu, 2011).

**Entrepreneurship in NPOs**

The concept of entrepreneurship can be relevant to organisations in the non-profit sector because entrepreneurship does not require a core profit motive for the organisation to succeed (Stevenson, 2000; Boyle & Mezias, 2002; Fairlie & Holleran, 2012). As a result of managements’ commitment, education and ethics, the organisation can be innovative and proactive in considering constructive risks (Wood, et al., 2000). Managers’ commitment to generating knowledge from continuous learning provides the marketing intelligence to share and use to respond to changes in their field (Jaworski & Kohli, 1993; Senge, 1990; Baker & Sinkula, 1999; Weerawardena & Sullivan-mort, 2008).

The broad ethical stance taken by managers as decision-makers in the organisation supports the objectives of the organisation over personal gains of the managers (King Committee on Corporate Governance, 2009), which contributes to its ability to make constructive risks for long-term success (Wood, et al., 2000). Because of NPOs’ market orientation (Baker & Sinkula, 1999; Barrett, et al., 2005; Kuratko, et al., 2005), performance of the organisation is not limited to financial performance, but to the organisation’s ability to satisfy its consumers through its value offerings.
**Organisational entrepreneurship and organisational performance**

The extent to which the organisation is able to take constructive risks to take advantage of opportunities that improve their value offering in the market has a lot of bearing on its performance (Matei, et al., 2010; Mahmoud & Yusif, 2012). Pertaining to NPOs, this includes ways of improving services to consumers who are dependent on the organisation, reaching new consumers as well as attracting more volunteers who share and believe in the same principles of the organisation (Huck, et al., 2011). Creative thinking that becomes effective in the organisation’s operations shows successful innovation, which essentially should make the value chain process of the organisation more efficient (Sessa, London, Pingor, Gullu & Patel, 2011). For this reason, a positive relationship between the two is assumed in the hypotheses further in this report. Organisational performance in NPOs is also discussed in more depth further in this chapter.

**2.2.2. Management’s Commitment to their Occupation**

In the current research, the commitment of managers to their occupation is their dedication to their work in the non-profit sector and their eagerness to remain in that occupation (Vandenburg & Scarpello, 1994). It is understood that employees remain committed to their work because of a psychological bond that keeps them attached to their profession (Bartol, 1979; Cho & Huang, 2012). This is seen in professions such as Information Technology (IT) and Accounting, where employees become members of a society with other professionals, to occasionally engage in profession-related issues and for social purposes (Fu, Bolander & Jones, 2009). When it comes to managers in NPOs, commitment is important to the organisation because it shows confidence in managers and their intention to continue providing value to consumers who need to benefit from NPOs (Huarg & Yu, 2011). Furthermore, commitment facilitates flexibility in the organisation and helps to construct risk-taking abilities in managers (Sopelana, et al., 2011; Fairlie & Holleran, 2012). It indicates intention for the organisation to remain operating in the market, and it allows for potential of improvement of services through innovative processes (Bartol, 1979; Wood, et al., 2000).

Bargain (2003) describes three components of professional commitment (affectionate, continuous and normative commitment), which can be used to measure the level of
commitment of management. Each measure of commitment is based on different motivations that affect the manager.

**Affectionate commitment**
Affectionate commitment refers to the emotional attachment or sense of identification with the occupation (Allen & Meyer, 1996; Oha & Park, 2011). Managers with high levels of affectionate commitment are likely to feel a sense of belonging (Bagrain, 2003) to the NPO due to their involvement with the organisation. This is a strong component of commitment, similar to psychological bonds that develop in relationships between people or with objects of fondness (Anderson & Martin, 1995), and is expressed mainly through major involvement with non-profit related work (Tufail, Zia, Khan & Irfan, 2005; Shanker, 2013). Although this type of commitment may be responsible for encouraging managers to endure certain hardships related to NPOs, sudden changes in the degree of attachment to the non-profit activities may result in disconnection or detachment, and consequently loss in endurance and reason to remain in the non-profit occupation (Martin, 2008; Oha & Park, 2011). Affectionate commitment is important to the non-profit sector because satisfaction through emotional attachment of managers can compensate for the absence of a profit motive (Wood, et al., 2000) which would otherwise be a major source of motivation.

**Continuous commitment**
Continuous commitment explains the managers’ likelihood of leaving or remaining in their occupation (Allen & Meyer, 1996; Shanker, 2013) in the non-profit sector, given another opportunity in a different occupation. When deciding whether to continue or leave their occupation, managers usually weigh the costs and benefits that may be associated with either (Bagrain, 2003). These may be financial and other costs and benefits, including feeling negative feelings of guilt (Cho & Huang, 2012). This research extends the assessment of continuous commitment to include the propensity of managers to remain in their organisation even when given an opportunity to work in a similar position in the for-profit sector. The reason for this is to examine a perceived limitation of the not-for-profit sector (Macphail, et al., 1998) and gain understanding of the extent or limit of dedication that NPO managers in Gauteng may have.

Because many NPOs demand effort and time but may not compensate for these in the same way that for-profit organisations do (Fu, et al., 2009), managers’ may choose to commit out
of guilt that may be associated with not supporting non-profit activities. Continuous commitment is important not only for the continuation of the NPO, but also to maintain develop NPO structures consistently over the years (Bush, 1992; Wood, et al., 2000).

**Normative commitment**

Normative commitment is explained by a managers’ sense of duty or obligation to the occupation (Bagrain, 2003; Meyer & Parfyonova, 2010), irrespective of whether they are happy or unhappy in the organisation. Managers may be normatively committed to their occupation where they attach sense of dignity or sacrifice to the work involved (Tufail, et al., 2005). Managers with high levels of normative commitment are likely to remain in their occupation in the not-for-profit sector out of a sense of duty to provide for consumers in ways that for-profit organisations do not (Tufail, et al., 2005; Shanker, 2013). Normative commitment becomes important given the nature of most activities carried out by NPOs, which are not motivated by personal or financial gain, but rather increase in the social wellbeing of certain segments of consumers (Allen & Meyer, 1996).

**2.2.3. Management’s Continuous Education**

Markets are continuously evolving and it is necessary for managers to remain relevant with the changes in order to make good and progressive decisions for their firms (Kotler & Keller, 2012). Management’s continuous education refers to managers’ ability to continue to develop their professional skills and knowledge in various forms. This relates well to the concept of a learning organisation, in which members develop the perspective of acquiring new knowledge relevant to their industry and implement informed decisions that benefit the organisation (Chiva, et al., 2010). As a dimension of professionalism (Uternam & Davis, 1984), senior managers believe in continuously developing their skills and knowledge to ensure that the organisation is aware of methods of providing higher quality services for their clients (Sessa, et al., 2011). This has been seen in IT professionals (Cho & Huang, 2012) actuaries and academics who, as part of their associations, attend conferences and workshops to remain current about their professional fields.

The same is thought to be true for senior managers in NPOs as they desire to know more about improving their expertise in their particular fields (Kim, et al., 2013). Organisational learning that encourage their managers to engage in enlightening workshops, seminars and conferences are seen to be progressive as they facilitate learning and sharing of new
knowledge with other organisations (Drejer, 2000). Although there are various types of organisations, skills development is not limited to the core functions of the organisation, but encompasses knowledge and experience around other functions that are important to the organisation (Drejer, et al., 2004; Sessa, et al., 2011). These include, for example, attendance to workshops that explain about financial management.

**Generative, adaptive and collaborative learning**

Through generative learning, NPO managers would integrate their existing knowledge with novel ideas of improving their services or methods of distributing their products to the relevant consumers (Chiva, et al., 2010; Sessa, et al., 2011). For NPOs involved in resource assistance, such as food and clothing donation, the strategic organisation of food banks or clothing drives can be improved through studying links between the donors, the channels of distribution available to accessing the resources, and ways of communicating and delivering the resources to the consumers. The Wits Citizen and Community Outreach (WCCO) volunteer programme are able to leverage their activities from important days, such as Nelson Mandela day, to bring together and create links with donors during their donation drive (Staff Reporter, 2014).

Adaptive learning involves managers of NPOs acquiring knowledge by analysing and recording data about their industry and practices, and continually updating their management teams with new ways of obtaining information that is important to the organisation (Chiva, et al., 2010). The essence of this style of learning is its continuous nature, which allows NPOs to find and look for ways of bridging gaps in their knowledge and skills pertaining to their organisations. The director of Medecins Sans Frontier’s Access Campaign, Dr Schoen-Angerer, supports that knowing beneficiaries’ needs is not sufficient, but in order to made positive changes, research about medical innovations should also be a priority (Medecins Sans Frontieres, 2012).

Generative learning and adaptive learning jointly result in collaborative learning (Chiva, et al., 2010), in which NPOs become learning organisations that are able to foster innovation through collaborating new ideas with continuously adapted knowledge (Drejer, 2000). This can be particularly relevant for education-based NPOs as they can forge relationships with community engagement initiative at institutions of higher learning, to benefit from the institution’s expertise in particular subjects (Macphail, et al., 1998; Huck, et al., 2011). The benefit of such a relationship flows to the NPO as students supported by the organisation
become exposed to learning techniques and practices of prominent scholars who volunteer to tutor or mentor the students.

**Managers’ continuous education relating to organisational entrepreneurship**

Continuous education also encompasses the extent to which senior managers are encouraged to engage in other forms of learning and knowledge sharing (Garcia-Morales & Llorens-Montes, 2006). These include, for example, adult health care organisations conducting independent research that assesses trends and changes in diseases affecting mature adults well into the pension-age cohort, or any that may be relevant and useful to the NPO (Kim, et al., 2013). In the case of some adult health care NPOs, such research would be relevant for motivating research into certain health practices or implements, finding ways of delivering relief health care to them through affordable means. It therefore allows NPOs to be prepared for increases in demand for their services, rather than dealing with shock-effects of sudden surges in demand where this could have been avoided.

NPOs that conduct themselves as learning organisations would benefit from being knowledge generators themselves (Drejer, et al., 2004) as well as play a role in driving the innovation needed to sustain their non-profit activities. Interactive and adaptive learning practices help organisations to generate intelligence that will assist in making informed decisions (Lee & Lee, 2014), even in times of uncertainty, that aid in the entrepreneurial behaviour of the organisation.

2.2.4. Management’s Ethics

Management ethics refer to the codes and practices that managers adhere to that ensure that they put the interests of the organisation before their own (Wood, et al., 2000). Ethics bring all members of the organisation under a common vision for the organisation (Garcia-Morales & Llorens-Montes, 2006). The presence of ethics in the organisations promotes managers to make constructive decisions that uplift the organisation rather than disadvantage it (Kao, Kao & Kao, 2005). The King Committee on Corporate Governance (2009) suggests that managers with ethics take calculated risks that benefit the organisation as they are committed to ensuring that the organisation continues to operate well into the future, continuing to provide quality services to their clients (Wood & Bhuian, 1993; Matei, et al., 2010).
“Doing the right thing”: Financial gain versus community benefits

The dilemma of supporting not-for-profit enterprises in a market that is structured to encourage profit generation is often raised by analysts (Hancook, 1989; Austin, et al., 2006), with concerns that NPOs create dependency that is not sustainable given the limited resources being shared by for-profit and not-for-profit organisations alike. Like management’s commitment to the organisation, management ethics resonate with managers who feel a sense of responsibility to serve the consumers within their communities, who are not accommodated by for-profit organisations as they are not profitable (Wood & Bhuian, 1993; Kearns, 2010) because it is the “right thing” to do.

However, argued that entrepreneurship is driven by creativity, flexibility and constructive risk bearing (Austin, et al., 2006; Dees, 1998; Stevenson, 2000), managers’ efforts to make the best use of the resources they have to provide consumers who need the services and products challenges this notion. Since both types of organisations can participate in entrepreneurship, in providing value to consumers, it follows that the use of resource is for a common purpose: to satisfy the needs of consumers in need of them (Austin, et al., 2006; Dees, 1998). As such, the underlying assumption in this research is the possibility that organisational entrepreneurship initiated by operational and senior management teams in NPOs can help NPOs to deliver better value offerings to their consumers.

More so, in instances where managers are required to consider risk in their decisions, or are negatively influenced to defraud the organisation, the pressure to “do the right thing” leads to managers taking responsibility in leading the organisation through such decision (Wood, et al., 2000; Kearns, 2010). With well-grounded ethics, managers are less likely to try to hinder the organisation’s progress by defrauding or to intentionally bringing harm to the organisation. By “doing the right thing” managers also consider the benefits to their consumers to be more important than personal financial gains (Schuster & Holtbrügge, 2010).

Priority of interests and Responsibility to serve

The orientation of the market is such that organisations prioritise the needs of the consumer as this is one of the main reasons for the organisation’s existence in the market (Kotler & Keller, 2012). As the main objective of the NPO is to offer valuable goods and services to consumers who would otherwise not be able to afford or have access to those offerings from for-profit organisations (Austin, et al., 2006), NPO managers face the need to prioritise their consumers. As the motivation to serve the community is not driven by monetary profit, an
alternative source of motivation may be required for NPO members to continue working in the sector. This motivation can be attributed to the members’ felt responsibility to serve their communities (Wood, et al., 2000), even though it may be difficult because the structure of the economy implies that labour is rewarded by a monetary standard, and investors expect returns on their investments (Gelbach, Klick & Wexler, 2009; Marshall, 2009).

As NPO managers may not be receiving as much monetary reward for their efforts as they would in some for-profit organisations (Gelbach, et al., 2009), the felt responsibility to serve becomes a key driver in how the members of the organisation contribute to the organisation making positive change in the lives of their consumers (Jaworski & Kohli, 1993). Although this may be strenuous to most members of NPOs, commitment toward contributing to the organisation’s entrepreneurship may require managers to recognise their service in the organisation as a priority over for-profit activities that would divert their efforts from the NPO (Wood, et al., 2000; Austin, et al., 2006).

NPO managers’ felt responsibility to serve their consumer groups also refers to their initiative to take constructive risk in the decisions they make on behalf of the organisation (Wood, et al., 2000; Mort, et al., 2003). It may be assumed that manager with a high degree of felt responsibility to serve consumers in the NPO would do so as efficiently as they can. More so, when work in the NPO is highly prioritised, dedication to making it successful, rather than not to, can be expected from the managers.

2.2.5. Organisational Performance

Common impressions of organisational performance refer to the profitability of the organisation (Albrecht, Stice & Stice, 2011). However, with NPOs, because the profit motive is not a core objective, performance is measured in terms of other metrics (Smith, 1988). How an organisation performs depends on how well it fulfils its objectives and mandate for existing in the market (Kotler & Keller, 2012). In the case of the NPOs, is the ability to serve its community with valuable offerings that improve their livelihood (Wood & Bhuian, 1993).

Increase in value offerings to consumers

Organisational entrepreneurship based on the organisation’s market orientation allows constructive decisions that increase the value the organisation transfers to its clients (Kotler & Keller, 2012). Performance can therefore take the form of the organisation’s improvement of its services to its consumers, which is an outcome of creativity, as supposed by the theory
on creative climate (Barrett, et al., 2005; Rhodes, 1961). Informed decisions to take constructive risks that lead to increased value being transferred to consumers lead to more satisfactory services to consumers and improved quality of service from the organisation (Albrecht, et al., 2011; Bush, 1992).

**Improvement in financial position**

With respect to NPOs, profit-oriented performance metrics may not be appropriate as the organisation is not profit oriented (Albrecht, et al., 2011). However, changes in financial position of the organisation are more relevant as this displays the organisation’s ability to manage its finances. An improvement in the organisation’s performance may be improvement of financial position in terms of its assets and reserves, as well as the organisation’s ability to secure increases in financial support. These are mainly due to increased interests from funders who believe in the effect that the organisation on its consumers (Wood, et al., 2000).

**Increase in reach**

Reach refers to the number of consumers that the organisation is able to impact with its value offerings (Kotler & Keller, 2012). Similar to how for-profit organisations consider an increase in market share by obtaining more consumers, NPOs may measure their ability to affect consumers who need their services in determining their performance (Naidoo, 2011). This relates to the NPO’s core objective to provide value offerings to segments of consumer who would otherwise not have access to those services (Austin, et al., 2006). An increase in the organisation’s reach may be due to affecting greater number of consumers, as well as the organisation affecting new consumer segments (Wood, et al., 2000). Therefore increase in reach, either supporting more members in the same community or new members in different communities, would translate to better performance of the NPO.

For NPOs that engage with volunteers, the ability to attract more volunteers to assist with activities translates to the performance of the organisation (Macphail, et al., 1998). Because the NPOs in this research rely heavily on volunteer effort, it is inferred that an increase in volunteers is as a result of volunteers sharing the organisation’s belief in providing services for the benefit of their consumers (Wood, et al., 2000). A greater number of volunteer therefore translates to more provision of services being covered by the organisation as a result of more volunteers.
Efficient use of resources

The efficient use of scarce resources allows for organisations to serve more consumers with present resources (Barrett, et al., 2005). This is a consequence of innovative thinking that enables the organisation to provide more value from lower costs (Dees, 1998; Sessa, et al., 2011). In conjunction with financial metrics, it helps the organisation to incur lower costs of providing value to consumers, and may allow them to reach more consumers with the same resources. This would be helpful for reaching out to vulnerable consumer groups in less economically developed areas of Gauteng, as some city-based NPOs with excess resources can positively influence consumers in rural areas (Khumalo, 2012).

Organisational Entrepreneurship and Performance

The purpose of managers contributing to the organisational entrepreneurship is to facilitate innovation that will make the organisation more successful in its activities of providing valuable offerings to certain consumer segments (Smith, 1988; Mahmoud & Yusif, 2012). The ability of the organisation to learn and adapt to changes and development in the market impact their ability to provide better services through efficient use of scarce resources, to reach more consumers and to attract volunteers (Huck, et al., 2011). Organisational entrepreneurship is therefore assumed to have a positive relation to organisational performance.

2.3. SUMMARY

The theoretical framework of the innovative enterprise, organisational learning and market orientation firmly support that organisations need to be continuously creative in order to continue existing and providing value to their beneficiaries. Based on the literature studied, the research can explore the extent to which internally generated entrepreneurship may be affected by NPO management’s continuous education, as guided by the framework on organisational learning and innovative enterprise. Organisational entrepreneurship allows for the collective creativity of NPO members to be nurtured in an interactive environment that enables shared learning, as well as constant renewal of knowledge about their industry, so as to make informed decisions on behalf of the organisation.

The multi-dimensional model for entrepreneurship (Weerawardena & Mort, 2006) associates innovativeness with exposure to risk. Because senior managers are responsible for making
decisions that affect their organisation, their ethical standards and governance principles affect how well they perceive risk and the effect that risk would have on their organisations. This is afforded by their felt responsibility to effect change in the community, which allows them to see the organisation’s activities for their consumers as a priority. This leads the research to explore the extent of management’s ethics in contributing to the NPO’s innovativeness or entrepreneurship as outlined in the framework of market orientation.

As a result of manager contributing to entrepreneurship, the NPO’s performance can be seen in improvement in their financial position over years, reaching more consumers and volunteers and efficiently using their limited resources to create value in better services and products to their consumers. The framework on market orientation values the importance of management’s commitment to their occupation, as well as the need for consistency to maintain innovativeness of an organisation guided by the innovative enterprise.

*Figure 5: Diagrammatic Summary of the Literature Review*
Table 1: Summary of variable terms

<table>
<thead>
<tr>
<th>Construct variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management’s commitment to their occupation</td>
<td>The level of dedication of management teams to their occupation in the non-profit sector (Stevenson, et al., 1985; Bagaim, 2003).</td>
</tr>
<tr>
<td>Management’s continuous education</td>
<td>Management teams’ engagement in research, learning and knowledge sharing that can enhance the entrepreneurial behaviour of the organisation (Vandenburg &amp; Scarpello, 1994).</td>
</tr>
<tr>
<td>Management’s ethics</td>
<td>Management’s code of conduct in leading the organisation through risk and for continuation of the organisation (King Committee on Corporate Governance, 2009).</td>
</tr>
<tr>
<td>Organisational entrepreneurship</td>
<td>Entrepreneurial behaviour of the organisation as a result of management’s creativity, flexibility and risk taking through the above-mentioned competences (Wood, et al., 2000).</td>
</tr>
<tr>
<td>Organisation’s performance</td>
<td>The ability of the NPO to increase its value offerings to its respective consumer groups through consumer satisfaction, improved quality, reach of new consumers and volunteers, and positive change in financial position (Wood, et al., 2000). This is as a result of organisational entrepreneurship.</td>
</tr>
</tbody>
</table>
CHAPTER III: Conceptual Model and Hypotheses Development

Chapter outline

- Introduction
- Relevance of the conceptual model and hypotheses of the study
- Conceptual model
- Justification of hypotheses development
- Summary
3.1. **INTRODUCTION**

This chapter is dedicated to explaining the research framework that forms the basis of the relationships between the variables in this study, namely the conceptual model and the development of the hypotheses for the research. It contains four sections outlining the relevance of the conceptual model and hypotheses, explanation of the conceptual model, the justification of the hypotheses development as well as the hypotheses development.

This research acknowledges various schools of thought and how they contribute to knowledge, which makes up the philosophy of the research. Although the research philosophy is dedicated to the Research Methodology and Design in chapter 4, the relevance of the conceptual model and hypotheses in this research is a considerable component of that philosophy. As such, this chapter highlights some important elements and justifications that result from applying the positivist paradigm to the research.

3.2. **RELEVANCE OF THE CONCEPTUAL MODEL AND HYPOTHESES TO THE STUDY**

One fundamental purpose of research is to generate knowledge about the world (Holden & Lynch, 2004), and in this case, to generate knowledge about management characteristics in relation to internally generated organisational entrepreneurship in NPOs. This study is conducted using a scientific way of acquiring knowledge, otherwise referred to as a positivist perspective (Holden & Lynch, 2004). The knowledge perspective assumes that the world operates under universal laws and in order to understand the world, it is important to understand the laws (Johnson & Christensen, 2008). Therefore, learning about the world involves observing and systematically recording reality so as to eventually determine the causes of certain events. Over time, these observations set the pattern for events that happen in reality and lead to generalising reality and making it subject to those universal patterns or laws (Mukher & Albon, 2010). For this reason, it is assumed that any events that occur within the same environment are subject to the same universal laws.

Given that the aim of this research is to determine how organisational entrepreneurship in NPOs is facilitated by certain management characteristics, the phenomenon under study is really internally generated organisational entrepreneurship. The theoretical and empirical literature reviews are considered to comprise of substantial records of observations (Mukher
of interactions between the management characteristics and organisational entrepreneurship, as well as between organisational entrepreneurship and organisational performance. Numerous accredited studies analysed the antecedents of organisational entrepreneurship and organisational performance, as well as the interactions with the management characteristics. (Wood, et al., 2000; Bagraim, 2003; Garcia-Morales & Llorens-Montes, 2006; Kim, et al., 2013). This literature therefore outlines the universal laws governing the phenomenon of organisational entrepreneurship, and forms the basis for the conceptual model and hypotheses development for the research.

3.3. CONCEPTUAL MODEL

The conceptual model is a diagram that visually explains a particular concept by illustrating the relationships between latent variables of the concept (Creswell, 1994). The diagrammatic representation of the variables and their relationships with one another is based on theoretical and empirical literature reviews that explain how the variables interact in a particular environment (Myers, et al., 2010). Figure 6 on the following page shows the conceptual model used for this research, which maps out the five constructs as variables hypothetically relating to one another (Creswell, 1994), according to reviewed literature. The conceptual model also facilitated the achievement of the empirical objectives and in this case, illustrated the conceptual research model that proposed the relationships between the construct variables.

The model used for the research was adapted from the conceptual model for market orientation in non-profit hospitals in Wood et al., (2000), and illustrates management’s commitment to their occupation, management’s continuous education and management’s ethics as independent variables to organisational entrepreneurship. Organisational entrepreneurship was seen as a mediator between the management characteristics and organisational performance. It is from these assumptions that the hypotheses which are to be tested in the research can be stated.
3.4. **JUSTIFICATION OF HYPOTHESES DEVELOPMENT**

Under the positivist paradigm, learning about the causal relations among the construct variables requires the research to postulate assumptions based on the literature surrounding the constructs (Holden & Lynch, 2004). The intention of the research in this regards was therefore to confirm whether established patterns in the literature surrounding organisational entrepreneurship and the management characteristics as its antecedents, as well as organisational performance correlated to entrepreneurship, held true for this particular study. Hypotheses postulated for the research are the assumptions of how the universal laws apply to the research phenomenon, based on substantial observations recorded and documented in literature (Johnson & Christensen, 2008). In order to gain knowledge about the phenomenon being researched, it is important to test the hypotheses to confirm whether the established patterns actually apply to this particular phenomenon. The positivist paradigm is the research philosophy used in this research, and is explained in greater detail in chapter 4.
Testing of the hypotheses becomes important as conclusions and generalisations about the relationships between the constructs depend on whether the hypotheses hold true or not (Mukher & Albon, 2010). The hypotheses are tested empirically in terms of the extent of the causal relations between the construct variables (Creswell, 1994). The tests are based on primary data collected during the study, which reports on the constructs under study. Once tested, the hypotheses are represented by estimates that indicate the extent of causality between the independent and dependent variables (Johnson & Christensen, 2008), as illustrated on the conceptual model. Therefore, to be able to confirm the relationships between managements’ characteristics and organisational entrepreneurship, and organisational entrepreneurship and organisational performance, the underlying assumptions were developed from the literature.

3.5. HYPOTHESES DEVELOPMENT

The hypotheses were developed from the conceptual model, which was based on literature surrounding management’s commitment to their occupation, management’s continuous education, management’s ethics in relation to organisational entrepreneurship, as well as organisational entrepreneurship in relation to organisational performance. These hypotheses are linked to the empirical objectives of the research.

3.5.1. Management’s commitment to occupation and organisational entrepreneurship

In NPOs’ market orientation, management’s commitment to the organisation positively influences the organisational entrepreneurship (Wood, et al., 2000). Bargrain (2003) suggests that more committed managers dedicate more time and effort to understanding and experiencing their industry’s risks and opportunities, and contributing to making the organisation flexible to respond to changes that affect the organisation (Angle & Perry, 1981; Sipelana, et al., 2011; Chalmers & Balan-Vnuk, 2012). The level of managements’ commitment to their occupation in the voluntary organisation may demonstrate the managers’ willingness to remain in this non-profit industry, even when offered a similar position in another industry (Wood, et al., 2000). From this literature, the first hypothesis was postulated.
H1: Management’s commitment has a positive relation with organisational entrepreneurship.

3.5.2. Management’s continuous education affects organisational entrepreneurship

Managers can generate intelligence on which to base their decisions in response to the changes in the industry and ways of improving their offerings. Making informed decisions helps to minimise the risks of failure that may be associated with adopting certain technologies or reacting to changes in the market environment. It is therefore assumed that managers’ continuous learning has a positive influence to organisational entrepreneurship. From this, the second hypothesis was postulated.

H2: Management’s continuous education has a positive relation with organisational entrepreneurship.

3.5.3. Managers’ ethics influence on organisational entrepreneurship

Theory surrounding market orientation considers managerial ethics to be important for facilitating principled risk-taking by senior managers (Wood, et al., 2000). This element of risk is inherent in entrepreneurial thinking (Mort, et al., 2003). Because senior managers are responsible for making decisions that affect the organisation, their ethical standards affect how well they perceive risk and the effect that risk would have on the organisation. Management’s ethics are therefore have a positively influence on the internally generated entrepreneurship of an organisation. This allowed the third hypothesis to be postulated.

H3: Management’s ethics have a relation with organisational entrepreneurship.

3.5.4. Organisational Entrepreneurship and Performance

The purpose of managers contributing to the organisational entrepreneurship is to facilitate innovation that will make the organisation more successful in its activities of providing valuable offerings to certain consumer segments. The ability of the organisation to learn and adapt to changes and development in the market impact their ability to provide better services through efficient use of scarce resources, to reach more consumers and to attract volunteers. Organisational entrepreneurship is therefore assumed to have a positive relation to organisational performance. The fourth hypothesis was then postulated as follows:
3.6. **Summary**

The conceptual model visually displays the relations between the construct variables being investigated in the research, while the hypotheses provided a means of testing the extent of those relations. Both help to fulfil the empirical objectives of the research, which are to establish the causal relations between the management characteristics and organisational entrepreneurship in NPOs, and organisational entrepreneurship and organisational performance. The hypotheses are summarised in Table 2.

*Table 2: Summary of Hypotheses*

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Description</th>
<th>Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Management’s commitment to their occupation has a positive relation with organisational entrepreneurship.</td>
<td>MgCmt → OrEntr</td>
</tr>
<tr>
<td>H2</td>
<td>Management’s continuous education has a positive relation with organisational entrepreneurship.</td>
<td>MgEdu → OrEntr</td>
</tr>
<tr>
<td>H3</td>
<td>Management’s ethics have a positive relation with organisational entrepreneurship.</td>
<td>MgEth → OrEntr</td>
</tr>
<tr>
<td>H4</td>
<td>Organisational entrepreneurship has a positive relation with organisational performance.</td>
<td>OrEntr → OrPerf</td>
</tr>
</tbody>
</table>
CHAPTER IV: Research Methodology and Design

Chapter outline

- Introduction
- Research philosophy: Positivist paradigm
- Quantitative approach
- Research instrument (Questionnaire design)
- Data collection technique
- Data analysis techniques
4.1. **INTRODUCTION**

Research methodology is a system designed for collecting information required for the research (Burns & Bush, 2006). It is guided by a research philosophy and comprises of all the techniques and procedures for acquiring, analysing and drawing conclusions from the data (Kumar, 2005). To effectively draw conclusions based on the study conducted, the methodology needs to be suitable in addressing the research problem, in its scope, depth and intensity (Krommenhoek & Galpin, 2013). This chapter outlines the research philosophy that directed the research, the quantitative approach used in the research, how the sample and research instrument were designed, and the data collection and analysis techniques used.

4.2. **RESEARCH PHILOSOPHY: POSITIVIST PARADIGM**

Research philosophy is the principle about how data is gathered, analysed and applied (Holden & Lynch, 2004) to understand phenomena in life. Under the positivist paradigm or way of thinking, research is scientifically conducted based on the principle that reality can be studied from an objective point of view, rather than being studied by interfering with the aspect of reality being studied (Hirschman, 1986).

It is a reality that NPOs exist to facilitate essential needs that may not be addressed by for-profit organisations for various reasons (Barrett, et al., 2005; Bush, 1992; Drucker, 1989). What these NPOs have in common are practices and systems of using their resources to create and provide value to their clients, without the intention of maximising monetary gain, compared with for-profit organisations (Austin, et al., 2006). This allowed the research to objectively study how the managers’ characteristics contributed to the NPOs’ ability to create value through organisational entrepreneurship, and the effect of that on their organisational performance. As managers are expected to adapt their capabilities for the success of the organisation (Yujuico, 2008; Chalmers & Balan-Vnuk, 2012), this paradigm was suitable for allowing the research to determine the effects of those capabilities on the entrepreneurship and performance of the organisation.

In an attempt to understand how managers’ characteristics can contribute to organisational entrepreneurship and in turn organisational performance, this study did not place managers under situations where they were tested on demonstrating their competencies to contribute to
organisational entrepreneurship. Instead, the research formulated and tested hypotheses about senior and operational managers, in order to determine the causal relationships between the construct variables (Mangang, Lalwani & Gardner, 2004), as well as use quantified measurement scales in the research instrument to examine the variables under study (Easterby-Smith, Thorpe & Lowe, 1991).

4.3. **Quantitative Approach**

The scientific approach used based on the positivist perspective lead the research to adopt a quantitative research methodology (Mukher & Albon, 2010). Quantitative research methods analyse numerical data using empirical models to explain the subject under study (Vogt, 2007). In line with the positivist perspective, quantitative methods are considered to be more objective than qualitative methods that seek to explain phenomena subjectively (Johnson & Christensen, 2008; Muijs, 2011). Because the intention of the research was to determine relationships between management characteristics, organisational entrepreneurship and organisational performance, empirical models were used to analyse the data. For this purpose, and to maintain objectivity (Creswell, 2009), this research was based on a quantitative study of the relations between the management characteristics and organisational entrepreneurship, and organisational performance.

4.4. **Sampling Design**

There are many difficulties associated with collecting data from every member of a population relevant to the research study (Burns & Bush, 2006), such as difficulties in reaching every member of the population, the insufficient time required to reach and collect data from the population, and uncertainties when trying to ensure that no member is excluded from the research. The positivist research perspective allows for research to base its conclusions about the research on smaller groups that are representative of the population (Mukher & Albon, 2010). Sampling therefore enabled the data for this research to be collected from a smaller group of NPOs and conclusions to be extrapolated for the population (Krommenhoek & Galpin, 2013).
The remainder of section 4.4 outlines how NPOs were randomly selected from the population of NPOs in Gauteng, as well as how the sample method, size and frame were determined for the research.

4.4.1. Population

The population is the entire group of subjects targeted by the research, and from whom information relevant to the research is drawn and analysed (Easterby-Smith, et al., 1991; Kumar, et al., 2011). The targeted population for this research comprised of NPOs in Gauteng, specifically those that are volunteer-oriented. A list of the members of this population was available in the directory of Nonprofit Organisations, which was accessed on the website of the South African Department of Social Development (DSD). More lists were also accessed from the Wits Citizenship and Community Outreach (WCCO), a facilitator of volunteer-led work at the University of the Witwatersrand. The purpose of approaching NPOs from the WCCO list took advantage of existing relations between the University and certain volunteer-oriented NPOs, which were more likely to result in higher response rate to participate in the research. Moreover, the use of more regularly updated lists reduced the incidences of contacting NPOs who had recently deregistered but were still listed in the directory.

4.4.2. Sample frame

The sample frame comprises of the members of the population that will form the basis of the research (Krommenhoek & Galpin, 2013). Framing allowed the research to be applicable by ensuring that questions were appropriate to the respondents so that relevant information could be obtained for the research. This research was framed for senior and operational managers of NPOs listed in the directory of the DSD and the WCCO. This was because managers were viewed as key decision makers in the NPOs, and were more likely to be privy to information asked by the research.

4.4.3. Sample size

The sample size is the number of subjects from whom data will be collected, drawn from the population (Kumar, 2005). Because conclusions for the research were to be extrapolated from the sample results, it was important to ensure that the sample size was representative of the population (Krommenhoek & Galpin, 2013). This research aimed to obtain data from 300 respondents. The Raosoft calculator for sample size was used to calculate the size of the
sample (Raosoft Incorporated, 2004). The calculation took into account the population of approximately 100,000 NPOs registered with the DSD (Stuart, 2013), 5% margin of error, 90% confidence interval and recommended 50% distribution, and returned a minimum sample size of 270 respondents.

4.4.4. Sample method

The sample method refers to the way in which the population sampled and may determine which respondents are included or excluded from the research (Muijs, 2011). The research used probability sampling, which assumes every respondent in the population had an equal chance of being included in the research, and thus reduced bias toward certain respondents (Krommenhoek & Galpin, 2013). For this research, any voluntary organisations that were listed in the WCCO list or DSD directory were simply randomly selected from the lists and invited to participate in the research, until the required number of respondents was reached.

4.5. **Research Instrument (Questionnaire Design)**

The measurement instrument is the tool used to collect the data for the research (Burns & Bush, 2006). For this research, senior managers were asked to complete a self-administered hard copy questionnaire with one section (Section A) on background information, and five sections (Sections B to F) relating to the constructs under study. Sections B to F measured each of the constructs on five-point Likert scales, with questions adapted from various relevant scales used in previous research. The decision to use five-point Likert scale rather than seven-point Likert scale was based on knowledge that mean scores for either scales may not differ significantly and are readily transferrable by rescaling (Dawes, 2008). The questionnaire is available in Appendix A of this report.

4.5.1. **Section A: Background information**

Section A asks for background information to build profiles of the managers in their organisations. This allows for comparisons among various types of NPOs based on demographic and other descriptive information. The items for this section were adapted from Wood et al., (2000).
4.5.2. Section B: Management’s Commitment to their Occupation

Items in this section measured the level of management’s commitment to their occupation in the non-profit sector in terms of affective, continuous and normative commitment, as adapted from Wood et al., (2000) and Bagrain (2003). The Likert scale measured from *Strongly disagree* (1) to *Strongly agree* (5), where respondents’ strong agreement with the statement alluded to greater extent of management’ commitment to their occupation. There was one item that was negatively phrased in this section (item 4) and, once reversed for data analysis purposes, higher scores in the section related to higher levels of management’s commitment to their occupation.

4.5.3. Section C: Management’s Continuous Education

Items in this section measured the manager’s perception of the importance of and involvement in continuous education, as adapted from Kim et al., (2013) and Garcia-Morales and Llorens-Montes (2006). The Likert scale measured from *Strongly disagree* (1) to *Strongly agree* (5). There was also one negatively phrased item (item 1) which, after reversed for data analysis purposes, higher scores for this section related to higher importance of manager’s continuous education.

4.5.4. Section D: Management’s Ethics

Items measuring the extent to which the manager prioritises the organisation over self-interests, as adapted from Wood et al. (2000) and Garcia-Morales and Llorens-Montes (2006) were measured on a scale from *Strongly disagree* (1) to *Strongly agree* (5). Higher scores in this section represented higher extent of management’s ethics in this regard. There were no negatively phrased items in this section.

4.5.5. Section E: Organisational Entrepreneurship

Items measured manager’s perceptions of their organisation’s contribution to the likelihood of entering new markets, and taking risks, compared to other similar organisations, as adapted from Garcia-Morales and Llorens-Montes (2006). Items in this section were measured on a scale from *Considerably less active than others* (1) to *Considerably more active than others* (5), with higher scores reflecting more involvement in entrepreneurial activities for the organisation.
4.5.6. **Section F: Organisational Performance**

Performance of NPOs is measured from perceptions of respondents about how their organisations have progressed over the past three years, similar to the approach initiated by Jaworski and Kohli (1993). The reason why qualitative–based items were used is because of the difficulties associated with obtaining financial information from organisations (Barrett, et al., 2005). More so, given the diversity in nature of the organisations, financial information would have been difficult to compare across organisation sizes, operational calendars and funding structures, among other factors (Albrecht, et al., 2011). Performance measurement was therefore subjective rather than objective, but measurable on a 5-point Likert scale.

Organisational performance was measured in terms of management’s perceptions on the organisation’s improvement of services, client satisfaction, financial position and reach over the past three years, as adapted from Wood et al., (2000). Higher scores on the scale from *Strongly disagree (1)* to *Strongly agree (5)* related to higher organisational performance.

4.5.7. **Scale development**

This research dealt with latent variables, that is, variables that are not observable (Zait & Bertea, 2011), but have to be measured to fulfil the purposes of the research. The variables were the constructs, and the instrument measured them on scales tested for internal consistency (Creswell, 2009). To take advantage of this, the instrument for this study used adapted questions from previous studies that have been assessed for internal consistency. Because the items were adapted from numerous sources with relatively similar scale measures, and for fulfilment of research criteria (Johnson & Christensen, 2008), the instrument was then assessed for reliability during the analysis phase of the research (Spitzer, Endicott & Robins, 1978).

4.6. **DATA COLLECTION TECHNIQUE**

The technique for collecting data included contacting NPOs either via telephone to invite them to participate in the research or approaching managers at the physical address of the organisation to invite them to participate. Sites visits were more practical as they allowed the researcher to explain in person the purpose of the research to the managers and generate
interest in them to participate. After potential respondents offered consent to participate, managers responded to the questionnaires provided.

### 4.6.1. Summary of Data Collection

The diagram below summarises the data research methodology used in the research.

*Figure 7: Summary of Data Collection*

![Diagram showing research methodology](image)

### 4.6.2. Ethical considerations

Obtaining information from individuals concerning their profession or organisation required ethical considerations to protect the potential respondents and prevent misuse of the research. It was important to clarify to potential respondents that their participation in the research was not compulsory, and that no penalties would be borne for deciding not to participate, nor benefits paid for participating. For this reason, it was important for individuals to give consent to participate in the research if they decided to participate. Assuring respondents’ confidentiality and anonymity was necessary to protect their identity and prevent them from being identified or linked to their responses. Access to the information obtained from the respondents was limited to the researcher and supervisor, and the information was stored...
safely and used only for the purposes of research. This research was granted ethical clearance by an independent ethics committee, the Wits Ethics Committee, to ensure that it complied with ethical principles, prior to distribution of the questionnaires.

4.7. **DATA ANALYSIS TECHNIQUES**

It is important to explain the data analysis procedures in order to understand the theoretical and empirical underpinnings of the procedures that effectively play a role in responding to the empirical objectives of the research. Once data has been collected on the coded questionnaires, the methodology requires it to be analysed so that inferences can be made pertaining to the study (Krommenhoek & Galpin, 2013).

The analysis process begins with data captured being screened for errors and irregularities in what is commonly known as data cleaning (Burns & Bush, 2006). This is followed by statistical analysis for descriptive exploration of the data. The data then goes through structural equation modelling (SEM) in two phases that comprise of various empirical tests, all for the purpose of making decisions about the hypotheses postulated earlier in the research. As this research makes use of a scientific approach, data analysis is an important part of the research process because the new knowledge being generated by the research is based on empirical and statistical analyses of the observations.

4.7.1. **Data coding and cleaning**

Initially, coded data translated from completed questionnaires onto a MicrosoftExcel® spreadsheet goes through data cleaning to screen for incomplete, erroneous or irregular entries, as well as for verification purposes (Myers, et al., 2010). This includes verifying that information from each questionnaire has been captured correctly, missing data is filled in appropriately, and spoilt questionnaires are excluded at an early stage in the analysis process (Krommenhoek & Galpin, 2013). Once cleaned, the spreadsheet file is imported into the statistical analysis programme Statistical Package for Social Sciences (SPSS) for statistical analysis. The first task is to compute a reliability test to verify the overall internal consistency of the scales used in the research instrument (Muijs, 2011) before descriptive statistics or SEM procedures are conducted. To ensure that the research instrument is logical and valid,
SPSS is used to run a test of internal consistency using the Cronbach’s alpha coefficient (Spitzer, et al., 1978; Krommenhoek & Galpin, 2013), which is explained under section 4.6.4.

4.7.2. Descriptive statistics

Descriptive statistics provide summarised characteristic information about the sample and form a basis of quantitative data analysis (Burns & Bush, 2006). They support inferential statistics used to draw conclusions about the sample by reducing the risk of basing decisions about the research purely on probabilistic indicators (Kumar, 2005). This is important as it helps to understand the sample, and this can assist recommendations of the research to be relevant to the characteristics of the sample (Vogt, 2007; Mukher & Albon, 2010). Such is the purpose of the respondent profile, responses per item and other relevant percentages.

Another importance of descriptive statistics is in confirming normality of the data set (Krommenhoek & Galpin, 2013). This is relevant where the conclusions from the research on the sample of NPOs intend to be extrapolated to the population of NPOs in the province, in which case the data set would need to have a normal distribution (Muijs, 2011). Some descriptive results have been previously presented in the Findings section in Chapter 4.

4.7.3. Structural equation modelling (SEM)

Once satisfied with the test for overall reliability, the next call in the data analysis process is to analyse the relationships between the construct variables using SEM. SEM is a statistical modelling tool that analyses relationships between construct variables with multiple levels (Byrne, 1994; Lei & Qiong, 2007) and is able to trace causal relations between multiple variables in a structure (Kline, 1998; Division of Statistics and Scientific Computation, 2012). SEM is conducted by running the data through the Analysis of Moment Structures (AMOS) Graphics software in two distinct stages, namely the confirmatory factor analysis (CFA) stage and the path model stage (Byrne, 2010; Gaskin, 2011).

CFA stage

The objective of running CFA is to determine the degree to which the constructs in the hypothesised model relate to each other prior to causality being considered (Hoyle, 2000; Lei & Qiong, 2007). This is to ensure that the construct variables do actually relate to one another
and are worthy of being associated with one another in the context of the model. In AMOS Graphics 22, a CFA model connecting all the construct variables to one another is drawn then the model with its corresponding data file is run (Byrne, 2010; Division of Statistics and Scientific Computation, 2012). The procedure returns results for a series of estimates and indicators useful for determining the extent of relations between the construct variables (Gaskin, 2011). These estimates include item factor loadings which are used to compute composite reliability and validity for the data (Hoyle, 2000). Model fit indicators are also generated to assess how well the construct variables fit the CFA model. The estimates and indicators are expected to surpass threshold limits in order for the CFA stage to be acceptable.

**Path modelling stage**

After it has been confirmed that construct variables relate to one another, it becomes necessary to test the extent of causality of the variables, as hypothesised by the conceptual model (Bagozzi & Yi, 1988). The path model for the data is drawn according to the conceptual model and run in AMOS Graphics. Like the CFA procedure, the path model returns various estimates and model fit indicators. Path coefficients are determined by standardised regression weights, and these quantify the extent of causality in the inter-variable relations (Byrne, 2010; Gaskin, 2011). The path coefficients are then used in path analysis, where testing of the hypotheses is based on the magnitude of the path coefficients, the signage (positive or negative) or the coefficient, and the significance of the path (given by the p-value) (Division of Statistics and Scientific Computation, 2012). It is also important for model fit indicators to be substantial in order to confirm that the data collected fits into the relationships between the variables as per the conceptual model (Schumacker & Lomax, 2004). Empirically, the decision to either accept or reject the hypotheses is determined by the outcome of the SEM procedures.

**4.7.4. Reliability**

The concept of reliability in research assess whether the research instrument is internally consistent in measuring the particular variable (Teo, 2011). This is founded on the notion that a scale used should produce consistent results each time it measures the variable (Spitzer, et al., 1978), and that the scale is measuring what it is intended to measure by indicating the
extent of commonality among items measuring the same construct (Churchill, 1979). This research uses two tests to assess reliability, namely the Cronbach’s alpha coefficient and composite reliability.

**Cronbach’s alpha coefficient**

The overall reliability is assessed by running a test for the Cronbach’s alpha coefficient in SPSS, before SEM begins. This is computed for each construct variable to measure the overall extent to which each item or question shares commonality with other items in the same construct (Krommenhoek & Galpin, 2013). The scale for Cronbach’s alpha ranges from 0 to 1, with coefficients closer to 1 indicating greater extent of internal consistency (Spitzer, et al., 1978; Gliem & Gliem, 2003). Coefficients of 0.6 and greater are considered to be acceptable for confirming overall internal consistency (Krommenhoek & Galpin, 2013).

**Composite reliability (CR)**

When data analysis involves SEM, for purposes of confirming reliability, Hair, Black, Babin, Anderson & Latham (2006) suggest using both the Cronbach’s alpha and CR because the Cronbach’s coefficient tends to understate reliability. CR computes the internal consistency at the item level, using the CFA factor loadings from each item generated from a structural model (Kline, 1998). It is therefore calculated after the CFA model is developed. It is computed using the formula:

\[
CR_\eta = \frac{(\sum \lambda yi)^2}{(\sum \lambda yi)^2 + (\sum \epsilon i)},
\]

where \((\sum \lambda yi)^2\) represents the square of the summation of the factor loadings generated by the CFA model, and \((\sum \epsilon i)\) represents the summation of error variances. Like the Cronbach’s alpha, CR ranges from 0 to 1, with coefficients closer to 1 indicating more internal consistency. Although a recommended threshold for CR is 0.7 (Nunnally & Bernstein, 1994), a coefficient of 0.6 is also viewed as marginally acceptable (Krommenhoek & Galpin, 2013).
4.7.5. Validity

The extent to which the research instrument measures what it is intended to measure so at to draw accurate findings and conclusions is confirmed by validity (Leedy & Ormrod, 2005). The validity of the construct assess how well the research instrument captures and measures the construct variables (Zait & Bertea, 2011), and in this case, whether the survey questionnaire captures and measures management’s commitment to their occupation, management’s continuous learning, management’s ethics, organisational entrepreneurship and organisational performance. There are numerous types of construct validity, and this research uses discriminant validity and convergent validity (Zait & Bertea, 2011).

**Discriminant validity**

Discriminant validity is based on the notion that, because each construct is measuring one variable, the items should therefore be more highly correlated with each other than with items from other constructs (Lucas, Diener & Suh, 1996). This is important for determining the degree to which the constructs are discriminant or distinguishable from one another and are not measuring the same variable (Lucas, et al., 1996; Zait & Bertea, 2011). This is done by generating an inter-construct correlation matrix in SPSS and computing average variance extracted (AVE) estimates for each construct.

**Discriminant validity: Inter-construct correlation matrix**

The inter-construct correlation matrix plots the constructs against one another to examine the strength of their relations with one another. The correlation coefficients run from negative infinity to positive 1, with lesser absolute values indicating less degree of correlation and therefore more discriminant construct validity (Zait & Bertea, 2011). Negative coefficients indicate negative correlations while positive coefficients indicate positive correlations between constructs. The recommended upper limit is 0.7 (Bagozzi & Yi, 1988; Lucas, et al., 1996) as coefficients closer to 1 suggest that the correlated constructs may be measuring the same variable. In this research, discriminant validity is assessed for the constructs using an inter-construct correlation matrix.

**Discriminant validity: Average Variance Extracted (AVE)**

For any one construct, the average variance extracted (AVE) is an indicator of the amount of variation accounted for by the construct as compared with variance due to the measurement
error (Segars, 1997). Like CR, it is computed at an item level using the factor loadings generated from the CFA model, and is calculated using the formula:

\[ V_\eta = \frac{\sum \lambda_i^2}{\lambda_i^2 + \sum \varepsilon_i} \]

where \( \sum \lambda_i^2 \) represents the summation of the squared of factor loadings, and \( \sum \varepsilon_i \) represents the summation of error variances. AVE ranges from 0 to 1, with values closer to 1 indicating greater variance being attributable to the construct. It is recommended for the AVE to be equal to or greater than 0.5 (Fornell & Larcker, 1981), as this suggests that the variance attributable to the construct is greater than the variance due to measurement error. However, AVE values above 0.4 are considered to be marginally acceptable.

**Convergent validity**

Convergent validity describes the extent to which each item in a construct variable correlates to the construct variable to affirm that it is measuring the same variable as other items in that variable (Campell & Fiske, 1959). This can be established by generating item-to-total correlations in SPSS to measure how each item is attributable to the construct variable, as well as by examining the factor loadings generated by the CFA model.

**4.7.6. Model fit criteria**

Models are tested for model fit using criteria to assess the extent to which the assumed relationships between the variables fit the conceptual model. There are numerous indicators to assess model fit, and this research deals with Chi-square, the comparative fit (CFI), incremental fit (IFI), normed fit (NFI) and Tucker-Lewis (TLI) indices, and the root mean square error approximation (RMSEA). Both the CFA and path models were assessed for model fit to measure the extent to which the relationships assumed in the research hypotheses fit the empirical model.

**Model fit criterion: Chi-square**

Chi-square, as a statistic for goodness of fit, measures the extent to which observations are not due to chance, but rather fits the postulated model (Kline, 1998; Krommenhoek & Galpin, 2013). It is denoted by \( \chi^2 / df \), (chi-square over degrees of freedom) and is measured in terms of positive numbers. An acceptable level for chi-square is below 3 (Ullman, 2001; Lei & Lomax, 2005).
Model fit indices: CFI, IFI, NFI and TLI

The indices listed above assess model fit by comparing the model to a null model, that is, a model that assumes that the variables are not correlated (Byrne, 1994). Their scales range from 0 to 1, although some may exceed 1, where model fit increases towards 1. CFI, otherwise called the Bentler CFI, considers the difference between covariances of the predicted and measured observations (Byrne, 1994). Good model fit is assumed when the CFI is greater than 0.9 (Chinomona, 2011). IFI, known as Bollen’s IFI, assesses model fit by comparing the chi-square of the null model with that of the postulated model as a proportion of the degrees of freedom of the postulated model. Like the CFI, model fit is acceptable for values greater than 0.9 (Bollen, 1989).

NFI, also the Bentler-Bonette NFI, considers the difference between the chi-square of the postulated and null model, as a proportion of the chi-square of the null model. An acceptable model of 0.9 or greater indicates that the postulated model improves fit by 90% of the null model (Schumacker & Lomax, 2004). TLI, otherwise called the Non-normed fit index, assesses model fit like the NFI (Tucker & Lewis, 1973). Ullman (2001) suggests that the NFI is sensitive to sample size and amount of parameters, which the TLI is able to accommodate (Tucker & Lewis, 1973).

Model fit criterion: Random mean square error approximation (RMSEA)
RMSEA assess model fit by determining the extent to which the model with indefinite parameter estimates would fit to the population covariance (Browne & Cudeck, 1992; Chinomona, 2011). Therefore, unlike the above-mentioned indices that measure the goodness fit, RMSEA assesses how badly the indefinite model fits the postulated model. As such, values towards 0 reflect better model fit, and a value of 0.08 is considered acceptable (Browne & Cudeck, 1992).
4.7.7. Summary of data analysis procedures

Data analysis procedures are summarised in the diagram below.

*Figure 8: Summary of data analysis procedures*
CHAPTER V: Findings, Data Analysis and Results

Chapter outline

- Introduction
- Findings
- Presentation of results
- Discussions
5.1. **Introduction**

In order to make generalisations about managers’ contributions to NPO’s entrepreneurship and performance based on the quantitative data obtained from the sample, it is necessary to analyse the data captured on the research instrument. Ultimately, the aim of analysing the data is to determine the causal relations between the management capabilities and organisational entrepreneurship, and organisational entrepreneurship and organisational performance. This chapter has three distinct sections dedicated at presenting the findings about the respondents, outlining the empirical analysis and discussing the results of the study. Section 5.2 familiarises with the findings of the research prior to empirical analysis. This includes a profile of the respondents as well as statistics describing their responses. Section 5.3 outlines the empirical data analysis previously elaborated on in Chapter 4, followed by section 5.4, which deals with detailed discussions pertaining to the constructs and empirical results.

5.2. **Findings**

Data was sufficiently captured on 257 questionnaires, after approximately 60% of potential participants responded to the research and three void questionnaires were excluded during data cleaning process. Descriptive statistics were run in SPSS to provide the respondent profile and allow for comparisons among the types of NPOs with respect to the research. The respondent profile in Table 3 below provides a summary of background information of the respondents that participated in the research.

5.2.1. **Descriptive statistics**

To present some findings about the research, the data collected was analysed to examine the profile of the respondents who participated in the research as well as average responses on the Likert scale items.

**Respondent profile**

The respondent profile describes a sample of 53 male and 204 female NPO managers from at the five types of organisations outlined in the questionnaire. The majority of the respondents were aged between 41 and 60 years and spread among board member, senior manager and operational manager job titles. From a total of 227 research questionnaires captured, 29.2% were from respondents in care organisations, 20.6% from health and disability care
organisations, 20% from education-based organisations and 16% from advocacy organisations. Almost 50% of the respondents’ organisations support 21-40 community members, and almost 70% of the respondents had been with their current organisation for ten years or less.

With regards to educational background, 68 respondents were from business or commerce fields, 63 from health, 59 from social welfare, 37 from public administration and 30 from other backgrounds. Some respondents were from agricultural, educational and arts backgrounds. The respondent profile is displayed in Table 3.

Table 3: Respondent profile

<table>
<thead>
<tr>
<th>Research construct</th>
<th>Category</th>
<th>Frequency</th>
<th>Percent (%)</th>
<th>Cumulative Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organisation type</td>
<td>Health and Disability care</td>
<td>53</td>
<td>20.6</td>
<td>20.6</td>
</tr>
<tr>
<td></td>
<td>Other Care</td>
<td>75</td>
<td>29.2</td>
<td>49.8</td>
</tr>
<tr>
<td></td>
<td>Advocacy</td>
<td>41</td>
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<td>65.8</td>
</tr>
<tr>
<td></td>
<td>Education</td>
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</tr>
<tr>
<td></td>
<td>Other</td>
<td>36</td>
<td>14.0</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>257</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Members supported by NPO</td>
<td>1-20</td>
<td>97</td>
<td>37.7</td>
<td>37.7</td>
</tr>
<tr>
<td></td>
<td>21-40</td>
<td>128</td>
<td>49.8</td>
<td>87.5</td>
</tr>
<tr>
<td></td>
<td>41-60</td>
<td>32</td>
<td>12.5</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>257</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Years’ experience in NPOs</td>
<td>1-5</td>
<td>63</td>
<td>24.5</td>
<td>24.5</td>
</tr>
<tr>
<td></td>
<td>6-10</td>
<td>64</td>
<td>24.9</td>
<td>49.4</td>
</tr>
<tr>
<td></td>
<td>11-15</td>
<td>72</td>
<td>28.0</td>
<td>77.4</td>
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<tr>
<td></td>
<td>16-20</td>
<td>47</td>
<td>18.3</td>
<td>95.7</td>
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<tr>
<td></td>
<td>20+</td>
<td>11</td>
<td>4.3</td>
<td>100.0</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>257</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>Years in current NPO</td>
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<td>99</td>
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<td>38.5</td>
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<tr>
<td></td>
<td>6-10</td>
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<td>28.4</td>
<td>66.9</td>
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<td>11-15</td>
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<td>Total</td>
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### Table 3: Respondent profile continued

<table>
<thead>
<tr>
<th>Research construct</th>
<th>Category</th>
<th>Frequency</th>
<th>Percent (%)</th>
<th>Cumulative Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Educational background</strong></td>
<td>Social welfare</td>
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</tr>
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<td></td>
<td>Business / Commerce</td>
<td>68</td>
<td>26.5</td>
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<td>Public administration</td>
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<td>88.3</td>
</tr>
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<td></td>
<td>Other</td>
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<td></td>
<td>Total</td>
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<td>100.0</td>
<td></td>
</tr>
<tr>
<td><strong>Job title</strong></td>
<td>Executive / Board member</td>
<td>64</td>
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<td>24.9</td>
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<td>Senior manager</td>
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<td>Operational manager</td>
<td>54</td>
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<td>Administrative</td>
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<td>19.8</td>
<td>92.6</td>
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<td></td>
<td>Other</td>
<td>19</td>
<td>7.4</td>
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<td></td>
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<td>100.0</td>
<td></td>
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<tr>
<td><strong>Research construct</strong></td>
<td>Category</td>
<td>Frequency</td>
<td>Percent (%)</td>
<td>Cumulative Percent (%)</td>
</tr>
<tr>
<td><strong>Age group</strong></td>
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<td>31-40</td>
<td>42</td>
<td>16.3</td>
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<td>41-50</td>
<td>66</td>
<td>25.7</td>
<td>52.9</td>
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<td></td>
<td>51-60</td>
<td>88</td>
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</tr>
<tr>
<td></td>
<td>over 60</td>
<td>33</td>
<td>12.8</td>
<td>100.0</td>
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<td>Total</td>
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<tr>
<td><strong>Gender</strong></td>
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<td></td>
<td>Total</td>
<td>257</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Figure 9 on the next page illustrates the respondents by their organisation types. The graph shows that 75 respondents were from care-providing organisations, such as children, adolescent and adult homes, and 53 from health and disability care organisations, such as hospices. Other organisations included community-based businesses, development groups and resource aid group, among many others.
Average responses on Likert scales

Having viewed the respondent profile, average responses on the Likert scale items of the questionnaire are displayed in Table 4 on the following page. These show participants’ mean responses to items about the constructs under study in the research. Overall responses on the questionnaire were between 3 and 4 on the 5-point Likert scales, which indicate relatively positive responses for the variables. Empirically, averages responses range from 3.90 for organisational entrepreneurship to 4.51 for organisation’s performance. The table presents in the mean scores for each item, as well as the standard deviations. The standard deviation shows the amount of points each response differs or deviates from the mean score (Krommenhoek & Galpin, 2013). This helps to determine approximately how far from the mean, positively or negatively, other responses are.

The lowest scored question asks “Compared to other voluntary organisations, how has your organisation been at introducing improved products and services based on new knowledge or technology?” (item OrEnt1, which scored 3.86). This reflects that, on average, managers feel their organisations range from being considerably as active as other organisations to being considerably more active than other organisations and this reflects positively on the overall score for contributing to organisational entrepreneurship. The highest scored question pertains to organisation’s performance (item OrPerf5), and reflects that the NPOs agree-strongly agree that their organisations have attracted more volunteers over the past three years. This reflects positively for the overall score for organisation’s performance.
Management’s commitment to their occupation scored highest for the item in which respondents agreed that working in the voluntary organisation was more than just a job, with an average empirical score of 4.21 for item MgCmt2. This positively contributes to the score for this construct. The highest scoring item pertaining to management’s continuous education, an average empirical score of 4.13 on item MgEdu1, reflects that NPO’s management teams agreed that the continuous education of managers is important. This item was negatively phrased on the questionnaire, and was reversed to reflect the scores for this construct in the same direction as the other items. With a corresponding standard deviation of 0.8, some respondents felt neutral about continuous education being important to management teams.

### Table 4: Average responses

<table>
<thead>
<tr>
<th>Research constructs</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management's commitment to their occupation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MgCmt2</td>
<td>4.21</td>
<td>0.64</td>
<td>257</td>
</tr>
<tr>
<td>MgCmt4</td>
<td>4.13</td>
<td>0.72</td>
<td>257</td>
</tr>
<tr>
<td>MgCmt5</td>
<td>4.05</td>
<td>0.72</td>
<td>257</td>
</tr>
<tr>
<td>Management's continuous education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MgEdu1^</td>
<td>4.13</td>
<td>0.80</td>
<td>257</td>
</tr>
<tr>
<td>MgEdu2</td>
<td>3.98</td>
<td>0.70</td>
<td>257</td>
</tr>
<tr>
<td>MgEdu3</td>
<td>4.00</td>
<td>0.63</td>
<td>257</td>
</tr>
<tr>
<td>MgEdu4</td>
<td>4.10</td>
<td>0.56</td>
<td>257</td>
</tr>
<tr>
<td>MgEdu5</td>
<td>4.04</td>
<td>0.56</td>
<td>257</td>
</tr>
<tr>
<td>Management's ethics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MgEth1</td>
<td>4.30</td>
<td>0.71</td>
<td>257</td>
</tr>
<tr>
<td>MgEth2</td>
<td>4.10</td>
<td>0.67</td>
<td>257</td>
</tr>
<tr>
<td>MgEth3^</td>
<td>4.20</td>
<td>0.65</td>
<td>257</td>
</tr>
<tr>
<td>MgEth4</td>
<td>4.13</td>
<td>0.67</td>
<td>257</td>
</tr>
<tr>
<td>MgEth5</td>
<td>4.41</td>
<td>0.73</td>
<td>257</td>
</tr>
<tr>
<td>Organisational entrepreneurship</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OrEntr1</td>
<td>3.86</td>
<td>0.64</td>
<td>257</td>
</tr>
<tr>
<td>OrEntr2</td>
<td>4.03</td>
<td>0.78</td>
<td>257</td>
</tr>
<tr>
<td>OrEntr3</td>
<td>4.14</td>
<td>0.87</td>
<td>257</td>
</tr>
<tr>
<td>OrEntr4</td>
<td>4.09</td>
<td>0.89</td>
<td>257</td>
</tr>
<tr>
<td>OrEntr5</td>
<td>3.84</td>
<td>0.79</td>
<td>257</td>
</tr>
<tr>
<td>OrEntr6</td>
<td>4.33</td>
<td>0.92</td>
<td>257</td>
</tr>
<tr>
<td>Organisation's performance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OrPerf1</td>
<td>4.40</td>
<td>0.76</td>
<td>257</td>
</tr>
<tr>
<td>OrPerf2</td>
<td>4.04</td>
<td>0.76</td>
<td>257</td>
</tr>
<tr>
<td>OrPerf3</td>
<td>4.01</td>
<td>0.64</td>
<td>257</td>
</tr>
<tr>
<td>OrPerf4</td>
<td>3.95</td>
<td>0.84</td>
<td>257</td>
</tr>
<tr>
<td>OrPerf5</td>
<td>4.37</td>
<td>0.90</td>
<td>257</td>
</tr>
</tbody>
</table>

Notes: ^ This question was negatively phrased and reversed for analysis purposes.
Management’s ethics scored highest for the item indicating that respondents feel strongly about the continuation of the NPO into the future (item MgEth5). With a score of 4.41 and standard deviation of 0.73, some respondents strongly agreed with the statement. Organisational entrepreneurship scored highest in the item, as shown in Table 5 in the next page, where respondents supported using existing knowledge and techniques to improve their organisations. This item also has the highest standard deviation of 0.92, suggesting wide deviations from the mean responses of 4.33.

Overall, the relatively high means score reflected respondents’ tendency to associate themselves positively with the management characteristics, organisational entrepreneurship and organisational performance. The responses were analysed further to determine the percentages of the responses by item. For each item, the majority of the respondents seemed to agree or strongly agree with the statement, as shown by the double-digit percentages under “agree” and “strongly agree”. This further confirmed the respondents’ tendency to positive associate with the management characteristics. However, “neutral” responses fluctuated between 3% and 20% for some items.

Still on item responses, Figure 10 on page 70 depicts participant responses to particular questions of interest. As part of the organisations’ performance items, 56% of respondents strongly feel that their organisation has improved its service quality offered to consumers over the last three years, and a minor 2% disagree. A third of the respondents feel strongly about leaving the voluntary organisation as they would feel guilty while 56% agree that this applies to them. This indicates a negative motivation to remain committed to the organisation.
Table 5: Responses by item

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
<th>Percentage per item</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>Management commitment to occupation</td>
<td>2</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>0%</td>
</tr>
<tr>
<td>Management continuous education</td>
<td>1^</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>0%</td>
</tr>
<tr>
<td>Management Ethics</td>
<td>1</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>3^</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>0%</td>
</tr>
<tr>
<td>Organisation’s Performance</td>
<td>1</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>0%</td>
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<tr>
<td>Organisational Entrepreneurship</td>
<td>1</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>0%</td>
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<td></td>
<td>5</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>0%</td>
</tr>
</tbody>
</table>

Notes: ^ This question was negatively phrased and reversed for analysis purposes.
Figure 10: Responses on service quality and commitment

Figure 11: Response on management ethics

Regarding management’s ethics, 47% of respondents feel strongly about prioritising the interests of their organisation and an equal proportion agree with this, as illustrated in Figure 11 on the left. This raises the expectation that management teams’ ethic would have a strong impact on contributing to the organisation’s entrepreneurship, as prioritised interests can lead to greater involvement in creative activities that benefit the organisation.

On the subject of organisational entrepreneurship, 14% of respondents feel their organisations are as active as others when it comes to performing research and development activities concerned with improving their offerings to their consumers, while 44% feel that their organisations are much more active, as illustrated in Figure 11 below. This indication of internally generated entrepreneurship may be attributed to performance, such as the 94% who feel their organisations have improved service quality, shown previously in Figure 3.
These findings help to the results expected from the analysis of the data. This anticipates high scores for management characteristics ability to contribute to their organisations’ entrepreneurship, as well as organisational entrepreneurship to strongly influence performance.

5.3. **PRESENTATION OF RESULTS**

Results of the empirical analyses are presented in the two stages of the structural equation modelling procedure.

5.3.1. **Structural equation modelling (SEM): CFA stage**

Once the overall internal consistency was confirmed by the Cronbach’s alpha test run in SPSS, SEM was used to test and evaluate the relationships between the variables, as assumed by the hypotheses (Bollen, 1989). This involved determining the relationships between the independent variables (managerial capabilities) and dependent variables (organisational entrepreneurship and organisational performance) by running the data in AMOS Graphics 22 statistical package.
CFA model

The CFA model was constructed as shown in Figure 13 on the following page. Construct variables were drawn in large circles and were correlated to one another by bi-directional arrows (Byrne, 2010). Items for each construct were drawn in rectangular boxes and were each allocated a unique error term. The CFA model returned factor loadings of each item with respect to the construct, as well a model fit indicators (Gaskin, 2011). Items that loaded below 0.5 (namely MgCmt1 and MgCmt3) were deleted from the model and model fit indicators were verified for acceptable levels each time the model was re-run (Byrne, 2010; Gaskin, 2011).

Figure 13: CFA model

CFA: Accuracy analytics

The factor loadings returned by the CFA procedure were used to compute composite reliability (CR) and average variance extracted (AVE) (see Appendix B), as explained previously in chapter 4. As indicated in Table 6 on the following page, Cronbach’s alpha and
CR estimate for all constructs returned above 0.6, thereby meeting the marginally acceptable level of 0.6. AVE estimates of 0.4 and above were considered to be marginally acceptable.

Because CR and AVE were computed using factor loadings from the CFA model, they pertained to items that satisfied the requirement for factor loadings to be greater than 0.5 (Lucas, et al., 1996). Items that loaded below this threshold were deleted from the CFA model and the model re-constructed. For this reason, items MgCmt1 and MgCmt3 were excluded from the CFA model. Cronbach’s alpha and CR jointly indicate that the scales used to measure management’s commitment to occupation, management’s continuous education, management’s ethics, organisational entrepreneurship and organisation’s performance are internally consistent.

Table 6: Reliability and accuracy analytics

<table>
<thead>
<tr>
<th>Research constructs</th>
<th>Item</th>
<th>Item</th>
<th>Alpha value</th>
<th>CR</th>
<th>AVE</th>
<th>Factor loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management’s commitment to occupation</td>
<td>MgCmt2</td>
<td>0.462</td>
<td>0.747</td>
<td>0.701</td>
<td>0.439</td>
<td>0.702</td>
</tr>
<tr>
<td></td>
<td>MgCmt4</td>
<td>0.486</td>
<td></td>
<td></td>
<td></td>
<td>0.644</td>
</tr>
<tr>
<td></td>
<td>MgCmt5</td>
<td>0.417</td>
<td></td>
<td></td>
<td></td>
<td>0.639</td>
</tr>
<tr>
<td>Management’s continuous education</td>
<td>MgEdu1</td>
<td>0.473</td>
<td></td>
<td></td>
<td></td>
<td>0.721</td>
</tr>
<tr>
<td></td>
<td>MgEdu2</td>
<td>0.548</td>
<td></td>
<td></td>
<td></td>
<td>0.655</td>
</tr>
<tr>
<td></td>
<td>MgEdu3</td>
<td>0.565</td>
<td>0.831</td>
<td>0.830</td>
<td>0.495</td>
<td>0.621</td>
</tr>
<tr>
<td></td>
<td>MgEdu4</td>
<td>0.618</td>
<td></td>
<td></td>
<td></td>
<td>0.735</td>
</tr>
<tr>
<td></td>
<td>MgEdu5</td>
<td>0.567</td>
<td></td>
<td></td>
<td></td>
<td>0.775</td>
</tr>
<tr>
<td>Management’s ethics</td>
<td>MgEth1</td>
<td>0.509</td>
<td></td>
<td></td>
<td></td>
<td>0.743</td>
</tr>
<tr>
<td></td>
<td>MgEth2</td>
<td>0.548</td>
<td></td>
<td></td>
<td></td>
<td>0.745</td>
</tr>
<tr>
<td></td>
<td>MgEth3</td>
<td>0.564</td>
<td>0.872</td>
<td>0.877</td>
<td>0.589</td>
<td>0.737</td>
</tr>
<tr>
<td></td>
<td>MgEth4</td>
<td>0.600</td>
<td></td>
<td></td>
<td></td>
<td>0.776</td>
</tr>
<tr>
<td></td>
<td>MgEth5</td>
<td>0.696</td>
<td></td>
<td></td>
<td></td>
<td>0.832</td>
</tr>
<tr>
<td>Organisational entrepreneurship</td>
<td>OrEntr1</td>
<td>0.494</td>
<td></td>
<td></td>
<td></td>
<td>0.578</td>
</tr>
<tr>
<td></td>
<td>OrEntr2</td>
<td>0.622</td>
<td></td>
<td></td>
<td></td>
<td>0.684</td>
</tr>
<tr>
<td></td>
<td>OrEntr3</td>
<td>0.550</td>
<td>0.864</td>
<td>0.859</td>
<td>0.506</td>
<td>0.745</td>
</tr>
<tr>
<td></td>
<td>OrEntr4</td>
<td>0.599</td>
<td></td>
<td></td>
<td></td>
<td>0.747</td>
</tr>
<tr>
<td></td>
<td>OrEntr5</td>
<td>0.642</td>
<td></td>
<td></td>
<td></td>
<td>0.733</td>
</tr>
<tr>
<td></td>
<td>OrEntr6</td>
<td>0.466</td>
<td></td>
<td></td>
<td></td>
<td>0.764</td>
</tr>
<tr>
<td>Organisation’s performance</td>
<td>OrPerf1</td>
<td>0.602</td>
<td></td>
<td></td>
<td></td>
<td>0.816</td>
</tr>
<tr>
<td></td>
<td>OrPerf2</td>
<td>0.602</td>
<td></td>
<td></td>
<td></td>
<td>0.724</td>
</tr>
<tr>
<td></td>
<td>OrPerf3</td>
<td>0.512</td>
<td>0.847</td>
<td>0.874</td>
<td>0.583</td>
<td>0.785</td>
</tr>
<tr>
<td></td>
<td>OrPerf4</td>
<td>0.564</td>
<td></td>
<td></td>
<td></td>
<td>0.678</td>
</tr>
<tr>
<td></td>
<td>OrPerf5</td>
<td>0.499</td>
<td></td>
<td></td>
<td></td>
<td>0.805</td>
</tr>
</tbody>
</table>

Notes: ^ This question is negatively phrased and is reversed for analysis purposes
CFA: Construct validity

Construct validity tested convergent validity in terms of item-total correlations and factor loadings, and discriminant validity in terms of AVE estimates and the inter-construct correlation estimates. AVE estimates were considered to be marginally acceptable, however, even though some item-total correlations were below 0.5, their corresponding factor loadings were well above the 0.5 threshold and the items were therefore retained. Overall, the items converged well within their respective constructs, thus confirming convergent validity.

Based on the correlation matrix in Table 7 below, correlations between constructs were below the 0.7 threshold (Bagozzi & Yi, 1988), which indicates sufficient discriminant validity. Therefore, there was a greater extent of each construct measuring the variable it is intended to measure. Construct correlations indicated by 1 show that constructs are measuring completely their intended variables (Krommenhoek & Galpin, 2013), which illustrates validity. The highest inter-construct correlation returned was 0.637, between organisational entrepreneurship and organisation’s performance, showing 63% of the measurement of organisational entrepreneurship and organisation’s performance variables being accounted for in both constructs.

Table 7: Inter-construct correlation Matrix

<table>
<thead>
<tr>
<th>Inter-Item Correlation Matrix</th>
<th>MgCmt</th>
<th>MgEdu</th>
<th>MgEth</th>
<th>OrEntr</th>
<th>OrPerf</th>
</tr>
</thead>
<tbody>
<tr>
<td>MgCmt</td>
<td>1</td>
<td>0.45</td>
<td>0.62**</td>
<td>0.35**</td>
<td>0.36**</td>
</tr>
<tr>
<td>MgEdu</td>
<td>1</td>
<td></td>
<td>0.35**</td>
<td>0.65**</td>
<td>0.52**</td>
</tr>
<tr>
<td>MgEth</td>
<td></td>
<td>1</td>
<td>0.49</td>
<td></td>
<td>0.60</td>
</tr>
<tr>
<td>OrEntr</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>0.637</td>
</tr>
<tr>
<td>OrPerf</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

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

CFA: Model fit

The model fit indicators are summarised in Table 8 on the following page. All together, the chi-square value, CFI, IFI, NFI, TLI and RMSEA indicate that construct variables with their item variables relate to one another, thereby confirming model fit (Hair, et al., 2006). The chi-square value of 2.36, which is below the recommended upper limit of 3, confirms that observations are not due to chance, but rather fit the postulated model (Kline, 1998; Krommenhoek & Galpin, 2013), thereby indicating goodness of fit.
The CFI value of 0.92, which is above the 0.9 threshold considers the difference between covariances of the predicted and measured observations to be acceptable (Byrne, 1994). IFI of 0.9 indicates that comparison between the the chi-square of the null model with that of the postulated CFA model as a proportion of the degrees of freedom of the postulated model is satisfactory as it is at the acceptable level 0.9 (Bollen, 1989). NFI and TLI values of 0.9 and 0.901 respectively considers the difference between the chi-square of the postulated and null model, as a proportion of the chi-square of the null model to be satisfactory.

Table 8: CFA Model fit indicators

<table>
<thead>
<tr>
<th>Model fit indicators</th>
<th>Acceptable level</th>
<th>Result</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>chi-square (χ²)</td>
<td>less than 3</td>
<td>2.361</td>
<td>Acceptable (Ullman, 2001)</td>
</tr>
<tr>
<td>Comparative fit index (CFI)</td>
<td>0.9 and above</td>
<td>0.93</td>
<td>Acceptable (Byrne, 1994)</td>
</tr>
<tr>
<td>Incremental fit index (IFI)</td>
<td>0.9 and above</td>
<td>0.93</td>
<td>Acceptable (Bollen, 1989)</td>
</tr>
<tr>
<td>Normed fit index (NFI)</td>
<td>0.9 and above</td>
<td>0.90</td>
<td>Acceptable (Bollen, 1989)</td>
</tr>
<tr>
<td>Tucker-Lewis index (TLI)</td>
<td>0.9 and above</td>
<td>0.91</td>
<td>Acceptable (Tucker &amp; Lewis, 1973)</td>
</tr>
<tr>
<td>Root mean square error of approximation (RMSEA)</td>
<td>Less than 0.08</td>
<td>0.07</td>
<td>Acceptable (Browne &amp; Cudeck, 1992)</td>
</tr>
</tbody>
</table>

5.1.1. Structural equation modelling: Path model

Following CFA is the path modelling procedure which generates equations that help to empirically determine the extent to which the variables relate to one another (Byrne, 1994). This was used to test the hypotheses by quantifying the extent of causal relations between the constructs in the conceptual model. Path coefficients of magnitudes greater than 0.5 were considered to be acceptable for causal relation (Bagozzi & Yi, 1988). Results of the path modelling procedure are used to determine whether the hypotheses postulated hold.
Path model

The path model illustrated in Figure 14 was constructed similarly to the CFA model, however it differs from the CFA model in that it is drawn with one-directional arrows between the construct variables, in a way that resembles the conceptual model (illustrated in chapter 3) for the research (Byrne, 2010; Gaskin, 2011). Error terms were allocated to each dependent variable construct (Byrne, 1994), which are organisational entrepreneurship and organisation’s performance. The model was run to return standardised regression weights representing the extent of the causal relation between the construct variables. These are summarised in Table 9.

*Figure 14: Path model*

![Path model diagram](image)

Notes: MgCmt: Management’s commitment to their occupation; MgEdu: Management’s continuous education; MgEth: Management’s ethics; OrEntr: Organisational entrepreneurship; OrPerf: Organisational performance

Path modelling: Path analysis

Path analysis follows the path model and assesses how well the hypotheses are supported by the resultant path model (Bagozzi & Yi, 1988). The four hypotheses are accepted or not accepted based on the path coefficient on the resultant path model. Given the acceptable level
of 0.5 (Byrne, 2010), with best results being close to 1, hypotheses 2, 3 and 4 are sufficiently supported by the model, while hypothesis 1 is not, as seen in Table 9 below.

Table 9: Path analysis

<table>
<thead>
<tr>
<th>Proposed relationship</th>
<th>Hypotheses</th>
<th>Path coefficient</th>
<th>p-value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>MgCmt → OrEntr</td>
<td>H1</td>
<td>0.382</td>
<td>p&lt;0.1</td>
<td>Not supported</td>
</tr>
<tr>
<td>MgEdu → OrEntr</td>
<td>H2</td>
<td>0.607</td>
<td>p&lt;0.01</td>
<td>Supported and significant</td>
</tr>
<tr>
<td>MgEth → OrEntr</td>
<td>H3</td>
<td>0.581</td>
<td>p&lt;0.01</td>
<td>Supported and significant</td>
</tr>
<tr>
<td>OrEntr → OrPerf</td>
<td>H4</td>
<td>0.866</td>
<td>p&lt;0.01</td>
<td>Supported and significant</td>
</tr>
</tbody>
</table>

Notes: MgCmt: Management’s commitment to their occupation; MgEdu: Management’s continuous education; MgEth: Management’s ethics; OrEntr: Organisational entrepreneurship; OrPerf: Organisation’s performance

Path modelling: Hypothesis testing

Manager’s continuous education shows to have a moderately positive causal relation to organisational entrepreneurship, as indicated by the 0.607 path coefficient. Therefore, the path analysis supports the hypothesis postulated that management’s continuous education positively affects the organisational entrepreneurship. The same applies to the hypothesis that management’s ethics positively causally related to organisational entrepreneurship, given the path coefficient 0.581. The hypothesis that management’s commitment to their occupation has a positive causal relation to organisational entrepreneurship, indicated by path coefficient 0.382, is not supported because the path coefficient falls below the 0.5 threshold. The hypothesis that organisational entrepreneurship has a significant positive causal relation to organisation’s performance, as indicated by the path coefficient 0.793, is hypothesis is supported, thereby suggesting a strong causal relation between the two constructs.
5.2. **Discussions**

The following discussions are based on the results of the hypothesis testing in the path analysis.

5.2.1. **Management’s continuous education and Organisational entrepreneurship**

Of the three management characteristics studied in this research, the continuous education of managers in the sampled NPOs proved empirically to be the management competency with the greatest positive effect on organisational entrepreneurship. At the 99.9% confidence level, management’s continuous education shows to have a moderately strong causal effect on the organisation’s entrepreneurship for this sample.

This reverts to the theory of the learning organisation (Drejer, 2006; Sessa, et al., 2011), which suggests that organisations whose employees engage in knowledge generation activities remain relevant to changes in their external environment. Moreover, given the constant changes in technologies procedures that affect the organisations, keeping abreast with information about new technologies and procedures is critical to fostering innovation for the organisation (Chiva, et al., 2010). Because the study deals with internally generated entrepreneurship, the results show that management teams’ interest in continuous education can contribute to their creativity, flexibility and constructive risk-taking.

Management’s participation in research and workshops for knowledge sharing is crucial for NPOs. The Department of Social Development recognises this and facilitates financial management platforms for NPOs, while more than 70% of respondents indicate their encouragement to attend workshops on financial management as part of their continuous education. Researching and conferencing for contemporary information proved to be important to most respondents, which can translate to creativity, in terms of new ways that NPOs can provide for their consumers.

Although NPOs indicate considerable interest in increased learning for purposes of creativity and flexibility, their propensity to take risks may be because of being risk averse. This may be improved by encouraging continuous education in areas such as investment and risk management, as these are important issues for organisations in a market-structured economy (Gans, et al., 2012).
5.2.2. Management commitment to occupation and Organisational entrepreneurship

At the 91% confidence level, the path model estimates the causal relationship between management’s commitment to their occupation and organisational entrepreneurship to be 0.382. Although positive, this is a weak relation, and suggests that management’s commitment has little influence on managers contributing to their organisation’s entrepreneurship. This is unexpected given implications that professional commitment of senior management is key in developing consumer orientation (Drucker, 1989; Hambrick, 1987; Kotler & Andersona, 1991), that market orientation theory supports that the degree to which managers in NPOs are committed to their profession encourages them to generate entrepreneurial thinking to benefit the organisation.

What is apparent is that market orientation highlights the importance of commitment of managers as a dimension of professionalism (Bartol, 1979; Wood, et al., 2000) rather than that of occupation. Compared to occupation, profession assumes formalised structures with rigid standards for maintaining the profession, and that demand compliance to certain requirements from members of the profession (Bagraim, 2003). By showing their commitment to the profession through membership fees, managers benefit from the body’s nature of being a hub for sharing and developing new knowledge and mechanisms relevant to the profession (Angle & Perry, 1981; Bagraim, 2003).

Although occupation may be rigorous as it demands skilled expertise, there is no requirement for NPO managers to subscribe and commit to such a body that maintains the integrity of the occupation of being in the non-profit sector, which could otherwise allow them to benefits from new knowledge and ideas pooled by the body (Uternam & Davis, 1984). The conceptual relationship with professional commitment in market orientation (Wood & Bhuian, 1993) is based on managers in non-profit medical hospitals. Research questions and theoretical reasoning pertaining to commitment were therefore developed from research from a professional rather than occupational orientation. The theoretical differences between the occupation and the profession may explain in the empirically weak causal result.

Although the commitment of management teams to their occupation in the non-profit sector is empirically weak, it is still positive, which implies minor extent of causation to organisational entrepreneurship. Commitment remains an important factor, because without it, operational consistency in NPOs would not be supported (Bush, 1992; Stuart, 2013).
Extrapolating from the sample, managers in NPOs around Gauteng may benefit from the formation of organised non-profit bodies, to foster commitment and that will enable knowledge sharing with like-minded individuals (Martin, 2008). Actuaries as professional show their commitment to the profession by paying membership to the Actuary Society of South Africa (ASSA) (Angle & Perry, 1981; Actuarial Society of South Africa, 2014), as chartered accountants do with the South African Institute for Chartered Accountants (SAICA). With more than 10 000 NPOs registered with the Department of Social Development (Department of Social Development, 2014), generating commitment through similarly structured bodies may prove to enhance internally generated entrepreneurship for NPOs.

5.2.3. Management ethics and Organisational entrepreneurship

At the 99.1% confidence level, the effect of management ethics on organisational entrepreneurship reports a moderately positive empirical causal indicator. The empirical result implies that NPO management teams’ resolve to avoid self-interest and put the objectives of the NPO above financial gain, to feel responsible for taking the organisation through risky decisions and experiencing the organisation as career fulfilment rather than job placement, do contribute to the organisation’s entrepreneurship. Because the majority of scores on the research instrument contributed to the high score for management ethics, the path result may not be an issue of lack of management ethics, but rather a need for management’s ethics to translate more considerably into entrepreneurship for the NPOs.

Like commitment, management ethics are also considered to be a dimension of professionalism (Bartol, 1979; Wood, et al., 2000), and as in the case of management’s commitment, differences between occupation and profession may account for the causal relation returning below expectation. Market orientation relies on management teams’ professional ethics for the improvement of services offered to consumers (Wood, et al., 2000), and the ability to provide better services through creativity and bearing risk is fostered by entrepreneurial thinking (Stevenson, 2000) (Department of Trade and Industry, 2005). The importance of constructive risk-taking is emphasised to professionals, particularly to avoid reckless consumption of resources (King Committee on Corporate Governance, 2009) and offers the restraint element in entrepreneurship (Lant & Mezias, 1990; Yujuico, 2008). The restraint element, coupled with the notion of NPOs being risk averse (Gower, 2014) due to uncertainty, may be responsible for management teams contributing less than expected to their organisations’ entrepreneurship.
5.2.4. Organisational entrepreneurship and Organisation’s performance

The results of the path analysis confirm at the 99.9% confident level that organisational entrepreneurship has a significant positive causal relation to organisation’s performance, indicated by the path coefficient 0.793. The robust positive relation confirms that NPOs’ internally generated creativity, flexibility and risk taking ability highly influences their ability to serve their consumers with valuable offerings that improve their livelihood (Wood & Bhuian, 1993).

With performance being an indicator of sufficient use of resources (Kotler & Keller, 2012), this research identifies that NPOs, through their creativity, flexibility and risk-taking ability, manage to mobilise human and other resources to bring new value to their communities. A majority of the NPOs in the sample indicated an increase in the quality of service they offer to their consumers over the past three years. This can be evidenced by NPOs succeeding to operate over years with the primary objective to create social value in supportive health care such as hospices, where for-profit organisations would not (Gower, 2014). With regards to improvement of financial position, the ability of numerous advocacy and care NPOs to engage in fundraising activities calls for management teams to be creative and flexible in planning fund-raiser events (Spruce, 2010). In encouragement of NPOs, platforms such as CharitySA position their online presence with a statement by Theodore Roosevelt: “Do what you can, with what you have, where you are” (CharitySA, 2014), which engenders core principles of entrepreneurship (Dees, 1998).
CHAPTER VI: Conclusions and Recommendations

Chapter outline

Introduction

Conclusions of the study

Limitations of the study

Managerial implications

Recommendations for further research
6.1. **INTRODUCTION**

This chapter concludes on the relationships between management characteristics, and organisational entrepreneurship, and between organisational entrepreneurship and organisational performance, based on the discussion of the empirical results. It outlines limitations of the study, recommendations for managers and academics, as well as suggestions for further research that are motivated by this study.

6.2. **CONCLUSIONS OF THE STUDY**

Management continuous education has proven to be a management competency that allows management teams to contribute to their NPOs’ entrepreneurship capabilities. The importance lies in encouraging continuous learning of employees to enable them to remain relevant in terms of important information about technologies and their industries that affects their organisations. With ever-changing needs of consumers who are dependent on NPOs, innovative learning can only be encouraged more as discontinuing or reducing momentum to learn could result in reversed in providing innovated social value.

Due to theoretical differences in concepts of profession and occupation, commitment of NPO managers to their occupation in the non-profit sector proved to be less influential than continuous education. This shows a lack of the competency to influence internally the NPO’s entrepreneurship. Capabilities of NPO managers could be enhanced through the creation of knowledge sharing bodies, which can be achieved through commitment of managers to such bodies to benefit from pooled knowledge hubs that are necessary for driving innovation.

The overall resolve of managers in the sample of NPOs to “do the right thing” and continually create benefit for their organisations does little to make a significant impact on the organisation’s entrepreneurship. The restraint element, accompanied by management teams being risk averse, may be responsible for limiting managers’ contributions to entrepreneurship that could benefit their organisations. This highlights the importance of instilling principles of constructive risk-taking educational efforts to allow managers to learn about benefits of investing and managing risk in order to be sustainable.

Organisational entrepreneurship has proven to have a significant effect on the organisation’s performance, as expected. Given the effect from internally contributed entrepreneurship,
NPO management teams’ characteristics play a role in the eventual performance of their organisation. The importance of encouraging management teams to engage in risk-taking and pooling knowledge resources from similar organisations should see NPOs’ ability to support consumer groups with improved services.

6.3. LIMITATIONS OF THE STUDY

This research is specialised in its geographical scope because of its focus on voluntary organisations in Gauteng. For this reason, conclusions about management characteristics may only be applicable to voluntary organisations in the province, and may not be applicable to other provinces.

Although English is an official language in South Africa, the research instrument restricts respondents to only those who can read and write in English. Given the diversity of languages in South Africa, this research excludes respondents who are not fluent in English but are fluent in various other South African languages. By inherently excluding them, the research loses out on information that may be influenced by management’s ethnic diversity relevant to entrepreneurship.

The research was restricted to managers of organisations that opted to participate, and excluded those that declined. This therefore limited the sample to agreeable NPOs whose management teams may have different characteristics or characteristics from those that decided not to respond. Given a response rate of 60%, time constraints for the completion of the study could not allow for the desired sample size of 300 respondents to be obtained.

6.4. MANAGERIAL IMPLICATIONS

Three major implications for managers in NPOs are highlighted in this research. Firstly, management groups in NPOs that are interested in increasing their organisational entrepreneurship may consider creating or renovating in their business models structures to make provision for continuous education of their management teams in order to help managers to improve their contributions, and ultimately improve the performance of the organisation. The strong influence of continuous education on entrepreneurship for the organisation may encourage managers to invest in learning and knowledge sharing initiatives,
such as workshops, seminars and conferences to contribute to their organisations’ entrepreneurship.

Given the importance of management commitment to operational consistency and continuation, managers in NPOs should be encouraged to form or join collective bodies or societies that can help to moderate, maintain and encourage citizenship to the non-profit sector and knowledge generation relevant to the NPOs. The importance of operational and senior managers being members lies in their ability to influence decision-making and ground-level interactions with their consumers. Taking the example from organisations such as building societies that succeed locally because of their ability to pool capital and knowledge resources would allow managers in the non-profit sector lead their organisations more effectively.

The third managerial implication concerns building up management teams in NPOs to engage in constructive risk-taking with the organisation’s resources. Being risk averse may come from fear of failure of fundraising projects or due to uncertainty, is a hindering element of entrepreneurship. The question may arise as to why NPOs should be entrepreneurial at all, to which NPO management teams can expect that, in a world of ever-changing circumstances, for-profit and not-for-profit organisations operate in a market-structured economy which runs on competitiveness for scarce resources. The response of NPOs, like for-profit organisations, is to be innovative, which inherently requires managers to bear risk. The focus therefore is to facilitate learning and engagement of management teams with constructive risk that allows for the continuation, innovation and sustainability of the NPO.

6.5. **RECOMMENDATIONS FOR FURTHER RESEARCH**

Recommendations for further research are directed at both practitioners and academics, and are based on contributions to knowledge made during the research as well as ways of addressing limitations of the research.

Given the positive impacts of management characteristics on entrepreneurship within NPOs observed in the current study, researchers may also extend studies to include non-managerial members of the organisation, because the capabilities of all members of an organisation help to effect the organisation’s mandate. The intention would be for researchers and practitioners to consider investigating the likelihood of business model renovations that factor in the
competencies being adopted by both volunteer and non-volunteer intensive organisations. Moreover, to address a particular limitation, it is important for further research to consider using explorative methods to discover possible themes pertaining to value creation in NPOs. This could not be achieved by this research as it is based on a confirmatory research orientation. Explorative methods would be important to address unknown or suppressed market-related issues in NPOs.

The relevance of a society or citizenship body for various types of NPOs is in creating solidarity and knowledge hubs for managers on NPOs. However, given the importance of distinguishing theoretically between occupational and professional bodies, researcher would be required to investigate and draft propositions for the dimensionalities of citizenship for managers occupied in the non-profit sector. This should allow follow-up research on management characteristics in NPOs to not be restricted to competencies propositioned from profession-specific orientations.

Although there is evidence of entrepreneurship in NPOs, it is questionable whether the market economy is a suitable system for NPOs to operate in. Even though the Schumpeterian innovator makes for a good entrepreneur irrespective of for-profit or not-for-profit core objectives, researchers may be curious about alternative systems, other than the market discipline, that can be more conducive for NPOs. However philosophical, research that explores areas beyond the boundaries of the market-economy discipline may help to motivate alternative systems or mechanisms under which NPOs can thrive. Some prospective research questions to be addressed may include the following: “Do NPOs really operate in the market? How suitable is the market discipline for NPOs? What alternatives to the market discipline are there for NPOs?”
List of References

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Appendices

Appendix A: Research questionnaire

This questionnaire has six (6) sections (Sections A – F). Please complete all six sections.

SECTION A: Background Information

This section asks about your background. For each category, please tick ONE that applies to you.

1. Please indicate the type of organisation you work in.

<table>
<thead>
<tr>
<th>Organisation Type</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Health and disabilities care</td>
<td>1</td>
</tr>
<tr>
<td>Other Care</td>
<td>2</td>
</tr>
<tr>
<td>Advocacy</td>
<td>3</td>
</tr>
<tr>
<td>Education</td>
<td>4</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>5</td>
</tr>
</tbody>
</table>

2. Approximately, how many members does your voluntary organisation provide services to?

<table>
<thead>
<tr>
<th>Membership Range</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 20</td>
<td>1</td>
</tr>
<tr>
<td>21 - 40</td>
<td>2</td>
</tr>
<tr>
<td>41 - 50</td>
<td>3</td>
</tr>
<tr>
<td>51 - 60</td>
<td>4</td>
</tr>
<tr>
<td>More than 60</td>
<td>5</td>
</tr>
</tbody>
</table>

3. How many years have you been working in voluntary organisations?

<table>
<thead>
<tr>
<th>Years Range</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 5</td>
<td>1</td>
</tr>
<tr>
<td>6 - 10</td>
<td>2</td>
</tr>
<tr>
<td>11 - 15</td>
<td>3</td>
</tr>
<tr>
<td>More than 15</td>
<td>4</td>
</tr>
</tbody>
</table>

4. How many years have you been working in your voluntary organisation?

<table>
<thead>
<tr>
<th>Years Range</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 5</td>
<td>1</td>
</tr>
<tr>
<td>6 - 10</td>
<td>2</td>
</tr>
<tr>
<td>11 - 15</td>
<td>3</td>
</tr>
<tr>
<td>More than 15</td>
<td>4</td>
</tr>
</tbody>
</table>

5. What is your educational background?

<table>
<thead>
<tr>
<th>Education Type</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Social welfare</td>
<td>1</td>
</tr>
<tr>
<td>Health</td>
<td>2</td>
</tr>
<tr>
<td>Business</td>
<td>3</td>
</tr>
<tr>
<td>Public administration</td>
<td>4</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>5</td>
</tr>
</tbody>
</table>

6. Please indicate your job title.

<table>
<thead>
<tr>
<th>Job Title</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive / Board member</td>
<td>1</td>
</tr>
<tr>
<td>Senior manager</td>
<td>2</td>
</tr>
<tr>
<td>Operational manager</td>
<td>3</td>
</tr>
<tr>
<td>Administrator</td>
<td>4</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>5</td>
</tr>
</tbody>
</table>

7. Please indicate your age-group.

<table>
<thead>
<tr>
<th>Age Group</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>20 - 29</td>
<td>1</td>
</tr>
<tr>
<td>30 - 39</td>
<td>2</td>
</tr>
<tr>
<td>40 - 49</td>
<td>3</td>
</tr>
<tr>
<td>50 and above</td>
<td>4</td>
</tr>
</tbody>
</table>
8. Please indicate your sex.

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

**SECTION B: Management Commitment to Occupation**

This section asks about how committed you feel towards the organisation. For each statement, please tick one response, either “strongly disagree,” “disagree”, “neutral”, “agree”, or “strongly agree”.

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Being in the voluntary service is important for my self-image.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>I feel that working for voluntary organisation is more than just a job; it is a career.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>I am personally satisfied when I produce good work for the organisation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>I would feel guilty if I left the voluntary organisation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>I would remain in the non-profit sector even if I was offered a similar position in another sector with more benefits.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

**SECTION C: Management Continuous Education**

This section asks about your views on continuous education for managers. For each statement, please tick one response, either “strongly disagree,” “disagree”, “neutral”, “agree”, or “strongly agree”.

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Our management believe it is not important for managers to continually develop professional skills and knowledge.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>I am encouraged to attend workshops, seminars or conferences to learn and share new knowledge.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>I am encouraged to attend workshops on financial management for the organisation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>I am encouraged to research and collect information relevant to our industry.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>I am encouraged to analyse information about how our industry is changing.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
SECTION D: Management Ethics

This section asks about your views on ethics. For each statement, please tick one response, either “strongly disagree,” “disagree”, “neutral”, “agree”, or “strongly agree”.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I always place the interests of the community we serve above my own personal interests.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>I feel a responsibility to serve the community.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>I feel that financial gain is more important than the benefits to the community.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>I feel responsible when leading the organisation to make decisions that involve risk.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>I feel that the continuation of the organisation in the future is important.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

SECTION E: Organisational Entrepreneurship

This section asks on your views about your organisation’s entrepreneurship, compared with other organisations. For each question, please respond by tick one response, either “more active than others”, “about as active as others” or “less active as others”.

Compared to other voluntary organisations, how has your organisation been at:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Considerably less active than others</th>
<th>Slightly less active than others</th>
<th>About as active as others</th>
<th>Slightly more active than others</th>
<th>Considerably more active than others</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Introducing improved products and services based on new knowledge or technology?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>Introducing new methods for delivering services to the community?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Performing research and development activities about improving your services and products?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>Taking calculated risks for the organisation during uncertain times?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>Approaching new members or communities to provide your services?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>Relying on existing knowledge to take advantage of opportunities for the organisation?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
**SECTION F: Organisational performance**

This section asks about your views on the organisation’s performance over the past three years. For each statement, please tick one response, either “strongly disagree,” “disagree” , “neutral”, “agree”, or “strongly agree”.

<table>
<thead>
<tr>
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<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
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<tbody>
<tr>
<td>1.</td>
<td>I feel that the quality of service quality offered by the organisation has improved.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2.</td>
<td>I feel that the organisation has supported more new members of the community than in previous years.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3.</td>
<td>I feel that the financial position of the organisation has improved.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4.</td>
<td>I feel that the organisation is making better use of its resources.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5.</td>
<td>I feel that the organisation is attracting more volunteers.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Thank you for taking part in the research.
## Appendix B: Calculation of Composite Reliability

<table>
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<tr>
<th>Research constructs</th>
<th>Estimate</th>
<th>$\sum (\lambda \gamma_i)^2$</th>
<th>$\xi_i$</th>
<th>$\sum \xi_i / \left( \sum (\lambda \gamma_i)^2 + \sum \xi_i \right)$</th>
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<td>Management's commitment to occupation</td>
<td>MgCmt2</td>
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<td>3.940</td>
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<td>MgCmt5</td>
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<td>0.592</td>
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<td>MgEdu1</td>
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<td>0.480</td>
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<td>0.571</td>
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<td>MgEdu5</td>
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<td></td>
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## Appendix C: Calculation of Average Variance Extracted

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<th>( \sum \lambda y^2 )</th>
<th>( \varepsilon )</th>
<th>( \sum \varepsilon )</th>
<th>( \sum \lambda y^2 / (\sum \lambda y^2 + \sum \varepsilon) )</th>
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HUMAN RESEARCH ETHICS COMMITTEE (NON-MEDICAL)
R14/49 Pamacheche

CLEARANCE CERTIFICATE
PROJECT TITLE
The role played by senior management's commitment, education and ethics on organisational entrepreneurship in the Gauteng Non-profit Sector

INVESTIGATOR(S)
Ms R Pamacheche

SCHOOL/DEPARTMENT
Economic and Business Sciences

DATE CONSIDERED
18 July 2014

DECISION OF THE COMMITTEE
Approved Unconditionally

EXPIRY DATE
23/10/2016

DATE 24/10/2014

cc: Supervisor: Prof R Chinomona

DEMANDATION OF INVESTIGATOR(S)

To be completed in duplicate and ONE COPY returned to the Secretary at Room 10000, 10th Floor, Senate House, University.

I/we fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee. I agree to completion of a yearly progress report.

Signature ___________________________________________ Date __________/______/______

PLEASE QUOTE THE PROTOCOL NUMBER ON ALL ENQUIRIES