Work engagement, psychological meaningfulness and psychological safety: A leadership perspective

by

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DECLARATION

I certify that the minor dissertation submitted by me for the degree Masters of Philosophy (Personal and Professional Leadership) at the University of Johannesburg is my independent work and has not been submitted by me for a degree at another university.

GÉNEVIEVE DICKS
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DEDICATION

In loving memory of

CHRIS SCHEPPEL

28 / 04 / 1960 - 16 / 08 / 2017

Thank you for being so proud of me, for all of your interest, support and love. Rest in Peace
ABSTRACT

Effective leadership is vital for any organisation as a leader has the power and ability to mould the culture within an organisation. Theory has linked the level of engagement, meaningfulness and psychological safety of employees to the leadership structure within an organisation. Disengaged employees have considerable cost implications for organisations.

The aim of this study was to explore the relationship between work engagement, psychological meaningfulness and psychological safety amongst leaders within the workplace. This study further investigated the possible moderating role of job level on psychological meaning and psychological safety on work engagement.

Using non-probability sampling, a quantitative, cross-sectional survey design was administered to a sample of individuals from several organisations in the Gauteng province (N = 587). The Utrecht Work Engagement Scale (UWES-9 item), the Psychological Conditions Scale (PCS), the Psychological Meaningfulness Scale (PMS), and Kahn’s method of measuring psychological safety were utilised. Pearson product moment correlation coefficients between work engagement, psychological meaningfulness and psychological safety were determined. Moderated multiple regression analysis was used to determine if the levels of leadership explained variance in the variables measured. In addition, a MANOVA was performed to determine the difference in means between the levels of leadership and work engagement, psychological meaningfulness and psychological safety respectively. Further to this, one-way ANOVA were then conducted for work engagement, psychological meaningfulness and psychological safety with regards to each level of leadership respectively.

Results confirmed that a significant positive relationship exists between work engagement and psychological meaningfulness, between work engagement and psychological safety and between psychological meaningfulness and psychological safety respectively. The results
showed that overall the sample showed to experience psychological meaning in their work, they felt psychologically safe in their work and they seemed to engage with their work often. Additionally, the results showed that psychological meaning predicted work engagement. Level of leadership was also shown not to moderate the relationship between psychological meaningfulness or psychological safety on work engagement. Psychological meaningfulness was shown to predict work engagement across all the leadership tiers as well as for non-leaders. Interestingly, psychological safety was only a predictor of work engagement for the Middle Managers and not for the other levels of leadership or the non-leadership group. The results show that Senior Managers/Executives felt the most psychologically safe and experienced more psychological meaningfulness and engagement with their work roles. Furthermore, the Senior Managers/Executives significantly differed from all the other groups measured. Limitations and recommendations for further research are offered within this study.

This research confirmed that South African’s experience the constructs of work engagement, psychological meaningfulness and psychological safety is similar to other populations. This confirms that previous research on these constructs holds true within a South African context. The sample often experienced engagement within their respective work roles. The study showed that Senior Managers/Executives experienced more psychological meaningfulness and engagement with their work roles, thereby differing from all other groups. The greatest difference in groups was between the Senior Managers/Executives and the Junior Managers and people with no level of leadership. This is important for organisations as it highlights areas of development for all levels of leadership in improving workplace engagement through improved psychological meaning and psychological safety for people within the organisation. This will provide increased creativity
and productivity for all levels of leadership and people with no leadership experience, positively affecting the bottom line and fiscal growth of organisations.

*Keywords: Leadership, organisations, work engagement, psychological meaningfulness, psychological safety, South Africa*
# TABLE OF CONTENT

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>DECLARATION</td>
<td>i</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>ii</td>
</tr>
<tr>
<td>DECLARATION</td>
<td>iii</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>iv</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>x</td>
</tr>
<tr>
<td>ABBREVIATIONS</td>
<td>xii</td>
</tr>
<tr>
<td>CHAPTER 1: INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>1.1 Introduction</td>
<td>1</td>
</tr>
<tr>
<td>1.2 Background to the study</td>
<td>1</td>
</tr>
<tr>
<td>1.3 Problem statement</td>
<td>5</td>
</tr>
<tr>
<td>1.4 Objectives of the study</td>
<td>5</td>
</tr>
<tr>
<td>1.5 Chapter outline</td>
<td>6</td>
</tr>
<tr>
<td>1.6 Conclusion</td>
<td>6</td>
</tr>
<tr>
<td>CHAPTER 2: WORK ENGAGEMENT, PSYCHOLOGICAL MEANINGFULNESS AND PSYCHOLOGICAL SAFETY</td>
<td>8</td>
</tr>
<tr>
<td>2.1 Introduction</td>
<td>8</td>
</tr>
<tr>
<td>2.2 Theoretical frameworks</td>
<td>8</td>
</tr>
<tr>
<td>2.2.1 The theory of motivation: Self-Determination Theory</td>
<td>8</td>
</tr>
<tr>
<td>2.2.2 Power and leadership</td>
<td>9</td>
</tr>
<tr>
<td>2.2.2.1 Power within an organisation</td>
<td>9</td>
</tr>
<tr>
<td>2.2.2.2 Legitimate and positional power</td>
<td>10</td>
</tr>
<tr>
<td>2.2.2.3 Leadership</td>
<td>11</td>
</tr>
<tr>
<td>2.2.2.4 Leader-member exchange (LMX)</td>
<td>11</td>
</tr>
<tr>
<td>2.2.2.5 African leadership</td>
<td>12</td>
</tr>
<tr>
<td>2.2.3 Defining the concepts</td>
<td>13</td>
</tr>
<tr>
<td>2.2.3.1 Work engagement</td>
<td>13</td>
</tr>
</tbody>
</table>
2.2.3.2 Employee engagement

2.2.3.3 Psychological meaningfulness and psychological safety

2.2.3.3.1 Meaningfulness

2.2.3.3.2 Meaning

2.2.3.3.3 Meaningful work

2.2.3.3.4 Psychological safety

2.3 The impact of leadership on work engagement, meaningful work and psychological safety

2.4 Hypothesis

2.5 Conclusion

CHAPTER 3: METHODOLOGY

3.1 Introduction

3.2 Research design

3.3 Research method

3.3.1 Research participants

3.3.2 Research procedure

3.4 Measuring instruments

3.4.1 Biographical questionnaire

3.4.2 Engagement questionnaire

3.4.3 Meaningfulness and psychological safety questionnaire

3.4.4 Data Capturing

3.5 Statistical analysis

3.5.1 Descriptive statistics

3.5.2 Inferential statistics

3.6 Ethical considerations

3.7 Conclusion
## CHAPTER 4: RESULTS

4.1 Introduction 34

4.2 Descriptive statistics 34

4.3 Inferential Statistics 35

4.3.1 Pearson’s product moment correlation 35

4.3.2 Moderated multiple regression analysis 36

4.3.3 MANOVA 41

4.4 Conclusion 50

## CHAPTER 5: DISCUSSION, RECOMMENDATIONS AND CONCLUSION 51

5.1 Introduction 51

5.2 Overview of the hypotheses of this study 51

5.3 Interpretation of findings 52

5.3.1 Work engagement, psychological meaningfulness and psychological safety 52

5.3.2 The differences of work engagement, psychological meaningfulness and psychological safety across leadership tiers 54

5.4 Research implications and value add 56

5.5 Limitations 57

5.6 Recommendations for future research 57

5.7 Conclusion 58

REFERENCES 59
LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>Demographic Composition of the Sample ($n = 587$).</td>
<td>24</td>
</tr>
<tr>
<td>Table 2</td>
<td>Number of Years in the Current Position for the Sample ($n = 587$).</td>
<td>27</td>
</tr>
<tr>
<td>Table 3</td>
<td>Descriptive Statistics of Scales.</td>
<td>34</td>
</tr>
<tr>
<td>Table 4</td>
<td>Pearson Correlation Analysis Results.</td>
<td>35</td>
</tr>
<tr>
<td>Table 5</td>
<td>Hierarchical Multiple Regression of the Moderating Effect of Position Level on the Relationship between Psychological Meaningfulness and Psychological Safety on Work Engagement Respectively.</td>
<td>37</td>
</tr>
<tr>
<td>Table 6</td>
<td>Hierarchical Multiple Regression of the Effect of Psychological Meaningfulness and Psychological Safety on Work Engagement between the Different Levels of Leadership Position.</td>
<td>39</td>
</tr>
<tr>
<td>Table 7</td>
<td>MANOVA – Difference in Level of Leadership for Work Engagement, Psychological Meaningfulness and Psychological Safety.</td>
<td>41</td>
</tr>
<tr>
<td>Table 8</td>
<td>ANOVA – Difference between the Respective Means for Each Level of Leadership Position and Work Engagement, Psychological Meaningfulness and Psychological Safety.</td>
<td>42</td>
</tr>
</tbody>
</table>
List of Tables continued

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 9</td>
<td>1-way ANOVA Analysis to Determine Which Levels of Leadership Position Were Affected by the Constructs of Work Engagement, Psychological Meaningfulness and Psychological Safety.</td>
<td>44</td>
</tr>
<tr>
<td>Table 10</td>
<td>Bonferroni Confirmatory Post Hoc Test to Determine the Differences Found in the Three 1-Way ANOVA Analysis Results.</td>
<td>47</td>
</tr>
</tbody>
</table>
**ABBREVIATIONS**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANOVA</td>
<td>Analysis of Variance</td>
</tr>
<tr>
<td>Ave.</td>
<td>Average</td>
</tr>
<tr>
<td>GLOBE</td>
<td>Global Leadership and Organisational Behaviour Effectiveness</td>
</tr>
<tr>
<td>H</td>
<td>Hypothesis</td>
</tr>
<tr>
<td>LMX</td>
<td>Leader-Member Exchange</td>
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<tr>
<td>MANOVA</td>
<td>Multivariate Analysis of Variance</td>
</tr>
<tr>
<td>$n$</td>
<td>Number of people in the sample, i.e. sample size</td>
</tr>
<tr>
<td>PCS</td>
<td>Psychological Conditions Scale</td>
</tr>
<tr>
<td>PDT</td>
<td>Public Display Technologies</td>
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<td>PMS</td>
<td>Psychological Meaningfulness Scale</td>
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<tr>
<td>RSA</td>
<td>Republic of South Africa</td>
</tr>
<tr>
<td>SD</td>
<td>Standard Deviation</td>
</tr>
<tr>
<td>SDT</td>
<td>Self-Determination Theory</td>
</tr>
<tr>
<td>UWES-9 item</td>
<td>Utrecht Work Engagement Scale</td>
</tr>
</tbody>
</table>
CHAPTER 1: INTRODUCTION

1.1 Introduction

Disengagement has considerable economical cost implications for organisations. According to “The State of Employee Engagement in RSA” (PDT, 2014) survey, 15% of South African employees are engaged, while 85% are disengaged at work. The survey describes 20% of people as actively disengaged and actively seeking alternative employment (PDT, 2014). This study takes place within the paucity of information regarding work engagement, meaningfulness and psychological safety amongst South African leadership structures. Leadership is defined as the influential power of a person in a leadership role over a follower to achieve organisational outcomes (Achua & Lussier, 2013; Bowditch & Buono, 2001; Yukl & Falbe, 1991). Due to the perceived power assigned to an individual in a leadership position (Achua & Lussier, 2013; Bowditch & Buono, 2001; Yukl & Falbe, 1991), this study will explore the manifestation of engagement, psychological meaningfulness and psychological safety amongst South African leaders. The current research explores global theory and research with regards to these constructs within the South African context. This chapter outlines the background to the problem and highlight’s the objectives of this study.

1.2 Background to the study

Research highlights the propensity of people to leave organisations because of their leader (El Badawy & Bassiouny, 2014; Lipman, 2015; Kets de Vries, 2014; Viljoen, 2015). The way a leader behaves has the ability to add to or detract from meaning, psychological safety and engagement within the work place. Motivational theories such as the self-determination theory (SDT) (Deci & Ryan, 1985), theory on leadership and power, together with leader-member exchange theory, testify to the importance of organisational leadership roles in improving positive workplace behaviours through self-determined behaviours (Avolio et al., 2009; Bowditch & Buono, 2001; Chaurasia & Shukla, 2013; Kang & Stewart, 2007;
Minotaite & Buciuniene, 2013; Whittington & Bell, 2016). Leaders have the ability to influence motivation, trust in the company, commitment and satisfaction with one’s work, and more importantly play a role in the development of the follower (Kickul & Neuman, 2000; Minotaite, & Buciuniene, 2013). According to Kets de Vries (Torrance, 2004), leadership requires synergy with everyone involved within an organisation and all levels of leadership thereby need to exhibit authentic behaviours in their leadership roles. The interpersonal relationship between leader and followers is therefore vital in the promotion of an engaged workplace in which each person displays self-motivated behaviours (Avolio et al., 2009; Minotaite & Buciunuene, 2013).

The self-determination theory (SDT) explores motivational factors influencing human behaviour (Deci & Ryan, 1985; Ryan & Deci, 2000). These internal or external factors determine an individual’s level of enjoyment or meaning they derive from the task and the level at which they are engaged during task completion (Deci & Ryan, 1985; Ryan & Deci, 2000). The influential power of leaders and followers upon each other has a direct effect on the productivity and success of an organisation (Achua & Lussier, 2013). Leaders and their behaviour should inspire the work force to be authentic self-leaders and to be engaged in their jobs (De Braine & Verrier, 2007; Puente et al., 2007), thereby equipping the organisation to compete in a global marketplace and be successful (Choi, Tran, & Park, 2015; El Badawy & Bassiouney, 2014; Macey & Schneider, 2008; Savoie, 2002).

Considering that people dedicate a large portion of their life to their work (cf. Geldenhuys, Laba, & Venter, 2014; Kompier, 2005), it should come as no surprise that people are searching for greater meaning and purpose in their lives, within their organisations and from their jobs (cf. Cartwright & Holmes, 2006; Chopra, 1994; Frankl, 1992; Lips – Wiersma & Morris, 2009; Smith, 2012; Smith & Louw, 2007). Furthermore, studies have strongly linked meaningfulness to positive work outcomes such as work engagement, organisational
commitment, motivation, decreased staff turnover and increased productivity levels (Geldenhuys et al., 2014; Kahn, 1990; May, Gilson, & Harter, 2004; Rosso, Dekas, & Wrzesniewski, 2010; 2011).

Frankl (1992) describes meaning as a crucial motivator for one’s life. Meaning provides a sense of control and accomplishment allowing for the internal resources of the leader to be in line with his or her authentic self (Fairlie, 2011; Frankl, 1992; Smith & Louw, 2007). In addition, Fairlie (2011) characterises meaningful work as the fulfilment of one or more values pertaining to the individual’s needs that are met through the organisation as well as organisational job requirements. Furthermore, Chalofsky (2003) describes meaningful work as an incorporation of one’s principles with one’s innate talent and motivational drivers. The dynamic nature of meaningfulness has further been explored by Lips – Wiersma and Wright (2012) who propose four characteristics of meaningful work, namely self-development, interpersonal connectedness, service to others and the use of latent talents to achievement one’s goals. They believe balance across these dimensions will allow for an individual to find meaning in all aspects of one’s life.

Experiencing a sense of safety in work allows for people to express themselves creatively without fear of criticism (May et al., 2004). This is directly linked to meaning within the work place as psychological meaningfulness and psychological safety contribute to employees engaging at work (Kahn, 1990; May et al., 2004; Olivier & Rothmann, 2007). A feeling of being psychologically safe to engage in and express oneself through one’s work increases individual immersion in daily work tasks. By intensifying the sense of meaning one will derive from the workplace, leaders can increase levels of work engagement (May et al., 2004). People appreciate feeling valued and find enjoyment in engaging in work that brings their lives meaning (Bamford, Wong, & Laschinger, 2013; Neck & Manz, 2012; Savoie,
A lack of meaning in daily work tasks may result in disengagement with people displaying unmotivated and uncommitted behaviour (May et al., 2004).

Work engagement is defined by Kahn (1990, p. 694) as the “physical, cognitive and emotional” attributes an individual will bring into their respective roles in the workplace. These attributes will determine whether a person experiences meaning in their work or not and will thereby influence their behaviour in the workplace (Hackman & Oldman; 1980; Kahn, 1990). In addition, Macey and Schneider (2008) discuss engagement as a prerequisite for a workforce that displays commitment to organisational objectives and the individual drive to achieve these objectives. An individual’s level of engagement has been found to be strongly linked to the meaning they derive from their work (Kahn, 1990). This allows for an individual to experience job satisfaction and authenticity as a leader (Fairlie, 2011; Frankl, 1992; Kahn, 1990; Simpson, 2008; Smith & Louw, 2007). Improved interpersonal relationships in the workplace as a result of improved communication and openness to ideas follow suit (Kahn, 1990).

In experiencing one’s work as meaningful, an individual will attain a sense of job satisfaction and a higher level of engagement in work (Cartwright & Holmes, 2006; Fairlie, 2011). Ultimately, an employee’s level of engagement will affect their productivity and task efficiency (Bakker & Bal, 2010; Simpson, 2008; Sonnentag, 2003). Studies have illustrated that the perception of meaning in one’s job roles and tasks and subsequent engagement and dedication to one’s work is vital for organisational growth and success (Geldenhuys et al., 2014; cf. Rosso et al., 2010; 2011). Interestingly, studies reveal that more than the half of employees on all levels are disengaged and this directly affects an organisations productivity levels and profitability (Gallup Survey, 2013; Lipman, 2015).
1.3 Problem statement

As people “search for meaning” (Frankl, 1992), they simultaneously look for leaders who demonstrate authenticity and character in their behaviour and leadership roles (De Braine & Verrier, 2007). It is therefore important for a leader to balance the use of their positional power to create an engaged workforce in which people will exhibit self-motivating behaviours to go beyond their required duties as employees (Avolio et al., 2009; Bowditch & Buono, 2001; Chaurasia & Shukla, 2013; Kang & Stewart, 2007; Minitaite & Buciunuene, 2013; Whittington & Bell, 2016).

Research into the cost of disengagement shows massive economical losses for organisations. The Gallup Survey (2013) estimated approximately $450 billion annual loss due to employee disengagement and linked this directly to the role of leadership within an organisation. There is a paucity in South African literature with regards to this cost for organisations. It is therefore imperative for South African organisations to invest in ensuring that people within leadership roles find meaning in their work, are engaged, and are motivating employees to behave the same way. This will have drastic effects on the bottom line for businesses and consequently for South Africa as an economy.

1.4 Objectives of the study

The purpose of this study is to investigate the manifestation of work engagement, psychological meaningful work and psychological safety across four tiers of South African leadership roles; namely Trainees/Interns, Junior Managers, Middle Managers and Senior Managers/Executives and in comparing these to a control group of non-leaders. This will be operationalised through the following objectives:

- To explore the manifestation and differences of work engagement, psychological meaningfulness and psychological safety across the four aforementioned levels of
leadership and compare these to the general employee’s experience of engagement and meaningful work.

- To explore the relationship between work engagement, psychological meaningfulness and psychological safety based on these four leadership tiers.
- To investigate the moderating effect of level of leadership on the relationship between psychological meaningfulness and psychological safety respectively on work engagement.

1.5 Chapter outline

This study comprises of six chapters. Chapter Two explores the literature and previous studies involving meaningfulness, psychological safety, engagement and leadership. An argument concerning these constructs as part of a healthy leadership structure within any organisation is made in the context of self-determination theory and leader-member exchange (LMX) theory.

Chapter Three clarifies the research methodology applied in this study. The sample, procedure, statistical analysis and ethical considerations are detailed within this chapter.

Chapter Four introduces the results of the statistical analysis.

Chapter Five discusses the findings detailed in Chapter Four. These results will be explored with the theoretical foundation laid in Chapter Two. The recommendations for future studies and limitations of the current study will also be explored. Finally, the conclusion will be discussed.

1.6 Conclusion

This chapter presented an ephemeral view into work engagement, psychological meaningfulness, psychological safety and the importance of leader-member exchange within organisations. Ultimately, this will affect people on a personal level and organisations as a whole because the productivity of employees will increase thereby influencing the
profitability of a company. Chapter Two provides an in-depth exploration of the literature pertaining to the constructs concerned within this study.
CHAPTER 2: WORK ENGAGEMENT, PSYCHOLOGICAL MEANINGFULNESS AND PSYCHOLOGICAL SAFETY

2.1 Introduction

This chapter explores the literature on work engagement, psychological meaningfulness and psychological safety. Once these concepts have been defined, leadership theory will be explored as a concept in relation to work engagement, psychological meaningfulness and psychological safety. The leadership theory pertinent to this study explores motivation via The Self-Determination Theory (SDT) (Deci & Ryan, 1985), before exploring the literature on power and leadership and power within an organisation via legitimate and personal power. Modern leadership theory and Leader-member exchange (LMX) theory are discussed before exploring African Leadership theory which is explored in line with the geographical and demographical composition of the sample of this study. This outlines the background of the current study which will extrapolate from this theory within the South African environment.

2.2 Theoretical frameworks

2.2.1 The theory of motivation: Self-Determination Theory

The Self-Determination Theory (Deci & Ryan, 1985) explores various motivational factors which regulate human behaviour. The motivators are categorised as either intrinsic or extrinsic (Deci & Ryan, 1985; Ryan & Deci, 2000). Intrinsic motivation arises when an individual finds enjoyment in the task at hand whereas extrinsic motivation arises from the achievement of an external reward due to task completion (Deci & Ryan, 1985; Stone, Deci & Ryan, 2008; Ryan & Deci, 2000). Accordingly, the working world fulfils the criteria of extrinsic motivation as people are employed to perform a role (Stone, et al., 2008). However, this does not mean optimal performance for each person within the work place (Stone et al., 2008). People have an innate nature to strive for more (Frankl, 1992; May et al., 2004; Stone et al., 2008). This provides people with the necessary drive needed when faced with
uninteresting tasks that may provide meaning and value on another level (Stone et al., 2008). SDT encompasses the drive to find meaning from one’s work and within one’s organisation with intrinsic and extrinsic motivators emanating from engagement with one’s work roles (Deci & Ryan, 1985; Geldenhuys et al., 2014; Ryan & Deci, 2000).

2.2.2 Power and leadership

2.2.2.1 Power within an organisation

Bowditch & Buono (2001, p. 185) define power as “the ability to influence various outcomes”. Thus, the power wielded by leadership within an organisation determines the organisational behaviour and ultimate success (Yukl & Falbe, 1991). Additionally, successful leaders are also motivated by power (Bowditch & Buono; 2001). Power is necessary within an organisation to drive organisational processes and achieve organisational success (Achua & Lussier, 2013; Yukl & Falbe, 1991). Leaders exercise their power to engage peers and employees in uncommon tasks requiring additional effort (Yukl & Falbe, 1991). Employees show more organisational commitment and greater performance within their work roles when they perceive their manager to be a leader (Chiu, Balkundi, Weinberg, 2016).

There are different types of power within an organisation that are employed to motivate fellow leaders as well as employees to perform tasks efficiently (Achua & Lussier, 2013; Yukl & Falbe, 1991). These were characterised by French and Raven (1959) as legitimate power, reward power, coercive power, referent power, expert power, position power and personal power (Achua & Lussier, 2013; Bergh & Geldenhuys, 2014; Yukl & Falbe, 1991). It is widely accepted that managers wield power within an organisation based upon the position they hold and are therefore seen as leaders of an organisation (Bowditch & Buono; 2001). Therefore, not all of French and Raven’s (1959) types of power are related to the position of a person within an organisation (Achua & Lussier, 2013; Bergh & Geldenhuys, 2014; Rus, Van Knippenberg & Wisse, 2010) and as such are not explored within the context of this study.
The study will explore the constructs of legitimate power as it relates to position power within the framework of leadership and leader-member exchange.

2.2.2.2 Legitimate and positional power

Legitimate power is the acceptance of the authority of an individual because they hold an assigned position of power within an organisation (Achua & Lussier, 2013; Bergh & Geldenhuys, 2014; Bowditch & Buono; 2001). Due to the hierarchical nature of organisations some leaders have more authority due to their position than others (Rus et al., 2010). Legitimate power drives daily organisational operations (Yukl & Falbe, 1991) as a leader’s peer or subordinate will adhere to the direction and guidance provided by a leader due to this authority (Achua & Lussier, 2013; Bergh & Geldenhuys, 2014).

Positional power relates to the influence a person in a leadership position has over other employees solely due to their leadership position (Achua & Lussier, 2013; Bergh & Geldenhuys, 2014; Rus et al., 2010). This authoritative power is used to motivate and direct employees to perform tasks needed to attain organisational success (Achua & Lussier, 2013; Bowditch & Buono, 2001; Keltner et al., 2003; Rus et al., 2010). The use of positional authority between peers and subordinates is customary in driving organisational tasks (Bowditch & Buono, 2001; Yukl & Falbe, 1991). Additionally, positional power is easier to enforce and is less costly than exercising other categories of power (Yukl & Falbe, 1991). The power-approach theory promotes the psychological and behavioural aspect of power and the influence this has on the perceptions of individuals, teams and organisations (Keltner, Greunfeld, & Anderson, 2003; Rus et al., 2010). The use of positional power therefore plays a significant role in the relationship between a leader and a follower (Bowditch & Buono, 2001; Yukl & Falbe, 1991).
2.2.2.3 Leadership

Modern leadership theory is holistic in its approach and it focuses on each person’s role in leadership and the innate diversity within any organisation (Avolio et al., 2009). Leadership is also viewed as relational (Wang, Sui, Luthans, Wang, & Wu, 2014) with some researchers referring to leaders as “meaning managers” (Rentsch, 1990, p.678). Mintzberg (1973) studied the daily activities of managers and found their roles to be concerned with interpersonal relations, information sharing and decision making (Bowditch & Buono, 2001).

2.2.2.4 Leader-member exchange (LMX)

Research has explored the power dynamics of the leader – follower relationship and how leaders influence followers behaviour (Avolio et al., 2009; Bergh & Geldenhuys, 2014; Miniotaite & Buciunuene, 2013). Leader-member exchange (LMX) is described as a mature interpersonal exchange between a leader and a follower (Graen & Uhl-Bien, 1995; Ioannidou, Karagiorgos & Alexandris, 2016; Whittington & Bell, 2016). LMX is of vital importance within an organisation’s culture (Chaurasia & Shukla, 2013; Whittington & Bell, 2016) as the success of this relationship has been found to contribute to trust, independence and productivity within an organisation (Kang & Stewart, 2007).

Initial LMX research focused on the differential leadership styles utilised between in-group and out-group members and the relationship of power and informational sharing because of group identification (Bowditch & Buono, 2001; Graen & Uhl-Bien, 1995; Kang & Stewart, 2007; Whittington & Bell, 2016). A leader would relate differently towards an in-group member than he or she would towards a member of the out-group (Bowditch & Buono, 2001; Ioannidou et al., 2016; Kang & Stewart, 2007; Whittington & Bell, 2016). Therefore, task assignment and informal authority would be unequal between these two groups (Bowditch & Buono, 2001; Ioannidou et al., 2016; Kang & Stewart, 2007; Kuada, 2010; Whittington & Bell, 2016). This has shown to impact the behaviour and rewards experienced
between the two groups of people and affects their engagement within the workplace
(Bowditch & Buono, 2001; Chaurasia & Shukla, 2013; Kang & Stewart, 2007; Kuada, 2010;
Whittington & Bell, 2016).

Ultimately, LMX theory has proven the importance of open communication and trust
between a leader and follower, resulting in beneficial organisational outcomes (Bowditch &
Buono, 2001; Chaurasia & Shukla, 2013). Research has shown that the quality of LMX,
together with the consequential provision of intrinsically motivated tasks for in-group
employees, results in higher organisational commitment and role engagement (Kang &
Stewart, 2007; Whittington & Bell, 2016). Additional outcomes of a good relationship
between leader and followers include improved work performance, task related gratification
and more creative behaviours from employees (Bowditch & Buono, 2001; Kang & Stewart,
2007; Whittington & Bell, 2016). Accordingly, the impact of leadership on an interpersonal
level with employees is central to the creation of an engaged workforce displaying self-
motivated behaviours (Avolio et al., 2009; Miniotaitė & Buciunuene, 2013).

2.2.2.5 African leadership

The GLOBE study describes African leaders as charismatic and finds no significant
difference when comparing the team orientation and team participation to other nations
(Bolden & Kirk, 2009). However, there is a significant difference in the value African leaders
place on community and ‘ubuntu’ (April & Ephraim, 2006; Bolden & Kirk, 2009; Kuada,
2010). Jackson (2004) describes that African leaders value hierarchy, positional power and
autocratic leadership style more than Westernised leadership (Bolden & Kirk, 2009; Kuada,
2010). These African relational cultural values are extremely influential in the workplace
(April & Ephraim, 2006; Bolden & Kirk, 2009; Kuada, 2010) and have positive outcomes
when exploring the constructs within this study.
2.2.3 Defining the constructs

2.2.3.1 Work engagement

Engagement is defined by Kahn (1990) as the “physical, cognitive and emotional” (Kahn, 1990, p. 694) attributes an individual brings into their respective roles in the workplace (Kahn, 1990). Kahn (1990) felt that these attributes will determine whether a person experiences meaning in their work or not, and will thereby influence their behaviour in the workplace (Hackman & Oldman; 1980; Kahn, 1990; Olivier & Rothmann, 2007). An individual’s level of engagement has been found to be strongly linked to the meaning they derive from their work (Kahn, 1990). This allows for an individual to experience creativity, improved interpersonal relationships, job satisfaction and authenticity as a leader (Fairlie, 2011; Frankl, 1992; Kahn, 1990; Simpson, 2008; Smith & Louw, 2007).

Work engagement is described as the meaning an individual derives from his or her work and the commitment and enthusiasm an individual will invest in his or her job tasks to ensure organisational success (Bakker & Bal, 2010; Carasco-Saul, Wooccheol & Kim, 2015; Kahn, 1990; Macey & Schneider, 2008; Sonnentag, 2003). Engagement is therefore conceptualised to be vital in an organisations success (Choi et al., 2015). Macey and Schneider (2008, p. 4) discuss engagement as a prerequisite for a workforce that displays commitment to organisational objectives and the individual “involvement, effort, enthusiasm and energy” to achieve these objectives. Ultimately, an increased level of engagement will affect the productivity and efficiency of an employee (Bakker & Bal, 2010; Simpson, 2008; Sonnentag, 2003). Additional benefits of improved levels of work engagement include positive affect, increased coping capacity and internal resources to cope with job demands, and a better quality of the interpersonal relationships amongst employees (Baker & Bal, 2010; Simpson, 2008; Sonnentag, 2003).
Studies have shown that work engagement is a component of employee motivation (Salanova & Agut, 2005) and is subjective for each person (Kahn, 1990; Sonnentag, 2003). An employee’s level of engagement can be described as both an attitude and the ensuing behaviour as a result of this attitude (Macey & Schneider, 2008). This will affect an employee’s productivity with an engaged individual performing his or her tasks more efficiently (Bakker & Bal, 2010; Macey & Schneider, 2008; Simpson, 2008; Sonnentag, 2003). This can provide an organisation with an unrivalled advantage in the global market (Macey & Schneider, 2008). Organisations with engaged staff have fewer problems with retention and a greater commitment by employees to their job and to the organisation (Bakker & Bal, 2010; Choi et al., 2015; Macey & Schneider, 2008; Simpson, 2008; Sonnentag, 2003). These employees experience more job satisfaction than those employees who are disengaged in their workplace (Fairlie, 2011; Frankl, 1992; Kahn, 1990; Simpson, 2008).

Work engagement is additionally defined as a positive state of being and immersion in one’s work that encapsulates vigour, dedication and absorption, (Geldenhuys et al., 2014; Henn & Barkhuizen, 2009; Schaufelli et al., 2002, p 74, 75). Vigour necessitates the effort to complete one’s daily work tasks efficiently (Geldenhuys et al., 2014; Henn & Barkhuizen, 2009; Schaufelli et al., 2002, p. 74). Dedication concerns the individual drive to be personally involved with one’s work and the pride taken in task completion (Geldenhuys et al., 2014; Henn & Barkhuizen, 2009; Schaufelli et al., 2002, p. 74). Absorption entails immersion in one’s work to the point that time is insignificant due to the high levels of concentration and personal enjoyment in the work task (Geldenhuys et al., 2014; Henn & Barkhuizen, 2009; Schaufelli et al., 2002, p. 75). Consequently, people are deemed to be engaged when they experience high levels of vigour, dedication and absorption (Geldenhuys et al., 2014; Henn & Barkhuizen, 2009; Schaufelli et al., 2002). These constructs have yielded positive results for
organisations, especially with regards to work outcomes and productivity (Geldenhuys et al., 2014).

2.2.3.2 Employee engagement

May et al. (2004) believe that the ability to express oneself through work tasks provides meaning and subsequent engagement for people. Engrossment in daily work tasks allows for people to amalgamate their authentic self and identity with their work tasks (Kahn, 1990; May et al., 2004). Employee engagement therefore requires an emotional connection to one’s work that results in favourable behaviour resonant in work productivity and accomplishments (May et al., 2004). Employees appreciate feeling valued and find enjoyment in engaging in work that brings their lives meaning. Engagement studies have positively correlated performance and engagement (Kahn, 1990; Leiter & Masclash; 2004; May, et al., 2004; Simpson, 2008; Schaufelli et al., 2002). This can be attributed to positive leadership behaviour in that leadership style can influence organisational enthusiasm and individual behaviour (Avolio et al., 2009; George, 2000). Consequently, organisations with engaged employees are better equipped to compete in a global marketplace and be successful (Choi et al., 2015; El Badawy & Bassiouny, 2014; Macey & Schneider, 2008; Savoie, 2002). Therefore, it is imperative that leaders and organisations create an organisational culture that values diversity, communication and innovation allowing for a more engaged workforce in order to see an increase in productivity and profitability (Viljoen, 2015).

2.2.3.3 Psychological meaningfulness and psychological safety

2.2.3.3.1 Meaningfulness

Man has always held a belief that there must be more to life than death and taxes. Literature has discussed this search for “more” endlessly and religion has even tried to answer it. Research has even shown that people are searching for greater meaning and purpose in their lives (cf. Cartwright & Holmes, 2006; Chopra, 1994; Frankl, 1992; Lips –
Wiersma & Morris, 2009; Smith & Louw, 2007). This extends to meaning from and within
their job and organisation (cf. Cartwright & Holmes, 2006). Meaningfulness is defined as the
subjective value one’s work role provides (May et al., 2004, p. 13) and this is believed to
drive one’s behaviour within the work place (Kahn, 1990, p. 700). Kahn (1990, p. 694)
defines psychological meaningfulness as the sense one gets from being physically,
cognitively and emotionally invested in one’s work.

2.2.3.3.2 Meaning

Frankl (1992) describes meaning as a crucial motivator for one’s life. Meaning provides a
sense of control and accomplishment allowing for the internal resources of the leader to be in
line with his or her authentic self (Fairlie, 2011; Frankl, 1992; Smith & Louw, 2007).
Meaning and purpose have been linked to better health, improved coping capacity and an
increase in productivity and work performance (Cartwright & Holmes, 2006). Conversely, a
lack of meaning and purpose has been linked to a pessimistic mind set and decreased coping
capacity (Cartwright & Holmes, 2006). Many researchers propose that meaning is a
subjective entity and is based on a person’s value system (Chopra, 1994; Frankl, 1992; Lips –
Wiersma & Wright, 2012; May et al., 2004). This aligns with Deci and Ryan’s (1985; Ryan
& Deci, 2000) theory of self – determination. Therefore, a person’s value system will provide
the motivation to strive for individual’s goals and strive for meaning (Ryan & Deci, 2000).

2.2.3.3.3 Meaningful work

People devote a large amount of time to their work (Geldenhuyys et al., 2014).
Subsequently, it is of no surprise that people are searching for meaning from their workplace
(Cartwright & Holmes, 2006). Fairlie (2011) describes meaningful work as the fulfilment of
one or more values pertaining to the individual’s needs that are met through the organisation
as well as organisational job requirements. Chalofsky (2003) describes meaningful work as
an integration of the moral-self including one’s talents and motivators. More dynamic views
of meaning affirm the dynamic nature of meaningfulness (Lips – Wiersma & Wright, 2012). Lips – Wiersma & Wright (2012) propose four characteristics of meaningful work, namely self-development, interpersonal connectedness, service to others and the use of latent talents to achievement one’s goals. They believe balance across these dimensions will allow for an individual to find meaning in all aspects of one’s life and enable authentic self – leadership (Lips – Wiersma & Wright, 2012).

As a result of this meaningful work, an individual will attain a sense of job satisfaction and a higher engagement in work (Cartwright & Holmes, 2006; Fairlie, 2011). Conversely, a lack of meaningful work is associated with decreased commitment to one’s job and job performance, and more severely a decrease in coping capacity (Lips – Wiersma & Morris, 2009). In obtaining meaningful work, a person can express more of their authentic self and therefore be an authentic self – leader and leader of others (Avolio et al., 2009; Boekhorst, 2015; Lips – Wiersma & Morris, 2009; Wang et al., 2014). Psychological meaningfulness is therefore the subjective rewards a person perceives from their work tasks, roles and achievements (Kahn, 1990; Simpson, 2008).

2.2.3.3.4 Psychological safety

Psychological safety involves the subjective perception that one is safe to be his or her authentic self without negative consequences, either personally or socially, from colleagues within the organisation (Edmonson, 1999, 2012; Kahn, 1990; Simpson, 2008). Leaders are responsible for cultivating a non-threatening organisational culture which is psychologically safe for employees to express themselves (Ashauer & Macan, 2013). A psychologically safe work environment has high levels of trust between employees (Nienaber, Holtorf, Lekker & Schewe, 2015). This allows for open communication and sharing of ideas without fear of prejudice or personal embarrassment (Ashauer & Macan, 2013; Edmonson, 1999, 2012; Kahn, 1990; Nienaber et al., 2015; Simpson, 2008). Psychological safety is an important
component of employee resilience especially in the face of globalisation (Ashauer & Macan, 2013; Choi et al., 2015; El Badawy & Bassiouny, 2014). Employees who experience psychological safety within their workplace are able to adapt to changes more adequately and provide innovative solutions to guide the organisation forward (Ashauer & Macan, 2013; Edmonson, 1999, 2012; Kahn, 1990; May et al., 2004; Nienaber et al., 2015). May et al. (2004) support this notion and their research has shown that work engagement is mediated by psychological safety.

2.3 The impact of leadership on work engagement, meaningful work and psychological safety

Leadership plays an important role in any organisation. A leader’s behaviour and attitude contributes and affects the organisational culture and individual’s feelings and behaviour (George, 2000). An employee’s level of engagement is strongly correlated with the attitude and behaviour of the organisations leaders (Carasco-Saul et al., 2015). Research has shown that the majority of employees seek alternative employment as a direct result of their leader and not the organisation (El Badawy & Bassiouny, 2014). However, employees may engage effectively with their specific job but not to their organisation, which may also result in their seeking alternative employment (Macey & Schneider, 2008). A leader can inspire employees through his or her behaviour (Choi et al., 2015). By creating an organisational culture in which individuals can identify and trust in the leader and organisation, the employees will experience positive affect, feel safe and express increased commitment to the organisation (Choi et al., 2015; Macey & Schneider, 2008; Savoie, 2002). When leaders provide psychological and emotional encouragement to employees this can have a positive effect on an individual’s psyche and result in the employee being able to further engage with his or her work (Carasco-Saul et al., 2015; Choi et al., 2015). Employees will feel more secure within their workplace and roles which in turn will reduce their anxiety and improve commitment to
the organisation (Ashauer & Macan, 2013; Choi et al., 2015; Edmonson, 1999, 2012; Kahn, 1990; May et al., 2004; Nienaber et al., 2015). In creating an organisational culture in which employees feel safe, they will be more willing to communicate their ideas thereby increasing innovation and the organisations competitive advantage (Ashauer & Macan, 2013; Choi et al., 2015; May et al., 2004; Nienaber et al., 2015; Viljoen, 2015).

People are different and therefore some organisational cultures and leadership styles may not be suitable for some employees (Choi et al., 2015; El Badawy & Bassiouny, 2014). To maintain a high-performance culture organisations and leaders need to pay attention to the person – job fit to ensure the employees remain engaged and committed to the organisation’s success (El Badawy & Bassiouny, 2014; Savoie, 2002). This can be done by an organisation’s leadership creating an environment that values diversity in all forms (Tavakoli, 2015). Individuals predisposition towards discrimination and bias can create barriers within an organisation which can lead to feelings of unhappiness and disengagement amongst employees (Wheeler, 2015). This can be detrimental for an organisation’s productivity levels and employee retention (Choi et al., 2015). Therefore, leaders need to create an inclusive organisational culture which values communication, diversity and innovation to ensure that employees remain engaged and committed to an organisation (Buhler, 2006; Viljoen, 2015).

An organisation’s culture and leadership can affect the engagement levels of an employee (Carasco – Saul et al., 2015; Macey & Schneider, 2008). Disengaged employees do not experience satisfaction from their jobs or within their organisation (Lee & Ok, 2015). In addition, disengaged employees who are not committed to their job or to the organisation are more likely to engage in presenteeism and absenteeism behaviours (Duxbury & Halinski, 2014). Furthermore, these employees can negatively affect the mood within the organisation thereby reducing productivity and overall profitability of the organisation (Duxbury & Halinski, 2014). Maslach and Schaufeli (1993) describe a disengaged employee as being at
risk for burnout which includes a cynical mind set, exhaustion and decreased task effectiveness (Lee & Ok, 2015). This is detrimental for an organisation competing in a global market place (Choi et al., 2015).

This research study will explore self-determination theory in relation to work engagement, psychological meaningfulness and psychological safety of South African leaders.

2.4 Hypotheses

Based on the literature examined above, the following hypotheses are formulated for this study:

H1: There is a positive relationship between work engagement and psychological meaningfulness.
H2: There is a positive relationship between work engagement and psychological safety.
H3: There is a positive relationship between psychological meaning and psychological safety.
H4: Psychological meaningfulness predicts work engagement.
H5: Psychological safety predicts work engagement.
H6: There is a difference between the levels of leadership and work engagement.
H7: There is a difference between the levels of leadership and psychological meaningfulness.
H8: There is a difference between the levels of leadership and psychological safety.
H9: The levels of leadership moderates the relationship between psychological meaningfulness and work engagement.
H10: The levels of leadership moderates the relationship between psychological safety and work engagement.
2.5 Conclusion

This chapter has provided background information with regards to self-determination theory, leadership, power and leader-member exchange theory in relation to the constructs of work engagement, psychological meaningfulness and psychological safety. Hypotheses for this study have been proposed and will be explored in Chapter Four and Five respectively. Chapter Three presents the research design and methodology undertaken in this study.
CHAPTER 3: METHODOLOGY

3.1 Introduction

This chapter outlines the quantitative research design and analysis undertaken in this current study. The collection of data and analysis using descriptive statistics will be explained with regards to the purpose of each test in relation to this study.

3.2 Research design

Statistics provide insight into the world around us (Howell, 2004) and help us to draw accurate inferences about phenomena within the population (Thomas & Nelson, 2001). In this vein, this study followed a quantitative research design. Cross-sectional surveys were used to gather information allowing for inferences to be made on the general population (Howell, 2004; Saunders, Lewis & Thornhill, 2009; Thomas & Nelson, 2001).

3.3 Research Method

Paper and pencil surveys were administered to the participants. Surveys are the most utilised data gathering tool and are one of the most economical for gathering data on a larger scale (Adams, Raeside & Kahn, 2014; Crano, Lac & Brewer, 2015; Rindfleish et al., 2008; Saunders et al., 2009; Thomas & Nelson, 2001).

3.3.1 Research participants

A non-probability sampling method was used to gather the data from people within various organisations. An initial sample size of 753 individuals from several corporate organisations in the Gauteng area were targeted. A final sample of $n = 587$ was obtained, resulting in a 77.9% response rate. In order to increase the generalisability of the data, criteria for participation was enforced (Gravetter & Forzano, 2012). The criteria for participation included the following: participants must have completed at least one year of work, participants must have a proficient command of the English language, participants from organisations of a business and/or corporate nature will be included, and participants should
have a specific level of leadership, pertaining to the study. Regarding this, the study aimed at collecting data that could represent the different levels of leadership, as well as a group of employees that did not have leadership responsibilities.

The demographics of the sample are depicted in Table 3.1 below. The sample comprised of both men (42.8%) and women (57.2%). The age range of the participants was from 18 years to 68 years old. The language distribution of the sample comprised of English (29.9%), Afrikaans (20.3%), IsiZulu (14.5%) and Sepedi (8.1%) speaking participants, with 27.2% of the participants speaking another South African language. The sample was composed of a majority black population ($n = 292, 49.9\%$) with 32.7% white, 8.2% coloured, 7.0% Indian, 0.3% Asian and 1.5% another race. The sample consisted of 41.1% married people, followed by 31.0% single people, 21.6% of the sample was in a relationship, 4.4% divorced and 1.5% separated from their spouses.

Most of the sample holds a Bachelors/B. Tech/Diploma ($n = 234, 39.9\%$), with the remainder comprising of 26.6% with a Grade 12 (i.e. Martic), 22.7% with a Honours Degree/Postgraduate, 7.7% with a Master’s Degree and 1.4% with Doctorate Degree. The sample consisted of 32.0% of people with no level of leadership ($n = 188$). The remainder of the sample was composed of the 12.4% Trainee’s/Interns ($n = 73$), 15.8% Junior Managers ($n = 93$), 17.2% Middle Managers ($n = 101$) and 13.5% Senior Managers/Executives ($n = 79$).
Table 1

Demographic Composition of the Sample (n = 587)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>251</td>
<td>42.8%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>335</td>
<td>57.1%</td>
</tr>
<tr>
<td>Age</td>
<td>20 – 29</td>
<td>228</td>
<td>38.8%</td>
</tr>
<tr>
<td></td>
<td>30 – 39</td>
<td>174</td>
<td>29.6%</td>
</tr>
<tr>
<td></td>
<td>40 – 49</td>
<td>103</td>
<td>17.5%</td>
</tr>
<tr>
<td></td>
<td>50 – 59</td>
<td>63</td>
<td>10.7%</td>
</tr>
<tr>
<td></td>
<td>60 – 69</td>
<td>10</td>
<td>1.7%</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>Black</td>
<td>292</td>
<td>49.7%</td>
</tr>
<tr>
<td></td>
<td>Coloured</td>
<td>48</td>
<td>8.2%</td>
</tr>
<tr>
<td></td>
<td>White</td>
<td>192</td>
<td>32.7%</td>
</tr>
<tr>
<td></td>
<td>Asian</td>
<td>2</td>
<td>0.3%</td>
</tr>
<tr>
<td></td>
<td>Indian</td>
<td>41</td>
<td>7.0%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>9</td>
<td>1.5%</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Single</td>
<td>182</td>
<td>31.0%</td>
</tr>
<tr>
<td></td>
<td>In a relationship</td>
<td>127</td>
<td>21.6%</td>
</tr>
<tr>
<td></td>
<td>Married/Living with partner</td>
<td>241</td>
<td>41.1%</td>
</tr>
<tr>
<td></td>
<td>Divorced</td>
<td>26</td>
<td>4.4%</td>
</tr>
<tr>
<td></td>
<td>Separated</td>
<td>9</td>
<td>1.5%</td>
</tr>
</tbody>
</table>
Table 1 continued

Demographic Composition of the Sample (n = 587)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Language</td>
<td>Afrikaans</td>
<td>116</td>
<td>19.8%</td>
</tr>
<tr>
<td></td>
<td>English</td>
<td>171</td>
<td>29.1%</td>
</tr>
<tr>
<td></td>
<td>Sepedi</td>
<td>46</td>
<td>7.8%</td>
</tr>
<tr>
<td></td>
<td>IsiNdebele</td>
<td>10</td>
<td>107%</td>
</tr>
<tr>
<td></td>
<td>Tshivenda</td>
<td>22</td>
<td>3.7%</td>
</tr>
<tr>
<td></td>
<td>IsiZulu</td>
<td>83</td>
<td>14.1%</td>
</tr>
<tr>
<td></td>
<td>Sesotho</td>
<td>19</td>
<td>3.2%</td>
</tr>
<tr>
<td></td>
<td>Setswana</td>
<td>39</td>
<td>6.6%</td>
</tr>
<tr>
<td></td>
<td>IsiXhosa</td>
<td>23</td>
<td>3.9%</td>
</tr>
<tr>
<td></td>
<td>Xitsonga</td>
<td>18</td>
<td>3.1%</td>
</tr>
<tr>
<td></td>
<td>Siswati</td>
<td>6</td>
<td>1.0%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>18</td>
<td>3.1%</td>
</tr>
<tr>
<td>Qualification</td>
<td>Matric</td>
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<td>26.6%</td>
</tr>
<tr>
<td></td>
<td>Bachelors/B. Tech/Diploma</td>
<td>234</td>
<td>39.9%</td>
</tr>
<tr>
<td></td>
<td>Honours Degree/Postgraduate</td>
<td>133</td>
<td>22.7%</td>
</tr>
<tr>
<td></td>
<td>Master’s Degree</td>
<td>45</td>
<td>7.7%</td>
</tr>
<tr>
<td></td>
<td>Doctorate Degree</td>
<td>8</td>
<td>1.4%</td>
</tr>
</tbody>
</table>
Table 1 continued

**Demographic Composition of the Sample (n = 587)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Position</td>
<td>Trainee/Intern</td>
<td>73</td>
<td>12.4%</td>
</tr>
<tr>
<td></td>
<td>Junior Manager</td>
<td>93</td>
<td>15.8%</td>
</tr>
<tr>
<td></td>
<td>Middle Manager</td>
<td>101</td>
<td>17.2%</td>
</tr>
<tr>
<td></td>
<td>Senior Managers/Executive</td>
<td>79</td>
<td>13.5%</td>
</tr>
<tr>
<td></td>
<td>People with no level of leadership</td>
<td>188</td>
<td>32.0%</td>
</tr>
</tbody>
</table>

Table 2 below examines the number of years the sample has spent in their current position. The sample consisted of 71.2% of Trainees/Interns 65.4% of people with 0-5 years of experience in their respective positions (n = 52). The remainder of the sample comprised of 62.4% Junior Managers (n = 58), 65.4% with no level of leadership (n = 123), 65.3% of Middle Managers (n = 66) and 43% of Senior Managers/Executives with 0-5 years’ experience in their respective positions. 22.8% of Senior Manager /Executives had 6-10 years’ experience in their respective current position. 19.8% of Middle Managers had 6-10 years’ experience in their respective current position. The remainder of the sample had nominal values split throughout the remainder of the time period, i.e. 0-35 years.
Table 2

*Number of Years in the Current Position for the Sample (n = 587)*

<table>
<thead>
<tr>
<th>Position</th>
<th>Number of Years in Current Position</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trainee/Intern</td>
<td>0 – 5 years</td>
<td>52</td>
<td>71.2</td>
</tr>
<tr>
<td></td>
<td>6 – 10 years</td>
<td>1</td>
<td>1.4</td>
</tr>
<tr>
<td></td>
<td>11 – 15 years</td>
<td>2</td>
<td>2.7</td>
</tr>
<tr>
<td></td>
<td>16 – 20 years</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>21 – 25 years</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>26 – 35 years</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Junior Manager</td>
<td>0 – 5 years</td>
<td>58</td>
<td>62.4</td>
</tr>
<tr>
<td></td>
<td>6 – 10 years</td>
<td>19</td>
<td>20.4</td>
</tr>
<tr>
<td></td>
<td>11 – 15 years</td>
<td>4</td>
<td>4.3</td>
</tr>
<tr>
<td></td>
<td>16 – 20 years</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>21 – 25 years</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>26 – 35 years</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Middle Manager</td>
<td>0 – 5 years</td>
<td>66</td>
<td>65.3</td>
</tr>
<tr>
<td></td>
<td>6 – 10 years</td>
<td>20</td>
<td>19.8</td>
</tr>
<tr>
<td></td>
<td>11 – 15 years</td>
<td>3</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>16 – 20 years</td>
<td>3</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>21 – 25 years</td>
<td>2</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td>26 – 35 years</td>
<td>0</td>
<td>-</td>
</tr>
</tbody>
</table>
Table 2 continued

*Number of Years in the Current Position for the Sample (n = 587)*

<table>
<thead>
<tr>
<th>Position</th>
<th>Number of Years in Current Position</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Manager/Executive</td>
<td>0 – 5 years</td>
<td>34</td>
<td>43.0</td>
</tr>
<tr>
<td></td>
<td>6 – 10 years</td>
<td>18</td>
<td>22.8</td>
</tr>
<tr>
<td></td>
<td>11 – 15 years</td>
<td>9</td>
<td>11.4</td>
</tr>
<tr>
<td></td>
<td>16 – 20 years</td>
<td>6</td>
<td>7.6</td>
</tr>
<tr>
<td></td>
<td>21 – 25 years</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>26 – 35 years</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>People with no level of leadership</td>
<td>0 – 5 years</td>
<td>123</td>
<td>65.4</td>
</tr>
<tr>
<td></td>
<td>6 – 10 years</td>
<td>23</td>
<td>12.2</td>
</tr>
<tr>
<td></td>
<td>11 – 15 years</td>
<td>11</td>
<td>5.9</td>
</tr>
<tr>
<td></td>
<td>16 – 20 years</td>
<td>9</td>
<td>4.8</td>
</tr>
<tr>
<td></td>
<td>21 – 25 years</td>
<td>1</td>
<td>.5</td>
</tr>
<tr>
<td></td>
<td>26 – 35 years</td>
<td>0</td>
<td>-</td>
</tr>
</tbody>
</table>

3.3.2. Research procedure

A letter of intent explaining the purpose of the study was sent out and permission was obtained from the several corporate organisations to distribute the surveys to their respective staff members. The cover letter accompanying the survey explained that the data gathered from the survey would be used for research purposes only. Once informed consent was obtained, questionnaires were administered to the participants and were collected by hand. It was made clear to the participants that their involvement was voluntary, all the information
will remain anonymous and confidential, and that there was no financial reward for completing the questionnaires. The participants were provided with the contact information of the researcher, should they desire access to the results of the study and/or further information regarding this study.

3.4 Measuring instruments

3.4.1 Biographical questionnaire

A biographical questionnaire accompanied the survey. Demographic information regarding race, ethnicity, gender, marital status and leadership status respectively was collected (Table 1).

3.4.2 Engagement questionnaire

The Utrecht Work Engagement Scale (UWES-9 item) was used to measure engagement levels of the sample (Schaufeli et al., 2002; Schaufeli & Bakker, 2004; Schaufeli, Bakker & Salanova, 2006). The UWES is a nine-item scale with each item scored on a seven-point frequency scale ranging from 0 (never) to 6 (always) (Schaufeli et al., 2006). The UWES-9 item examines the three dimensions of engagement, namely vigour, dedication and absorption (Schaufeli et al., 2006). A South African study by Van Zyl, Deacon and Rothman (2010), found Cronbach α coefficients for vigour of .78, dedication of .89 and absorption of .78 respectively. An example of an item used in this scale: “Time flies when I am at work” (Rothmann & Rothmann, 2010).

3.4.3 Meaningfulness and psychological safety questionnaire

The Psychological Meaningfulness Scale (PMS) is based on the work of Spreitzer (1995) and consists of six items and investigates the degree of meaning people experience within their work roles (May et al., 2004). The PMS employs a five-point Likert scale with options ranging from 1 (totally agree) to 5 (totally disagree) (Spreitzer, 1995). The PMS has a Cronbach α of .90 according to May et al. (2004), whilst Olivier and Rothmann (2007)
calculated a Cronbach α of .92. “The work I do on this job is very important to me” (May et al., 2004) is an example of an item from the PMS.

Psychological safety was measured using a method based off Kahn’s (1990) work. This instrument measures psychological safety by averaging the three items. The items quantify whether the person feels at ease with expressing themselves in the work place or whether they perceive the work environment to be hostile (Kahn, 1990; May et al., 2004). An example of one such item is “I’m not afraid to be myself at work” (Olivier & Rothmann, 2007). The use of these three items to assess psychological safety has a Cronbach α of .71 (May et al., 2004).

3.4.4 Data capturing

The data pertaining to the demographic variables, work engagement, psychological meaning and psychological safety were captured into a Microsoft Excel spreadsheet and analysed using the SPSS 23 statistical programme (SPSS Inc., 2016).

3.5 Statistical analysis

The SPSS 23 Programme (SPSS Inc., 2016) was utilised in the statistical analysis of the collected data. According to Howell (2004), the SPSS 23 programme is decidedly reliable. Wagner et al. (2012) refer to the SPSS as the more widely accepted computer software in social science statistical research. The data was first screened to remove all outlying responses, errors and incomplete items.

3.5.1 Descriptive statistics

Descriptive statistics provide a method of analysis allowing researchers to draw conclusions about the population and the problem being investigated through the use of statistical instruments (Durrheim, Painter & Terre Blanche, 2006; Ho & Yu, 2015; Howell, 2004; Thomas & Nelson, 2001). Descriptive statistics were attained for all of the constructs and the data was analysed with regards to mean, standard deviation, skewness and kurtosis.
Skewness and kurtosis are reliable descriptive statistic measures used to indicate the normality or lack thereof of the data set (Ho & Yu, 2015). The skewness cut-off points were -<2 and < 2 and the kurtosis cut-off points were -4 and < 4 respectively (Pallant, 2011). This is important as this allowed for the calculation of the distribution of the data with regards to the mean (Durrheim et al., 2006; Ho & Yu, 2015; Howell, 2004).

3.5.2 Inferential statistics

Pearson product moment correlation coefficients between work engagement, psychological meaningfulness and psychological safety were determined. Correlation expresses the strength of the relationship between two variables thereby describing the data (Howell, 2004; Wagner et al., 2012). The level of significance; i.e. the p-value; will provide a lower level of risk for an undefined construct to be the influencing factor on the data set in an effort to avoid a Type I or Type II error (Wagner et al., 2012). The practical significance was also calculated with respect to effect size to ensure that the relationship between the constructs is meaningful (Wagner et al., 2012). The effect size allows for the relationship or lack thereof to be validated or disputed and is independent of sample size and is determined by Cohen’s $d$ (Wagner et al., 2012). According to Cohen (2013), $d \geq .8$ denotes a large effect size, $d \geq .5$ i denotes a medium effect size and $d \geq .2$ denotes a small effect size.

Moderated multiple regression analysis was used to determine if the levels of leadership explains variance in the variables. To ensure that the assumptions for regression analysis were met, the assumptions of normality, linearity and homoscedasticity were investigated. The independent variables were centred prior to determining the interaction term job level. The multicollinearity values were expected to be within the recommended limits (Pallant, 2011) and the Cronbach $\alpha$ coefficients were used to determine the reliability of the constructs within this study. More specifically moderated regression analysis was used to determine if levels of leadership had an effect on the relationship of psychological meaningfulness and
psychological safety respectively on work engagement. The use of more variables allowed for a more accurate predication (Thomas & Nelson, 2001). This provides a better understanding of the independent variables, i.e. work engagement, psychological meaningfulness and psychological safety on the dependant variable.

A Multivariate Analysis of Variance (MANOVA) was performed to determine the difference in means between the levels of leadership and work engagement, psychological meaningfulness and psychological safety respectively. According to Howell (2004), MANOVA provides for the analysis of hypotheses pertaining to means of groups. Three One-Way Analysis of Variance (ANOVA) were then conducted for work engagement, psychological meaningfulness and psychological safety with regards to each level of leadership respectively. A Bonferroni procedure was then followed to eliminate the probability of a Type 1 error (Howell, 2004) in the three respective One-Way ANOVA’s.

3.6 Ethical considerations

The ethical guidelines of The University of Johannesburg were adhered to in the completion of this research. Durrheim et al. (2006) outline ethical principles for research studies which were followed in this research study. Durrheim et al. (2006) delineate a multifaceted approach towards ensuring the ethics of research, namely that people must be able to discern for themselves their participation in the research study and that they should be treated in a dignified manner with no detrimental consequences physically, psychologically or otherwise. In line with this, each participant was informed of the intentions of the research study and the expectations with regards to their participation (Durrheim et al., 2006). Each participant was required to provide informed consent, with the understanding that they could withdraw from the research study at any time, without prejudice, prior to partaking in the research study (Durrheim et al., 2006). All participants were assured of the confidentiality of all information gathered within the research study (Durrheim et al., 2009). Furthermore, all
participants were treated fairly and equally and will benefit from the research study in that they will have access to the results thereof (Durrheim et al., 2006).

3.7 Conclusion

This chapter presented a synopsis of the research design and research methods employed within this study. The measurement instruments and statistical analysis tools that were used in this study were explored in more detail. Chapter Four provides a comprehensive account of the results obtained from the statistical analysis.
CHAPTER 4: RESULTS

4.1 Introduction

This chapter outlines the results of the study. The aim of this study is to explore the relationship between Work Engagement, Psychological Meaningfulness and Psychological Safety amongst South African leaders within the workplace. The findings reported in this chapter include descriptive statistics, Pearson’s product moment correlation, moderated multiple regression analysis and MANOVA.

4.2 Descriptive statistics

Table 4.1 illustrates the descriptive statistical scales used in the study. These are the mean scores, standard deviation, skewness, kurtosis and Cronbach α.

Table 3

Descriptive Statistics of Scales

<table>
<thead>
<tr>
<th>Scale</th>
<th>Ave. Mean</th>
<th>Ave. SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Engagement</td>
<td>5.17</td>
<td>1.03</td>
<td>.56</td>
<td>.32</td>
<td>.90</td>
</tr>
<tr>
<td>Psychological Meaningfulness</td>
<td>5.11</td>
<td>1.12</td>
<td>.86</td>
<td>.26</td>
<td>.94</td>
</tr>
<tr>
<td>Psychological Safety</td>
<td>5.29</td>
<td>1.21</td>
<td>.53</td>
<td>.48</td>
<td>.74</td>
</tr>
</tbody>
</table>

Note: α = Cronbach’s internal consistency

Table 3 presents the descriptive statistics representing the sample of this study. Three constructs were measured, namely: Work Engagement, Psychological Meaningfulness and Psychological Safety. The skewness cut-off points were -<2 and < 2 and the kurtosis cut-off points were -4 and < 4 respectively (Pallant, 2011). Based on the skewness (-2 and < 2) and kurtosis (-4 and < 4), the data is normally distributed. Work Engagement has a skewness of .56 and a kurtosis of .32. For Psychological Meaningfulness, the skewness is .86 and the
kurtosis is .26. For Psychological Safety, the skewness is .53 and the kurtosis is .48. The reported skewness and kurtosis values are within the normal range for these measures. Thus, these scores reflect that the results are normally distributed.

The average mean score for Work Engagement is 5.17 which indicates that the sample were *often* engaged with their work. The average mean score for Psychological Meaningfulness is 5.11 indicating that the sample *often* find meaning from their work. The average mean score for Psychological Safety is 5.29 indicating that the sample *often* feel psychologically safe within their workplace.

Cronbach α was calculated to determine the reliability of the measures. As presented within Table 3, the Cronbach α for Work Engagement is $\alpha=.900$, for Psychological Meaningfulness is $\alpha=.943$ and for Psychological Safety is $\alpha=.741$. Each respective Cronbach α score is considered high, thereby indicating that there is a high item intercorrelation per construct measured.

### 4.3 Inferential Statistics

#### 4.3.1 Pearson’s product moment correlation

Table 4 below describes the results obtained from conducting a Pearson product moment correlation analysis.

Table 4

<table>
<thead>
<tr>
<th></th>
<th>Work Engagement</th>
<th>Psychological Meaning</th>
<th>Psychological Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Engagement</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Psychological Meaning</td>
<td>.73*</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Psychological Safety</td>
<td>.21*</td>
<td>.22*</td>
<td>-</td>
</tr>
</tbody>
</table>

*p = .000 (1-tailed)
As per Table 4, the results imply that there is a significant strong positive relationship between Work Engagement and Psychological Meaningfulness ($r = .731$, $p = .000$). There is a significant positive relationship between Work Engagement and Psychological Safety ($r = .213$, $p = .000$). There is also a significant positive relationship between Psychological Safety and Psychological Meaningfulness ($r = .220$, $p = .000$).

4.3.2 Moderated multiple regression analysis

Multiple regression analysis was conducted to estimate the moderating effect of position level on the relationship between Psychological Meaningfulness and Psychological Safety on Work Engagement respectively. The results are reported in Table 5 and Table 6 below.
Table 5

Hierarchical Multiple Regression of the Moderating Effect of Position Level on the Relationship between Psychological Meaningfulness and Psychological Safety on Work Engagement Respectively

<table>
<thead>
<tr>
<th>Step</th>
<th>Unstandardised coefficients</th>
<th>Standardised coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>SE β</td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>5.596</td>
<td>.637</td>
</tr>
<tr>
<td>Meaning</td>
<td>1.342</td>
<td>.017</td>
</tr>
<tr>
<td>Safety</td>
<td>.002</td>
<td>.031</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>5.079</td>
<td>.681</td>
</tr>
<tr>
<td>Meaning</td>
<td>1.341</td>
<td>.017</td>
</tr>
<tr>
<td>Safety</td>
<td>.002</td>
<td>.031</td>
</tr>
<tr>
<td>Position</td>
<td>.158</td>
<td>.076</td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>4.789</td>
<td>1.310</td>
</tr>
<tr>
<td>Meaning</td>
<td>1.352</td>
<td>.043</td>
</tr>
<tr>
<td>Safety</td>
<td>.055</td>
<td>.092</td>
</tr>
<tr>
<td>Position</td>
<td>.381</td>
<td>.411</td>
</tr>
<tr>
<td>Meaning X Position</td>
<td>.000</td>
<td>.013</td>
</tr>
<tr>
<td>Safety X Position</td>
<td>-.015</td>
<td>.024</td>
</tr>
</tbody>
</table>

*p<0.05

Results of the hierarchical multiple regression of the relationship between Work Engagement, Psychological Meaningfulness and level of leadership position provided the following results:

Step 1:

Meaning and Safety accounts for 93% of variance in Work Engagement: $R^2 = .930$, $F(2,500) = 3312.277$, $p = .000$. However, Psychological Meaningfulness ($\beta = .964$, $p = .000$) significantly predicted Work Engagement whilst Psychological Safety did not predict Work.
Engagement ($\beta = .001$, $p = .000$). Thus, Psychological Meaningfulness accounts for the 93% variance in Work Engagement only.

Step 2:

Position was added in step 2 of the regression analysis. The $R^2$ value did not change: $R^2 = .930$, $F(1,499) = 2224.538$, $p = .037$. This indicates that position was not significant in the prediction of Meaning on Work Engagement.

Step 3:

Meaning X Position and Safety X Position was added in step 3 of the regression analysis.

The $R^2$ value for Meaning X Position did not change: $R^2 = .930$, $F(2, 497) = 1330.698$, $p = .0968$. The results show that this regression analysis was not significant: Psychological Meaning ($p = .000$), Psychological Safety ($p = .546$), Position ($p = .354$) and Meaning X Position ($p = .968$). Thus, the results imply that the level of position does not moderate the relationship between Psychological Meaningfulness and Work Engagement ($p = .968$).

The $R^2$ value for Safety X Position did not change: $R^2 = .930$, $F(2, 497) = 1330.698$, $p = .0531$. The results show that this regression analysis was not significant: Psychological Meaning ($p = .000$), Psychological Safety ($p = .546$), Position ($p = .354$) and Safety X Position ($p = .531$). Thus, the results imply that the level of position does not moderate the relationship between Psychological Safety and Work Engagement ($p = .531$).

The next table provides the results of the multiple regression analysis of Psychological Meaningfulness and Psychological Safety on Work Engagement between the different levels of leadership position.
Table 6

*Hierarchical Multiple Regression of the Effect of Psychological Meaningfulness and Psychological Safety on Work Engagement between the Different Levels of Leadership*

<table>
<thead>
<tr>
<th>Position</th>
<th>Unstandardized coefficients</th>
<th>Standardised coefficients</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\beta$</td>
<td>$SE \beta$</td>
<td>$\beta$</td>
</tr>
<tr>
<td>Constant</td>
<td>2.162</td>
<td>1.922</td>
<td>.954</td>
</tr>
<tr>
<td>Meaning</td>
<td>1.384</td>
<td>.058</td>
<td>.954</td>
</tr>
<tr>
<td>Trainee / Intern*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>5.733</td>
<td>1.900</td>
<td>.964*</td>
</tr>
<tr>
<td>Meaning</td>
<td>1.349</td>
<td>.050</td>
<td>.964*</td>
</tr>
<tr>
<td>Safety</td>
<td>-.057</td>
<td>.093</td>
<td>-.022</td>
</tr>
<tr>
<td>Junior Manager*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>5.292</td>
<td>1.530</td>
<td>.971*</td>
</tr>
<tr>
<td>Meaning</td>
<td>1.377</td>
<td>.042</td>
<td>.971*</td>
</tr>
<tr>
<td>Safety</td>
<td>-.067</td>
<td>.081</td>
<td>-.024</td>
</tr>
<tr>
<td>Middle Manager*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>6.011</td>
<td>1.443</td>
<td>.933*</td>
</tr>
<tr>
<td>Meaning</td>
<td>1.263</td>
<td>.043</td>
<td>.933*</td>
</tr>
<tr>
<td>Safety</td>
<td>.144</td>
<td>.068</td>
<td>.068**</td>
</tr>
<tr>
<td>Senior Managers/ Executive</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>9.859</td>
<td>1.861</td>
<td>.962</td>
</tr>
<tr>
<td>Meaning</td>
<td>1.226</td>
<td>.042</td>
<td>.962</td>
</tr>
<tr>
<td>Safety</td>
<td>.033</td>
<td>.075</td>
<td>.015</td>
</tr>
<tr>
<td>No level of leadership</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>6.512</td>
<td>1.002</td>
<td>.973</td>
</tr>
<tr>
<td>Meaning</td>
<td>1.345</td>
<td>.025</td>
<td>.973</td>
</tr>
<tr>
<td>Safety</td>
<td>-.058</td>
<td>.047</td>
<td>-.022*</td>
</tr>
</tbody>
</table>

*p < 0.05
Results of the hierarchical multiple regression of the effect of Psychological Meaningfulness and Psychological Safety on Work Engagement between the different levels of leadership position provided the following:

Trainee/Intern:

Meaning is a significant predictor of Work Engagement for the Trainee/Intern level of leadership: $\beta = .964, p = .000$. Safety is not a significant predictor of Work Engagement for the Trainee/Intern level of leadership: $\beta = -.022, p = .542$.

Junior Manager:

Meaning is a significant predictor of Work Engagement for the Junior Manager level of leadership: $\beta = .971, p = .000$. Safety is not a significant predictor of Work Engagement for the Junior Manager level of leadership: $\beta = -.024, p = .414$.

Middle Manager:

Meaning is a significant predictor of Work Engagement for the Middle Manager level of leadership: $\beta = .933, p = .000$. Safety is a significant predictor of Work Engagement for the Middle Manager level of leadership: $\beta = .068, p = .036$.

Senior Managers/Executive:

Meaning is a significant predictor of Work Engagement for the Senior Manager/Executive level of leadership: $\beta = .962, p = .000$. Safety is not a significant predictor of Work Engagement for the Senior Manager/Executive level of leadership: $\beta = .015, p = .660$.

No Level of Leadership:

Meaning is a significant predictor of Work Engagement for the people with no level of leadership: $\beta = .973, p = .000$. Safety is not a significant predictor of Work Engagement for the people with no level of leadership: $\beta = -.022, p = .221$. 
4.3.3 MANOVA

A MANOVA was used to determine the difference in means between the levels of leadership and Work Engagement, Psychological Meaningfulness and Psychological Safety respectively. The results for this MANOVA can be seen in Table 7 below. Wilks’ Lambda was used to report on the statistical significance of the findings. Table 8 presents the difference between the respective means for each level of leadership position and Work Engagement, Psychological Meaningfulness and Psychological Safety. Three 1-way ANOVA’s were then conducted for Work Engagement, Psychological Meaningfulness and Psychological Safety with regards to each level of leadership respectively. The results for these 1-way ANOVA’s are captured within Table 9 below. Bonferroni was run to confirm the findings of the 1-way ANOVA analysis results. These results are presented in Table 10.

Table 7

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
<th>F</th>
<th>df</th>
<th>p</th>
<th>Partial eta squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of Leadership</td>
<td>.923</td>
<td>3.367</td>
<td>12.00</td>
<td>.000</td>
<td>.026</td>
</tr>
</tbody>
</table>

The results indicate that there is a significant difference in the experience of Work Engagement, Psychological Meaningfulness and Psychological Safety respectively between the different levels of leadership. As a result of this finding a 1-way ANOVA was conducted to determine which levels of leadership position were affected by the constructs of Work Engagement, Psychological Meaningfulness and Psychological Safety. The results for this 1-way ANOVA can be seen in Table 8 below.
Table 8


<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Trainee/Intern</th>
<th>Junior Manager</th>
<th>Middle Manager</th>
<th>Senior Managers/Executive</th>
<th>No level of Leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Engagement</td>
<td>46.09&lt;sup&gt;a&lt;/sup&gt; (5.12)</td>
<td>44.74&lt;sup&gt;b&lt;/sup&gt; (4.97)</td>
<td>46.46&lt;sup&gt;c&lt;/sup&gt; (5.16)</td>
<td>51.23&lt;sup&gt;abcd&lt;/sup&gt; (5.69)</td>
<td>45.75&lt;sup&gt;d&lt;/sup&gt; (5.08)</td>
</tr>
<tr>
<td>Psychological Meaning</td>
<td>30.59&lt;sup&gt;a&lt;/sup&gt; (5.10)</td>
<td>29.39&lt;sup&gt;b&lt;/sup&gt; (4.90)</td>
<td>30.20&lt;sup&gt;c&lt;/sup&gt; (5.03)</td>
<td>33.29&lt;sup&gt;abcd&lt;/sup&gt; (5.55)</td>
<td>29.85&lt;sup&gt;d&lt;/sup&gt; (4.97)</td>
</tr>
<tr>
<td>Psychological Safety</td>
<td>15.97 (5.32)</td>
<td>15.43 (5.14)</td>
<td>15.88 (5.30)</td>
<td>17.00&lt;sup&gt;abcd&lt;/sup&gt; (5.67)</td>
<td>15.57&lt;sup&gt;d&lt;/sup&gt; (5.19)</td>
</tr>
</tbody>
</table>

<sup>a,b,c,d</sup> = groups that are statistically significantly differ from each other.

The mean values for the difference between each level of leadership and Work Engagement, Psychological Meaningfulness and Psychological Safety are captured in Table 8. The average mean values for each level of leadership is captured in brackets below each mean score per construct. The Senior Manager/Executive level of leadership had the highest mean scores for Work Engagement (M = 51.23, Ave M = 5.69), Psychological Meaningfulness (M = 33.29, Ave M = 5.55) and Psychological Safety (M = 17.00, Ave M = 5.67) compared to the other levels of leadership groups and the non-leadership position group. The Junior Manager level of leadership experience the lowest mean scores for Work Engagement (M = 44.74, Ave M = 4.97), Psychological Meaningfulness (M = 29.39, Ave M = 4.90) and Psychological Safety (M = 15.43, Ave M = 5.14).

Table 9 below contains the results of the 1-way ANOVA analysis to determine which levels of leadership position were affected by the constructs of Work Engagement, Psychological Meaningfulness and Psychological Safety and how they significantly differed from which group/s.
### Table 9

1-way ANOVA Analysis to Determine Which Levels of Leadership Position Were Affected by the Constructs of Work Engagement, Psychological Meaningfulness and Psychological Safety.

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Position(I)</th>
<th>Position(J)</th>
<th>Mean Difference (I – J)</th>
<th>Std. Error</th>
<th>Sig.</th>
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<tbody>
<tr>
<td>Work Engagement</td>
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<td>1.288</td>
<td>.792</td>
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<td>1.469</td>
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<tr>
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<td>5.</td>
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<td>1.187</td>
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<td>.794</td>
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</table>

*The mean difference is significant at the .05 level*
Table 9 continued

1-way ANOVA Analysis to Determine Which Levels of Leadership Position Were Affected by the Constructs of Work Engagement, Psychological Meaningfulness and Psychological Safety.

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Position(I)</th>
<th>Position(J)</th>
<th>Mean Difference (I – J)</th>
<th>Std. Error</th>
<th>Sig.</th>
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</thead>
<tbody>
<tr>
<td>Psychological Meaning</td>
<td>1. Trainee/ Intern</td>
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<td>.260</td>
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<td>1.047</td>
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<td>4.</td>
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<td>1.067</td>
<td>.260</td>
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<td>1.047</td>
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<td>.931</td>
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</tbody>
</table>

*The mean difference is significant at the .05 level
Table 9 continued

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</thead>
<tbody>
<tr>
<td>Psychological Safety</td>
<td>1. Trainee / Intern</td>
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</table>

*The mean difference is significant at the .05 level
Table 9 displays the 1-way ANOVA analysis to determine which levels of leadership position were affected by the constructs of Work Engagement, Psychological Meaningfulness and Psychological Safety. The results obtained per construct are as follows:

*Work Engagement:*

The effect of Work Engagement is greatest for the Senior Managers/Executives between all other levels of leadership. The greatest difference between the effect of Work Engagement for Senior Managers/Executives is between Junior Managers and people with no level of leadership ($p = .000$).

*Psychological Meaningfulness:*

The effect of Psychological Meaning is greatest for the Senior Managers/Executives between all other levels of leadership. The greatest difference between the effect of Work Engagement for Senior Managers/Executives is between Junior Managers and people with no level of leadership ($p = .000$).

*Psychological Safety:*

The effect of Psychological Safety is greatest for the Senior Managers/Executives between Junior Managers ($p = .007$) and people with no level of leadership ($p = .005$).

Bonferroni was run to confirm the findings of the 1-way ANOVA analysis results. These results are presented in Table 10.
Table 10

Bonferroni Confirmatory Post Hoc Test to Determine the Differences Found in the Three 1-Way ANOVA Analysis Results.

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Position(I)</th>
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<tbody>
<tr>
<td>Work Engagement</td>
<td>1. Trainee/ Intern</td>
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</table>

*The mean difference is significant at the .05 level
Table 10 continued

*Bonferroni Confirmatory Post Hoc Test to Determine the Differences Found in the Three 1-Way ANOVA Analysis Results.*

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<th>Sig.</th>
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<tr>
<td>Psychological Safety</td>
<td>1. Trainee/Intern</td>
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<tr>
<td></td>
<td>3.</td>
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<td>.57318</td>
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<td></td>
<td>4.</td>
<td>-1.0290</td>
<td>.61474</td>
<td>.948</td>
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<td></td>
<td>5.</td>
<td>.3996</td>
<td>.51231</td>
<td>1.000</td>
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<tr>
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<td>3.</td>
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<tr>
<td></td>
<td>5.</td>
<td>-.1461</td>
<td>.47232</td>
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</tr>
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<td>-1.1158</td>
<td>.57081</td>
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<td>4.</td>
<td>-1.4286</td>
<td>.50965</td>
<td>.053</td>
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</tr>
</tbody>
</table>

*The mean difference is significant at the .05 level*
The Bonferroni post hoc analysis confirms the following per construct:

**Work Engagement:**

The effect of Work Engagement is greatest for the Senior Managers/Executives over all other levels of leadership. The greatest difference between the effect of Work Engagement for Senior Managers/Executives is between Junior Managers and people with no level of leadership \((p = .000)\).

**Psychological Meaningfulness:**

The effect of Psychological Meaning is greatest for the Senior Managers/Executives and between Junior Managers, Middle Managers and people with no level of leadership. The greatest difference between the effect of Psychological Meaning for Senior Managers/Executives is for people with no level of leadership \((p = .002)\).

**Psychological Safety:**

There are no significant results for Psychological Safety between all levels of leadership.

### 4.4 Conclusion

This chapter presented the results obtained from the statistical instruments used to determine the relationship between Work Engagement, Psychological Meaningfulness and Psychological Safety amongst the five levels of leadership measured. The results confirmed a positive relationship between the three constructs and the levels of leadership measured. The results showed that the Senior Manager/Executive level of leadership had the strongest relationship with the constructs when compared to the other levels of leadership groups. Chapter Five discusses the results of this chapter in detail. The limitations of this study and recommendations for further research will also be explored.
CHAPTER 5: DISCUSSION, RECOMMENDATIONS AND CONCLUSION

5.1 Introduction

This chapter provides a discussion of the results obtained from this study. The study’s hypotheses will be discussed and an overall integration of the results is provided. Thereafter, recommendations will be made for future research and for organisations.

5.2 Overview of the hypotheses of this study

The aim of this study was to explore the manifestation of work engagement, psychological meaningfulness and psychological safety across four tiers of South African leadership roles; namely Trainees/Interns, Junior Managers, Middle Managers and Senior Managers/Executives and in comparing these to a control group of non-leaders. This study further investigated the possible moderating role of job level on psychological meaning and psychological safety on work engagement.

The following hypotheses were outlined for this study:

1. There is a positive relationship between work engagement and psychological meaningfulness.
2. There is a positive relationship between work engagement and psychological safety.
3. There is a positive relationship between psychological meaning and psychological safety.
4. Psychological meaningfulness predicts work engagement.
5. Psychological safety predicts work engagement.
6. There is a difference between the levels of leadership and work engagement.
7. There is a difference between the levels of leadership and psychological meaningfulness.
8. There is a difference between the levels of leadership and psychological safety.
9. The levels of leadership moderate the relationship between psychological meaningfulness and psychological safety on work engagement.
10. The levels of leadership moderate the relationship between psychological safety on work engagement.

These hypotheses will be explored in detail in the ensuing section.

5.3 Interpretation of findings

5.3.1 Work engagement, psychological meaningfulness and psychological safety

In general, the overall sample showed to experience psychological meaning in their work, they felt psychologically safe in their work and they seemed to engage with their work often. For an organisation, this means increased productivity and organisational performance (Bakker & Bal, 2010; Macey & Schneidder, 2008; Simpson, 2008; Sonnentag, 2003). For the sample population, this indicates that they will experience enjoyment and find meaning in their daily tasks (Bamford et al., 2013; Neck & Manz, 2012; Olivier & Rothmann, 2007; Savoie, 2002; Viljoen, 2015), taking pride in the respective tasks (Geldenhuys et al., 2014; Henn & Barkhuizen, 2009; Schaufelli et al., 2002) whilst expressing themselves in a creative manner (Olivier & Rothmann, 2007). This finding is related to a more personal experience of one’s work role in line with SDT (Deci and Ryan, 1985; 2008; Ryan & Deci, 2000; Stone et al., 2008).

However, the finding of a more engaged workforce contradicts previous research, which emphasised that South African employees are disengaged at work (PDT, 2014). Additionally, The Gallup Survey (2013) found that more than half of the employees on all levels were disengaged with their work. This is also contradictory to the finding of this study. This could be due to the sample consisting of more people within a leadership role than people in a non-leadership position, meaning that leaders experience more engagement with their work roles. Previous research has linked SDT to increased levels of work engagement (Deci & Ryan, 1985; Ryan & Deci, 2000). Therefore, the sample may experience more intrinsic and extrinsic motivation within their work roles leading to increased engagement levels (Deci &
Ryan, 1985; Ryan & Deci, 2000; Salanova & Agut, 2005). Additionally, the higher engagement levels can be explained by the sample experiencing more meaning from their work roles (Frankl, 1992; May et al., 2004; Stone et al., 2008).

The results found that a significant positive relationship exists between work engagement and psychological meaningfulness, between work engagement and psychological safety and between psychological meaningfulness and psychological safety respectively. Therefore, the hypotheses H1, H2 and H3 were all accepted. This is in line with previous theory and research findings on work engagement, psychological meaningfulness and psychological safety. For example, Kahn (1990) found that when people experience meaning in their work, they will be more engaged in their work roles. Further research has supported this describing engagement as a consequence of the subjective experience of meaning with one’s work role (cf. Cartwright & Holmes, 2006; Chopra, 1994; Frankl, 1992; Lips – Wiersma & Morris, 2009; Smith & Louw, 2007) and feeling psychologically safe to engage within one’s work role and with the organisation (Ashauer & Macan, 2013; Edmonson, 1999, 2012; Kahn, 1990; Nienaber et al. 2015; Simpson, 2008).

Additionally, the results show that psychological meaning predicted work engagement. Thus, H4 was accepted. This is supported and validated by previous research findings in which people who experience psychological meaningfulness within their work roles tend to be more engaged within those respective roles (cf. Cartwright & Holmes, 2006; Chopra, 1994; Frankl, 1992; Lips – Wiersma & Morris, 2009; Smith & Louw, 2007; Ashauer & Macan, 2013; Edmonson, 1999, 2012; Kahn, 1990; Nienaber et al., 2015; Simpson, 2008). This is important because the finding establishes that South African’s experience the constructs of psychological meaningfulness, psychological safety and work engagement similarly to other nations in which the previous research was conducted.
Level of leadership was also shown not to moderate the relationship between psychological meaningfulness or psychological safety on work engagement. Therefore, the relationship between psychological meaningfulness or psychological safety cannot be explained by level of leadership. The hypotheses H9 and H10 are therefore rejected. This is supported by research showing that the experience of psychological meaning, psychological safety and work engagement is different for each person (Kahn, 1990; Salanova & Agut, 2005; Sonnentag, 2003). Diversity accounts for these differences (Viljoen, 2015).

5.3.2 The differences of work engagement, psychological meaningfulness and psychological safety across leadership tiers

As expected, psychological meaningfulness predicted work engagement across all the leadership tiers as well as for non-leaders. This is in line with previous theory explaining the interconnection between motivational factors (Deci & Ryan, 2008; Ryan & Deci, 2000), psychological meaningfulness (Frankl, 1992; Geldenhuys et al., 2014; May et al., 2004; Stone et al., 2008) and work engagement (Bakker & Bal. 2010; Carasco-Saul et al., 2015; Kahn, 1990; Macey & Schneider, 2008; Schaufelli et al., 2002; Simpson, 2008; Smith & Louw, 2007).

Interestingly, psychological safety was only a predictor of work engagement for the Middle Managers and not for the other levels of leadership or the non-leadership group. Therefore, H5 was partially accepted. This result could be because 88.1% of this group had been in their current position for a period of 0-15 years. Thus, Middle Managers could feel secure within their work roles as they have more legitimate and positional power than the lower levels of leadership and non-leadership and are privy to more information from the upper levels of leadership. Power and Leadership Theory supports this as Middle Managers experience and yield a lot of power within an organisation to drive processes and organisational directives from upper leadership levels (Achua & Lussier, 2013; Bergh &
Geldenhuys, 2014; Yukl & Falbe, 1991). Additionally, Middle Managers have less organisational responsibility and risk associated with organisational strategy when compared to Senior Managers/Executives. This could add to their feeling of safety within their position and work roles as Middle Managers. Ultimately though, this indicates that the organisation is not performing optimally as the Senior Managers/Executives are the not creating a high-performance culture in which the lower levels of leadership and non-leadership feel safe enough to express themselves openly within the organisation. This can affect the productivity of the organisation and limit the competitive advantage of the organisation (Ashauer & Macan, 2013; Choi et al., 2015; May et al., 2004; Nienaber et al., 2015).

The results show that Senior Managers/Executives felt the most psychologically safe and experienced more psychological meaningfulness and engagement with their work roles. Furthermore, the Senior Managers/Executives significantly differed from all the other groups measured. Therefore, there is a difference between the levels of leadership and work engagement and psychological meaningfulness respectively. H6 and H7 are consequently accepted. This means that this group felt more psychologically safe to express their ideas (Ashauer & Macan, 2013). This could be due to higher levels of trust between this level of leadership as well as increased job resources available to this level of leadership. There is also an expectation that leaders will produce creative strategies to compete within a global marketplace. Theory has highlighted the importance of psychological safety for innovation and navigation of the global workplace (Ashauer & Macan, 2013; Choi et al., 2015; El Badawy & Bassiouny, 2014). Additionally, this group experienced more psychological meaningfulness from their daily work roles allowing for greater engagement within the workplace (Bakker & Bal. 2010; Carasco-Saul et al., 2015; Frankl, 1992; Geldenhuys et al., 2014; Kahn, 1990; Macey & Schneider, 2008; May et al., 2004; Schaufelli et al., 2002; Simpson, 2008; Smith & Louw, 2007; Stone et al., 2008). This is in line with SDT (Deci &
Ryan, 2008; Ryan & Deci, 2000), as Senior Managers/Executives could experience more intrinsic and extrinsic motivators within their position than other groups, leading to an increased experience of psychological meaningfulness.

The greatest difference in groups was between the Senior Managers/Executives and the Junior Managers and people with no level of leadership. Research has shown that employees’ level of engagement is directly correlated to the attitude and behaviour of the organisation’s leadership structure (Carasco-Saul et al., 2015). This is further supported by research highlighting the importance of positional power and autocratic power of African leaders and the impact of these relational cultural values have on everyone in an organisation (April & Ephraim, 2006; Bolden & Kirk, 2009; Kuada, 2010). Therefore, this result shows that these leaders do not experience quality relationships with the other groups and do not adequately motivate their subordinates to experience psychological safety, psychological meaningfulness and engagement. The leaders thereby use legitimate and positional power to drive organisational tasks (Yukl & Falbe, 1991). This affects the productivity and commitment of the other groups within an organisation (Bakker & Bal, 2010; Choi et al., 2015; Macey & Schneider, 2008; Simpson, 2008; Sonnentag, 2003) and ultimately impacts the competitive advantage of the organisation (Choi et al., 2015).

5.4 Research implications and value add

This research confirmed that South African’s experience the constructs of work engagement, psychological meaningfulness and psychological safety is similar to other populations. This confirms that previous research on these constructs holds true within a South African context. The sample often experienced engagement within their respective work roles. The study showed that Senior Managers/Executives experienced more psychological meaningfulness and engagement with their work roles, thereby differing from all other groups. The greatest difference in groups was between the Senior
Managers/Executives and the Junior Managers and people with no level of leadership. This is important for organisations as it highlights areas of development for all levels of leadership in improving workplace engagement through improved psychological meaning and psychological safety for people within all levels of an organisation. This will provide increased creativity and productivity for all levels of leadership and people with no leadership experience, positively affecting the bottom line and fiscal growth of organisations.

5.5 Limitations

This study collected data within one province of South Africa, i.e. Gauteng, using a cross-sectional research design. This affects the generalisability of the findings to South Africa as a whole. The cross-sectional research design may have affected the causality regarding the relationships between the variables measured. A longitudinal or mixed-method design may eliminate this problem in a future study. Furthermore, the study made use of self-report questionnaires in which respondents may not have responded honestly, thereby affecting the outcome of the study.

5.6 Recommendations for future research

As is the nature of research, a larger sample size could contribute to a greater generalisability of the current findings. Thus it is recommended that the study engage with more organisations across all provinces within South Africa and additionally target a wider array of organisations to ensure generalisability across all leadership structures within different sectors. Research could also be conducted on the Middle Managers to determine why they experienced greater psychological safety compared to the other levels of leadership and non-leadership. Future research could also target the Senior Manager/Executive level to determine the reasons why they experienced the greatest difference between all other groups for all constructs measured. Additionally, this could be completed in conjunction with current literature on African leadership to determine the impact of this specific leadership culture on
employees work engagement, psychological meaningfulness and psychological safety. Additionally, the constructs of work-role identity (De Braine & Roodt, 2011) or job-resources for people within a leadership role (Bakker, 2011; De Braine & Roodt, 2011) could be explored across all levels of leadership to account for the difference in level of engagement as found in this study compared to the PDT (2014) study. Leadership style could also be measured in addition to the current constructs to determine the reasons for differences between groups.

5.7 Conclusion

The aim of this research study was to explore the manifestation of engagement, psychological meaningfulness and psychological safety across fours tiers of South African leadership roles and compare these to a control group of non-leaders. In addition, the study investigated the moderating role of job level on psychological meaning and psychological safety on work engagement. The findings supported previous research on work engagement, psychological meaningfulness and psychological safety. This study contradicted previous South African research done by the PDT (2014) as the sample often experienced engagement within their work roles. The study provided interesting results for Middle Managers and their experience of psychological safety compared to the other levels of leadership and non-leadership. The study additionally provided interesting results as Senior Managers/Executives experienced the greatest difference with all other groups thereby experiencing more psychological safety, psychological meaning and work engagement than other groups. This study has highlighted areas for future organisational development on all levels of leadership and non-leadership to drive fiscal growth and global competitiveness for an organisation.
REFERENCES


