THE RELATIONSHIP BETWEEN PSYCHOLOGICAL CAPITAL, WORK ENGAGEMENT AND ORGANIZATIONAL COMMITMENT AMONGST EMPLOYEES AT A SELECTED FOOD PROCESSING PLANT IN THE WESTERN CAPE

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Mini-thesis submitted in partial fulfilment of the requirements for the degree of Master of Commerce in the Department of Industrial Psychology, Faculty of Economic and Management Sciences, University of the Western Cape.

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DECLARATION

I hereby declare that the 'The relationship between psychological capital, work engagement and organizational commitment amongst employees at a selected food processing plant in the Western Cape' is my own work, that it has not been submitted for any degree or examination at any other institution of higher learning and that all the sources I have used or quoted have been indicated and acknowledged by complete references. It is being submitted for the degree of Magister Commercii at the University of the Western Cape.

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'We are because of others.'

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ABSTRACT

Business operational environments are constantly challenged by shifting trends in the economy, technology and market. The food processing industry is driven by rise in higher income and population growth as well as growing urbanization and internationalization of retail, which induce demand for food manufacturing products. More often than not, food processing is marked by voluminous production and mandatory stringent food processing standards (Henson & Cranfield, 2009). In a report by the Department of Agriculture, Forestry and Fisheries (2012), in 2011, the food production division of the South African economy was the most dominant in terms of output, followed by paper and beverages production. Given the scale of impact and the volatile nature of the industry, food processing plants require support from employees who resemble positive psychological states, work with energy and delight as well as employees who display desire to remain with the organization. Positive psychological capacities can be developed in employees and have been associated with higher employee performance and satisfaction, amongst other desirable organizational outcomes (Luthans, Avolio, Avey, & Norman, 2007).

The current study sought to add to existing research on psychological capital, work engagement and organizational commitment, by observing the variables in a food processing context. The main objective of the research was to investigate the relationship between psychological capital, work engagement and organizational commitment amongst employees at a selected food processing plant in the Western Cape. Two hundred and fifty three questionnaires were administered, of which two hundred and eighteen were returned.

Convenience sampling was used to select employees to participate in the study. Data was collected using a self-developed biographical questionnaire, the Psychological Capital Questionnaire developed by Luthans, Youssef and Avolio (2007), the Utrecht's Work Engagement Scale developed by Schaufeli and Bakker (2003) and the Organisational Commitment Questionnaire which was developed by Allen and Meyer (1990). The Statistical Package for Social Sciences (SPSS) version 23 and the LISREL 8.80 statistical analysis software were used to analyze the data. Item and dimensional analyses were conducted on the subscales to identify poor items and ensure uni-dimensionality of the subscales. It was found

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that both the measurement and structural models fitted the data reasonably well. Regression analysis was used to test one of the hypotheses.

The results showed that a relationship between psychological capital and work engagement exist. There was a significant, negative relationship between psychological capital and affective commitment and between work engagement and affective commitment. Regression analysis showed that work engagement had a significant impact on affective commitment. Future considerations and recommendations for organizations are discussed.

Keywords: Psychological capital, Work engagement, Organizational commitment, Self-efficacy, Hope, Resilience, Optimism, Vigour, Dedication, Positive Psychology.

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CHAPTER 1

INTRODUCTION AND BACKGROUND

1.1. INTRODUCTION

Human capital is a cornerstone of competitive advantage for businesses across industries. Youssef and Luthans (2007) ascertained that as talent becomes increasingly scarce to source, it is imperative for organizations to retain human resources. Thus organizations that attract and more crucially, retain talent, tend to position themselves for effectiveness and success.

Organizations are increasingly appreciating the value of employees' health and well-being in the workplace, which has potential for sustaining growth and survival in turbulent operational environments (Moeller-Roy, 2005). Occupational health is mainly centred on the application of psychology in work contexts, thereby promoting safety in the workplace as well as promoting health and well-being (Schaufeli, 2004). To this end, interventions that enable psychological well-being, thereby enhance peak performance, benefit both employees and organizations.

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Psychological capital is a useful personal resource and Avey, Reichard, Luthans and Mhatre (2011) noted that employees with high levels of psychological capital tend to have extra resources to handle their work tasks, are expectant of good things to happen, quickly bounce back from setbacks and are more optimistic about negative circumstances. Work engaged employees are noted by Schaufeli and Bakker (2003) to possess a positive state of mind. Organizational commitment is identified by McMahon (2007) as a desired organizational outcome for most food processing companies. Suki and Suki (2011) noted that there are universal constructs that can be applied to any given organizational context such as work engagement, job satisfaction and organizational commitment, among others. Studies including that of Yücel (2012) have indicated that committed employees enable organizational thriving and success in the face of prevailing dynamic business environments.

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In today's environment in which employees in South Africa and elsewhere in the world currently function, more increasingly, demands are being placed on individuals' psychological presence and input. This can be attributed to factors such as technological advancements, shifting economic trends, change in organizational structures and the need for companies to remain abreast of competitive business environments. These factors have the propensity for employees to face quite a number of challenges including greater work load, lack of role clarity and diminished control and choice (Johnson, Cooper, Cartwright, Donald, Taylor, & Millet, 2005). This may then tap into employees' balance, with the effect of potentially disconnecting them from the work they do or organization concerned (Birt, Wallis, & Winternitz, 2004).

Moreover, many organizations have implemented practices that target reduction of costs and increase productivity, which often leads to a mentality that favours profitability more than the welfare of employees (Turner, Barling, & Zacharatos, 2002). These organizations try to survive on the basis of cutting prices and operational costs through redesigning business processes and downsizing the number of employees (Bakker, 2009). Since there is a limit to cutting prices and downsizing, new thinking and new approaches have become necessary for organizations to survive and create sustainable businesses. Hence, looking at personal psychological resources becomes necessary.

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1.2. PROBLEM STATEMENT

Food processing remains an inevitable sub-set of any given economy. This is particularly evident in the case of South Africa as population figures continue to escalate at a rate 1.3 percent and figures are projected to continually multiply (Barnes, Hartogh, & Wolpe, 2011). Apart from sustaining growing populations, the food processing industry is vital for enabling trade, creating employment and diversification of an economy. Pereira (2014) highlighted food processing as a priority for the South African economy. Prinsloo (2011) asserted that there are approximately 2 770 companies that are registered as manufacturers of food preparation products. In 2011, food processing accounted for 16% of total value added in the manufacturing sector (Cohen, Mason-Jones, Rambaran, & Lewis, 2013). In a report by the Department of Agriculture, Forestry and Fisheries (2012), the food processing industry accounted for 17% of total manufacturing jobs with estimated 215 000 jobs in 2011, thus

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making it the second largest manufacturing sector in as much as employment is concerned. Therefore, in one such labour intensive industry, organizations need to be sufficiently empowered with productive employees.

In a study by Schaufeli and Bakker (2001) it was found that some individuals, regardless of high job demands and long working hours, did not show symptoms of wearing down, stress or burnout. Instead, it appeared that they found pleasure in working hard and dealing with job demands. From a psychological perspective, these individuals are termed work engaged employees. Work engagement holds numerous advantages for the individuals exhibiting it and the organizations they work for. At an individual level, engaged employees derive satisfaction from applying themselves into their work, their energies do not deplete with ease and they have a balanced psychological well-being (Bakker, 2009). The organizations stand to benefit from engaged employees in the form of increased employee retention, work performance, collaboration and organizational commitment, which ultimately speak to desirable organizational outcomes. According to Joo (2010), an important strength for individuals working in any organization is their organizational commitment. Committed employees identify with their organizations and are prepared to remain loyal to organizations they serve. They are a resource to organizations as they tend to involve themselves in extra role behaviour, which goes a long way towards achieving organizational objectives (Luthans, 2002).

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As times evolve, organizations need to embrace change, including the changing needs of employees. According to Vance (2006), an organization that invests in employees, increases employees' work engagement. When employees are engaged, they are deeply engrossed in a task and psychologically present. However, disengaged employees are marked by decreased levels of energy and enthusiasm at a task, which have negative resultant impacts for an organization including increased turnover, absenteeism and low productivity (Mostert & Rathbone, 2001).

A large proportion of today's working individuals find themselves coping with major responsibilities at home, as well as rising expectations and demands at work. The combination of home and work demands often leads to time pressure and conflict, a blend of which may see the one gaining more attention than the other and the bearer experiencing

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negative physical, psychological or behavioural outcomes. Research has been conducted to understand variables that are linked to these negative outcomes. The positive psychology school of thought diverts attention to variables that lead to desirable organizational outcomes. These include psychological capital, work engagement and organizational commitment, amongst many others. Various literature exist on the interaction of these variables but there is an existing gap in understanding these variables in a food processing environment.

Psychological capital, which comprises hope, self-efficacy, optimism and resilience, has been researched and found to have huge potential for organizations to thrive (Luthans, 2002). Thus, the research question guiding the current study is to investigate the relationship between psychological capital, work engagement and organizational commitment amongst employees who are employed at a selected food processing plant in the Western Cape.

1.3. MOTIVATION FOR THE STUDY

Around the world, there is a great deal of interest in the concept of work engagement. Surveys have revealed low levels of engagement in many countries, for example, according to the Aon Hewitt's Global Engagement research (2011) in China, 33 percent of people were reported to be partly or fully disengaged. The same survey showed that four employees out of ten are not engaged worldwide. Khalid, Khalid, Waseem, Farooqi and Nazish (2015) noted that when employees are engaged, they try to create resources for their own work and can offer competitive advantage to their organizations.

Most organizations value performance, employees who meet their deliverables, as they drive for success. Engaged employees play a central role in delivering desirable outcomes that are indicative of success and high performing culture. According to Wright and Cropanzano (2000), job performance has a positive relationship with employees' psychological well-being, indicating that employees with higher levels of psychological well-being perform better at work and those with lower psychological well-being are associated with lower job performance. Robertson and Cooper (2009) were of the view that high psychological well-being is associated with a wide range of positive outcomes which support stronger work engagement. Although work may be a source of income, work relationships and affiliation, it can also be a source of stress, burnout and health implications - work contexts that cater to

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employees' psychological wellness stand to have employees who are productive, psychologically present at work and employees who flourish at tasks (Herbert, 2011).

The food manufacturing industry is characterised by labour intensity. Although this has been the case for South Africa for many years in the past, the Department of Agriculture, Forestry and Fisheries (2012) postulated that from 2009 to 2010, South Africa recorded a significant drop in the total numbers of employees in the food manufacturing sector. A large number of jobs were made redundant due to unfavourable economic conditions that persisted. However, production plants have had to produce outputs with limited human resources. Across the food manufacturing environment, the kind of labour that is predominant is semi-skilled and unskilled. Developing employees through initiatives that enhance their mental capacities of hope, self-efficacy, resilience and optimism, is a step towards empowering an organization with committed and engaged employees. In spite of challenging job markets, manufacturers need to meet productive aims and gain a competitive edge in the market and build sustainable businesses that factor in the interests of various stakeholders, including employees (Herbert, 2011).

The Swiss Business Hub South Africa (2011) acknowledged that production companies expand and form partnerships with conglomerates to gain from economies of scale, thereby surviving competition in the industry. By virtue of the market concentration of the industry, strategic interventions are required for an organization to be and remain competitive. It is vital that organizations utilize human resources as a driver for performance and effectiveness. Suki and Suki (2011) were of the view that effectively managed employees breed success. Work engaged employees – employees who lose sight of other things and focus attention on work enable an organization to reach its goals / intents.

Moreover, engaged employees perform tasks with vigour, dedication and become absorbed in the involvement thereof. Lockwood (2007) asserted that engaged employees work harder and are more likely to go above the requirements and expectations of their work. Organizations desire various outcomes such as job satisfaction, productivity, retention, organizational commitment, among other outcomes. Commitment sees organizations retaining talent that has tacit job knowledge and proves cost effective by eliminating consistent hiring and firing.

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According to Hoffmeister (2006), employees prefer to work in an organization where the workforce is engaged and where there are greater levels of involvement.

The Trade and Industry Minister, Davies (2014, p. 3), affirmed that "food processing continues to be resilient and is one of the largest manufacturing sectors by employment." The food manufacturing plant where the research will be conducted is sustained by values that promote employee well-being, safety and development through employee-oriented initiatives such as drive, passion and commitment. Among many other value statements, this operational statement catalyses the relevance of investigating the variables of psychological capital, work engagement and organizational commitment as it speaks to the core values of the organization where the research will be conducted.

1.4. RESEARCH OBJECTIVES

Based on the introduction, problem statement and motivation, the over-arching research question for this study is to investigate the relationship between psychological capital, work engagement and organizational commitment amongst employees at a selected food processing plant in the Western Cape.

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Hence, the objectives of the current research are:

- To determine the relationship between psychological capital and work engagement.
- To establish if there is a relationship between psychological capital and organizational commitment.
- To determine the relationship between work engagement and organizational commitment.
- To determine which of the two variables, namely, psychological capital or work engagement has a greater impact on organizational commitment.

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1.5. DEFINITION OF KEY TERMS

1.5.1 Psychological Capital

Luthans et al. (2007, p. 3) defined psychological capital as "an individual's positive psychological state of development and is characterized by: (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success." According to Luthans et al. (2007, p. 542), the term psychological capital represents individual motivational propensities that accrue through positive psychological constructs such as self-efficacy, optimism, hope, and resilience. Kersting (2003) defined psychological capital in terms of components of the inner self, which when combined with experiences make up the value.

1.5.2 Work engagement

According to Bakker, Schaufeli, Leiter and Taris (2008), work engagement is a positive, work-related state of well-being or fulfilment characterized by a high level of energy and strong identification with one's work. Maslach and Leiter (1997) defined engagement as the opposite of burnout; engaged employees have a sense of energetic and effective connection with their work. Schaufeli, Salanova, Gonza´lez-Roma and Bakker (2002, p. 74) defined work engagement as "a positive, fulfilling, work-related state of mind that is characterized by vigour, dedication and absorption."

1.5.3 Organizational commitment

Field and Buitendach (2011) defined organizational commitment as the willingness for employees to extend greater efforts on behalf of their organizations, thereby manifesting a desire to remain in the organization and identify with the organization's goals and values. Meyer and Allen's (1991, p. 67) definition of organizational commitment is centred around three kinds of commitment, namely, "affective commitment refers to the employee's

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emotional attachment to, identification with, and involvement in the organization. Continuance commitment is the awareness of the costs associated with leaving the organization. Finally, normative commitment represents a perceived obligation to remain in the organization."

1.6. SUMMARY OF CHAPTER ONE

This chapter introduced the background to the constructs being investigated. The problem statement, motivation for the study and research objectives were also discussed. Furthermore, definitions of key terms and a chapter summary were also presented.

1.7. THESIS CHAPTER OUTLINE

Chapter 2 will give an overview of the variables under study, namely, psychological capital, work engagement and organizational commitment. The chapter provides a literature survey that outlines the theoretical basis of the research.

Chapter 3 provides a detailed discussion of the research design and methodology used to investigate the research problem. Specifically, the sampling procedure, sample size, procedures followed, research instruments used and the statistical techniques used to analyze the data will be explored.

Chapter 4 will provide a presentation of the findings obtained from the research.

Chapter 5 will highlight the results obtained. Inferences will be drawn based on the findings and limitations will be highlighted. In conclusion, recommendations for future research and the organization will be made.

The following chapter will provide specific literature review of the variables being investigated.

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CHAPTER 2

LITERATURE REVIEW

2.1. INTRODUCTION

Employees who are well managed are drivers of quality and productivity (Osa & Amos, 2014). Çavuş and Gökçen (2015) noted that the psychological and physical participation of employees attribute to organizational success. It is crucial for organizations to devise strategies that are centred on human capital, which result in both employees and the organizations thriving. Traditionally, few organizations rely on human resources for maximization of resource utilization, rather, they place attention on non-human centred resources such as raw materials, financial injection and market intelligence, amongst other predictors of success (Luthans, Luthans, & Luthans, 2004). Based on this view, practices that increase employee productivity and effectiveness such as 360 degree feedback, strength-based feedback, employee empowerment, positive reinforcement, and many other human-centred approaches were not placed much emphasis on (Luthans & Youssef, 2007).

Organizations continually strive for competitive advantage which was coined by Ulrich and Brockbank (2005) as the superiority that an organization gains by providing the same offering as its competitors at a low cost. Luthans and Youssef (2004) noted that traditionally, competitive advantage has often been derived from rare or unique business methods, low costs and interconnectedness. Although these are sound sources of competitive advantage, it is important to note that they mainly ensure the financial success of an organization and do not take into account the long term interest of the various stakeholders, including employees.

Various recent research studies have noted a developing trend in many organizations to focus on their workforce as a means of competitive advantage (Adler & Kwon, 2002; O'Leary, Lindholm, Whitford, & Freeman, 2002). This is supported by theorists such as Luthans and Youssef (2004) who positioned people as the most ultimate and important tangible resource in changing business environments. It has continually been proved that human resources yield return on investment and that helps organizations to withstand competition and ensure

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sustainability (Luthans, Avey, Avolio, Norman, & Combs, 2006). Luthans and Youssef (2004) noted the proposition of 'doing' human resources for competitive advantage can begin to close the gap through the recognition and effective management of human, social and now positive psychological capital.

According to Çavuş and Gökçen (2015), psychological capital is a take-off from economic capital, a concept which entails investing resources with the aim of yielding financial returns. It is now recognised at an equal footing with resources such as social capital and human capital. Whereas human capital is about what one knows and social capital is about who one knows, psychological capital is about who one is, especially the emphasis on who one is becoming, thus the concept of the current self and the possible self. Luthans et al. (2006) were of the view that a positive psychological state is characterised by having confidence to exert effort where it is needed to ensure successful outcomes, being optimistic about the current and the future perspective, having pathways towards set goals of success and being able to bounce back when a difficulty is encountered. In order for a capability to be considered as a positive psychological capital, there are characteristics that it should have. A capability should be grounded in research, have a valid measurement, be unique in the field of organizational behaviour, be state-like and lastly, it should have an impact of sustainable performance. There are four capabilities that meet the criteria, namely: self-efficacy, optimism, hope and resilience. The combination of these four capabilities was identified to have a tremendous effect on performance (Luthans et al., 2006).

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2.2. THE CONCEPT OF PSYCHOLOGICAL CAPITAL

2.2.1 The Positive Psychology Movement

The Positive Psychology Movement is acknowledged to have been spear headed by the work of Seligman (1998). In line with the work of most psychologists of his time, he focused his mandate on human frailties and weaknesses. In other words, the focus of his early work was based on shortcomings of people, dysfunctions and pathologies. By 2002, there was an estimated 200 000 articles published in Psychology, of which only an estimated 1000 articles were on positive psychology. The other 199 000 articles were on topics of treatment of mental illness, depression, anxiety, fear and anger (Luthans, 2002). Seligman (1998) later

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redirected his focus from weaknesses of people and figured out there is more substance in dealing with what is right with people than concentrating on what is wrong with them. The view of Luthans (2002, p. 696) was that "It is about identifying and nurturing their strongest qualities, what they own and are best at, and helping them find niches in which they can best live out these strengths."

Çavuş and Gökçen (2015) noted that the field of psychology has had a paradigm shift, from the generalised mission of helping the mentally ill to a different focus of making the lives of people more productive and fulfilling, finding out what people are best at and nurturing their gifts to get the best out of them. Luthans (2002) argued that the field of organizational behaviour has more work done on negative discourses than positive virtues. Examples of these would be work on stress and burnout as opposed to eustress, the well known work on resistance to change as opposed to embracing or celebration of change and the dysfunction of employees as opposed to strengths. Thus, the field of organizational behaviour has shifted from vulnerability to resilience and from a diagnosis of pathologies to wellness. Positive Psychology is a plausible approach as it is grounded in theory and research. The concept can be experienced at three different levels - subjective, micro and macro level of analysis. The subjective level is concerned with well-being, contentment with the past, flow and happiness in the present, hope and optimism for the future. The micro level of analysis is about positive traits such as the capacity to love, courage, perseverance and forgiveness, amongst other positive virtues. At the macro or institutional level of analysis, the emphasis is on better citizenship and responsibility, altruism and strong work ethic amongst other positive aspects (Luthans, 2002).

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2.2.2 Positive Organizational Behaviour (POB)

Positive Psychology is a unique concept because of its qualities of being measurable and its applicability in the work context. Luthans (2002, p. 698) defined micro level POB as "the study and application of positively oriented human resource strengths and psychological capabilities that can be measured, developed and effectively managed for performance improvement in today's workplace." The quality of being open to development is what Luthans (2002) identified as one of the most important state-like traits of POB. It opens up the concept to development through training initiatives, management on-the-job or even self-

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development. The question that remains a highly contested issue is which psychological capacities meet the POB criteria. Luthans (2002) asserted that of all the psychological capacities, confidence or hope is the most established capacity and that hope is the psychological capacity which he identified as the most unique and potentially having the greatest impact.

According to Linley and Joseph (2004), there are many positive approaches but unlike POB, most of them are dependent on dispositional, notably stable and state-like characteristics which develop over long periods of time, even stretching across a lifespan. They develop when factors that enable or inhibit them are managed and through long term professional interventions that may be complimented by intensive treatment. These kinds of positive approaches do not keep up with continually changing business environments and the limited resources of organizations (Youssef & Luthans, 2007). Most concepts in the field of psychology are recognized as strictly being states or traits (Peterson, 2006). States such as moods and positive emotions are seen to be momentary and easily changeable, whereas traits are recognized to be stable and not easily changeable. These would include traits like intelligence and positive heritable qualities. POB lies in-between this continuum, it is neither on the extremes of being a state or a trait. Youssef and Luthans (2007) used the term 'state-like' to set POB apart from other positive states. This implies that POB is more open to change and development. POB can be differentiated from positive organization scholarship (POS) in that POB focuses on the individual and micro level of analysis of psychological capabilities, whereas POS focuses on interventions at an organizational or institutional level of analysis (Roberts, 2006).

2.3. DIMENSIONS OF PSYCHOLOGICAL CAPITAL

2.3.1 Self-efficacy

Self-efficacy can be used interchangeably with the term confidence which is rooted in the research and theoretical finding of Bandura (1997). There is no one universal definition of self-efficacy. The most popular one is by Bandura (1997) which stated that self-efficacy is about how well one can execute a course of action to deal with a particular situation. The concept of self-efficacy traces back to Bandura's Social Cognitive Theory which outlines five

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cognitive processes namely, symbolizing, forethought, observation, self-regulation, and self reflection. Brand (2007) stated that of the four psychological capabilities, self-efficacy is the one which is better structured in terms of theory and practice.

Other scholars such as Sahin, Çubuk, and Uslu (2014) preferred to use the term 'self-sufficiency' to refer to the same concept. For Sahin et al. (2014), people with self-sufficiency divide tasks into smaller parts and try to attain these small goals, the collective of which results in the achievement of a huge goal. According to Bandura (1997), self-efficacy affects the manner in which people perceive reality, feel, act and interpret events. It is evidenced that people with low self-efficacy are easily convinced that effort to solve complex tasks does not persevere. However, the definition that is most applicable to POB is by Luthans (2002, p. 699) which stated that "self-efficacy refers to an individual's conviction or confidence about his or her abilities to mobilize the motivation, cognitive resources and courses of action needed to successfully execute a specific task within a given context." It is important to note that self-efficacy can be built in order to carry out a specific task in a given situation.

Bandura (1997) stipulated that when an individual is confident, they are more likely to make a choice to really get into a task and welcome a challenge. A confident person is viewed as being able to direct more effort and motivation into successfully completing a task and being persistent when obstacles are encountered, even on initial failure. Luthans (2002) ascertained that confident leaders have a profile that supports effectiveness and high performance in organizations. According to Herbert (2011, p. 80) "people with high efficacy do not wait for challenging goals to be set for them, which is often referred to as discrepancy reduction." Instead, they create their own discrepancies by setting goals for them to aspire towards. A lack of self-efficacy may be as a result of doubting oneself, criticism from other people as well as repeated failure on a task (Judge, Erez, Bono, & Thoresen, 2002). According to Luszczynska, Gutiérrez-Doña and Schwarzer (2005), there is a line of thinking that differentiates between specific self-efficacy from general self-efficacy. It is interesting to note that both types of self-efficacy have self confidence in common. General self-efficacy is defined by Judge et al. (2002, p. 697) as a "judgement of how well one can perform across a variety of situations." This positive and general psychological state may be useful in determining success even in specific situations. This is unlike specific self-efficacy which has boundaries in terms of its application (Luthans, 2002).

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Luthans (2002) asserted that previous success helps in building ongoing confidence. However, the key to confidence is acknowledged to depend on how one interprets and processes success; whether it was hard earned through one's effort or if it was simply handed over. With reference to the vicarious input, one needs to be able to identify with a model of success in order to build confidence. An example would be observing a significant other being successful in a current role therefore encouraging the observer's capacity to succeed. Luthans (2002) stated that being physically and psychologically well may result in one being confident as opposed to when one is ill or burnt out.

2.3.2 Hope

Although hope is a commonly used term as individuals generally hope to do well at tasks, Luthans (2002) noted that unlike self-efficacy, which has been proved to have a strong positive relationship with work related performance, hope has not yet. However, there is supporting evidence that hope is closely linked to goal expectancies, perceived control and positive affect (Luthans, 2002). Snyder (2000) defined hope as a cognitive set that is based on reciprocally derived sense of successful agency and pathways. Agency refers to determination that is goal directed and pathways entail planning of ways to meet goals. It is the combination of agency and pathways that makes hope a significant positivity psychology capability. Luthans et al. (2006) equated the willpower component of hope to efficacy expectations and the pathway component to efficacy outcome expectations. According to Luthans (2002, p. 154), "the major difference between hope and optimism is that optimism expectancies which are formed through others are forces outside the self, while hope is initiated and determined through the self." Although earlier research links the psychological capacity of hope to clinical psychology, evidence correlates hope to sporting and academic performance (Onwuegbuzie & Snyder, 2000).

There is a growing body of knowledge which suggests that the extent to which one is hopeful is determined by the perceived control one has. According to Luthans (2002), people who possess high levels of hope have the motivation and desire to attain objectives. Hope may be dispositional, which means that it may be displayed across all situations and times. Individuals may also have state hope, which manifests in specific situations only. Attempts have been made to foster the capacity of hope through training initiatives. According to

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Herbert (2011), the initial results from these efforts focusing on goal design, pathway generation, and overcoming obstacles are encouraging and could help human resource managers to influence employees' perceptions of challenges versus hindrances in stress management.

2.3.3 Resilience

Resilience is deep rooted in clinical work, especially in child psychopathology. It is a concept that used to be thought of as an extra ordinary capability, somewhat a gift that is possessed by a few people, as a rare quality that relates to one's coping with undesirable circumstances. The treatment of resilience as a state started in the 1970's with research on schizophrenic mothers and their children (Luthans, 2002). According to Luthans (2002), researchers in the clinical sector found that although some children were unable to survive from the devastating disease, some were able to bounce back and survive schizophrenia. Masten (2001) confirmed that resilience is not a rare quality found in a few individuals, it is rather a psychological quality that can be developed in ordinary people.

This view of resilience has changed and according to Masten (2001), it is now associated with regular everyday people and it is important because it has implications for promoting competence for individuals and societies. Resilience can be defined as the capability of individuals to cope successfully in the face of significant change, adversity or risk (Luthans, 2002). This capability changes over time and is enhanced by protective factors in the individual and environment (Luthans, 2002). Resilience is the ability to 'bounce back' from adversity, uncertainty, conflict, failure or even change. It goes beyond mere adaptation to situations. Resilience has a contextual trajectory in terms of meaning. Notably, the main difference between self-efficacy and resilience is that resilience tends to have a smaller domain and that it is a reactive rather than proactive concept (Hunter & Chandler 1999, as cited in Luthans, 2002).

According to Luthans (2002), resilience is quite similar to the pathways component of hope but does not include agency. A study on stress emphasizes that it is not what happens to an individual that matters but how one takes it makes all the difference. The 'taking in' part of the explanation can be associated with resilience as it relates to dealing with changes in the

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environment through the positive psychological capacity of resilience. According to Luthans (2002), the attributes of resilient people include social competence, problem solving skills, autonomy and a sense of purpose and future.

2.3.4 Optimism

According to Carver and Scheier (2003) optimists are described as people who expect good things to happen to them and pessimists are people who expect bad things to happen to them. Optimists have been known to perceive unfavourable events as temporary states while pessimists view unfavourable events as permanent situations (Herbert, 2011). In the field of positive organizational behaviour, optimism is supported by theory and research. Seligman (1998) defined optimists as those who make internal, stable attributions regarding positive events (for example, task accomplishment) and those who attribute external, unstable, and specific reasons for negative events (for example, a missed deadline). Optimistic people take credit for the favourable situations they encounter and believe that the motivations behind these situations are within their power and they feel in control of events in their lives. A pessimistic orientation discourages the positive impacts of success and encourages the destructive potential of failure (Luthans & Youssef, 2007).

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In a bid to deal with criticism, the idea of realistic optimism has been put forward. According to Herbert (2011), realistic optimism includes an objective assessment of what one can accomplish in a specific situation, given the available resources at the time. In order to be optimistic, one is recommended to have leniency for past events, appreciation for the present and opportunity for that which lies ahead. Optimism has been associated with positive outcomes such as greater levels of motivation and more psychological presence. The manner in which one attempts to do various things depends on the individual's outlook on events. The optimistic or pessimistic orientation of a person can affect their completion of work.

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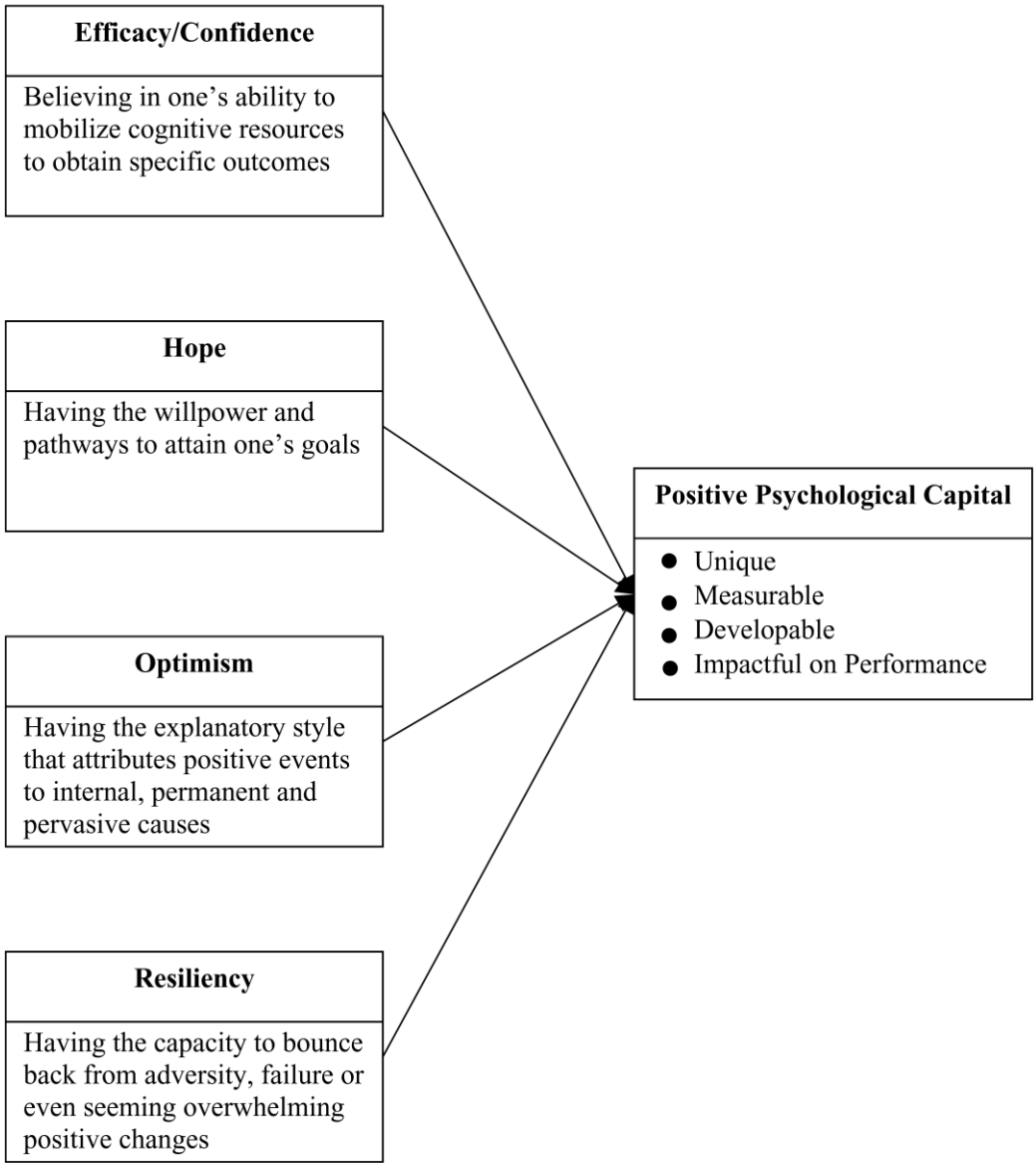
Figure 2.1

Dimensions of Positive Psychological Capital



Source: Luthans, F., & Youssef, C. M. (2004). Human, social and now positive psychological capital management: investing in people for competitive advantage. *Organizational Dynamics, 33,* 143–160.

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2.4. DEVELOPMENT OF PSYCHOLOGICAL CAPITAL

It is a fortunate reality that like other resources, psychological capital can be developed in people (Luthans et al., 2006). Several initiatives can be put to practice in order to achieve high level of positive psychological states. The following are ways to develop psychological capital:

2.4.1 Developing Self-efficacy

The self-efficacy dimension of psychological capital has been acknowledged by Bandura (1989) to be built through four main ways which are task mastery, role modelling or vicarious learning, social persuasion and positive feedback and physiological and psychological arousal. Task mastery is perhaps the most powerful way of gaining positive states because it produces direct results of success. There is a widely accepted understanding that past success may lead to future success. According to Luthans et al. (2004), mastery experiences gained through perseverance and learning ability have a lasting effect and build confidence that an individual can apply in complex situations. Role modelling is one of the ways in which positive psychological capital can be attained. Although reinforcement needs one to stay positive to help gain self-efficacy, it helps even more if one has role models whom they can model behaviour after. Luthans et al. (2006) stated that people tend to believe their endurance to achieve a goal by observation of others achieving their goals. This is particularly true for the psychological capital dimension of confidence or self-efficacy. By the same token, role modelling after someone who has failed may instil feeling of low esteem and inhibits one's self-efficacy levels. It is important to note that the more similar the model is to the person aspiring to be like them in terms of demographical factors (age, sex, marital status, educational level and other physical characteristics), the more applicable the behaviour.

Avey, Patera and West (2006) were of the view that social persuasion has the capacity to increase an individual's belief in their ability to succeed. This is through positive appraisal and verbal persuasion. It follows that an individual who has significant others persuading them to do better, tends to put in more effort in the face of difficulties. By the same token, individuals who are persuaded to avoid difficult challenges tend to give up when they encounter challenges. According to Bandura (1997), although varying between individuals,

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stress or tension reactions can be interpreted as indications of poor performance or vulnerability. In situations that require strength and stamina, people tend to evaluate the resultant aches, pains and fatigue as symptoms of physical impairment. It therefore becomes important to reduce factors that lead to stress and physical wear-out. However, Bandura (1997) posited that it is not necessarily what happens to an individual that matters the most, but how they react to an event. People who have high self-efficacy are likely to view situations that arouse physical and emotional intensity as motivational rather than derogatory.

2.4.2 Developing Hope

Synder (2000) described hope in terms of agency, pathways and goals. This three dimensional perspective of hope is useful in designing hope interventions. A micro-intervention session of hope development was proposed by Luthans et al. (2006). In their methodology, hope development starts with participants identifying goals that are personally meaningful to them which they will make reference to throughout the session. Once participants have identified these goals, the facilitator of the session gives guidelines on the construction of meaningful goals so as to minimize unrealistic goals. In the guidelines, the facilitator cautions an avoidance way of handling goals and rather emphasizes an approach of attempting goal attainment, which generates success. The facilitator also guides the participants to identify the indicators of success to their goals (Luthans et al., 2006). Synder (2000) noted the importance of breaking down the major goals into smaller, manageable goals. Accomplishing smaller goals has motivational potential towards accomplishment of the major goals.

Having identified the personally valuable goals, participants are encouraged to devise as many ways as possible to attain the goals, irrespective of the practicality of the pathways and other environmental factors. Luthans et al. (2006) further detailed that, after identifying multiple pathways, participants are grouped with the aim of taking turns to share their goals with fellow group members who will contribute to already identified pathways or bring in new ones. The next step is identifying resources that are needed for the pathways to substantiate. At this stage, unrealistic pathways are discarded. Synder (2000) pointed out that there are always obstacles to just about any goal. In this regard, it becomes imperative to identify obstacles to the valuable goals, anticipate them and identify ways to surpass them. At

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this stage, small groups can be formed to brainstorm hindrances to goals and strategies to overcome them. The role of the facilitator throughout the hope development session is to encourage participants' positive self-talk and emphasizing the transferability of the technique in the workplace.

2.4.3 Developing Resilience

According to Masten (2001), building resilience can be viewed from the interaction of three factors, namely, asset factors, risk factors and influence processes. It is crucial to reduce factors that inhibit resilience and foster factors that promote resilience. According to Luthans et al. (2006), asset factors refer to supporting factors for the development of resilience, such as stable background and adequate education and risk factors refer to factors that limit the development of resilience such as lack of mentors and unstable environmental factors. The most effective strategies of developing resilience are based on enhancing asset factors and delineating risk factors. In facilitating the development of hope, participants are asked to identify setbacks within their work context. Furthermore, they are asked to state their immediate reaction to the setbacks. The facilitator comes in to explain a preferred way of dealing with a setback and ideally framing the setback. From this process, as participants identify setbacks, impacts thereof, their control and options to persevere, they build resilience and increase their ability to bounce back in the face of difficulties (Luthans, Vogelgesang, & Lester, 2006).

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2.4.4 Developing Optimism

Luthans and Youssef (2004) were of the view that optimistic individuals distance themselves from less favourable events, thereby protecting themselves from feelings of depression, guilt and self-blame. Dawkins, Martins, Scott and Sanderson (2013) asserted that optimism needs to be realistic and flexible to enable positive impact on the individual and organization concerned. Luthans et al. (2007) cautioned against unrealistic optimism which underestimates consequences of actions and externalizes risk factors. Although individuals tend to have fixed ranges in relation to their degree of optimism, individuals can learn how to be optimistic (Larson & Luthans, 2006).

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According to Luthans et al. (2006), optimism is attributed to the Expectancy-Value Theory and the positive attribution concept. Training on how to be more self-efficacious and more hopeful can be useful in building one's optimism. This is particularly so because, as one identifies where they want to be, prepare for potential barriers and ways around the barriers, the pessimistic way of viewing circumstances is out-weighed. Optimism can be learnt by replacing a pessimistic explanatory style of events with an optimistic explanatory style. Schneider (2001) proposed a three-pronged strategy to attaining optimism which emphasizes on leniency for the past, appreciation for the present and seeking opportunities for the future. This strategy entails careful evaluation of the impacts of harbouring negative feelings from past experiences on the ability to learn from past experiences and calculate future risks.

2.5. ANTECEDENTS OF PSYCHOLOGICAL CAPITAL

Bandura (1997) posited that the development of self-efficacy can be affected by the interaction of two factors. The first factor is explained by Herbert (2011) as being influenced by the development of the capacity for symbolic thought, particularly the capacity for understanding cause-and-effect relationships and the capacity for self-observation and self-reflection. According to this view, self-efficacy develops from a tender age and where there is an understanding that action produces results. The second factor is that the development of self-efficacy is influenced by one's environment, particularly the social environment in which one is immersed. It is vital to note that social environments that are supportive and responsive tend to foster self-efficacy to an individual as compared to non-responsive social environments (Walumbwa, Peterson, Avolio, & Hartnell, 2010). The attainment of performance experiences results in greater self-efficacy. Vicarious experiences, which are the observations of successful performances by others, may have a positive impact on self-efficacy. It is deemed that imaginable experiences as well as physiological states may alter an individual's belief in their own capacities.

The antecedents that are applicable to hope are mostly negative, undesirable events. This may be as a result of the fact that hope has in the past been associated with survival from diseases and unfavourable conditions. According to Herbert (2011), the strenuous situations to which one would be hopeful to outlive include stressful stimuli, crisis such as loss, life threatening situations and temptation to despair. From the implicit school of thought, individuals have

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intuitions which guide them on whether or not to engage in goal directed behaviour. In this regard, individuals can be motivated to take on work activities along with the hope of achieving the desired results. It has been noted that a learning goal may trigger hope in that the learning goal is viewed as a developmental step. Another antecedent of hope is that of verbal cues. It stands that oral persuasion from others increases one's commitment to pathways and agency.

Luthar, Cicchetti and Becker (2000) asserted that both external and internal characteristics can influence one's capacity for resilience. The one most universally accepted antecedent of resilience is adversity (Masten, 2001). Scholars posit that there has to be a negative buffer before one can bounce back (Luthans et al., 2006). Solomon (2014) noted that individuals bounce back from negative experiences such as hardship, difficulties, indecisiveness and disappointments. Positive change such as prosperity and more autonomy are antecedents of resilience. According to Richardson (2002), resilience has more to do with qualities of an individual as well as the support systems that predict success. The motivational forces within an individual or group activate the use of resilience as a coping mechanism in the face of adversity.

It has been acknowledged that optimism is found in neuroticism and extraversion, qualities which are known to be genetically influenced (Carver & Scheier, 2003). It has also been researched that optimism is rooted in the childhood experiences of an individual. In discussing childhood development, Erikson (cited in Herbert, 2011, p. 78) posited that "infants, who experience the social world as predictable develop a sense of basic trust, whereas those who experience the world as unpredictable, develop a sense of basic mistrust." Another theory to draw from is the attachment theory which states that some people are attached to childhood relationships and that capability carries on in their lives. Herbert (2011) summed up by stating that although the discussed antecedents, genetics and childhood experiences, cannot be influenced by organizations, this does not mean that organizations cannot play a part in increasing the optimism levels of their employees as research have proven this state-like trait can indeed be developed.

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2.6. CRITICISMS OF PSYCHOLOGICAL CAPITAL

In a bid to further broaden constructs that form psychological capital, Luthans et al. (2007) were of the view that psychological capital needs to include more than just self-efficacy, hope, resilience and optimism. They propose that more constructs which meet the criteria of being state-like, measurable and open to development be added to psychological capital. However, Dawkins et al. (2013) cautioned the pitfall of coming up with an 'all inclusive' approach that may see the suggested development of psychological capital losing grip of the meaning of psychological capital, particularly where the development is not done systematically and methodically.

The research findings by Little, Gooty and Nelson (2007) have shown that psychological dimensions of hope and optimism were not found to be distinct dimensions, thus questioning their inclusion and applicability in work settings. According to the researchers, too much of anything, may have consequences. Criticism around psychological capital has been the negative outcomes of extreme positivity such as over self-efficacy, accidents at work due to over confidence or having high turnover as a result of extreme positivity that one would secure a better prospect outside their current organization.

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2.7. WORK ENGAGEMENT

2.7.1 INTRODUCTION

The concept of work engagement has gained momentum in the workplace over the past years. It is acknowledged to have been brought to surface by a Gallup study that was conducted in the early 1990s on over 100 000 employees, with the intention of depicting aspects that made strong workplaces (Schaufeli, 2013). The Gallup study obtained perceptions of employees using a twelve item questionnaire. The emergence of work engagement has seen many organizations taking an interest in understanding and aligning the concept with their processes. Work engagement, which broadly relates to positive, energetic presence in pursuing tasks, has become more validated by numerous changes that organizations continually encounter (Seligman & Czikszentmihalyi, 2000). Work environments evolve in

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terms of their structure, scale and composition, thereby requiring employees to adopt smart ways of working and assuming responsibility in order to thrive in spite of changes.

Most organizations embrace employees who are initiative, proactive, drive for results and committed to high quality performance indicators. They need employees who are engaged, that is, employees who perform with energy, dedication and enthusiasm. Given the volatile economic conditions within which organizations operate, ensuring that employees invest discretionary effort in their performance is critical for organizational success (Kappagoda, Othman, & De Alwis 2014). Schaufeli and Salanova (2007) proposed that work engagement has meaningful and positive outcomes for both employees and organizations. It holds that work engagement has potential for organizations to flourish. Davids (2011) noted work engagement to be resulting in positive job related attitudes, good mental health, acquisition of job and personal resources as well as intriguing intrinsic motivation and good work performance. When an individual is engaged, they are described by Schaufeli (2013) as being in gear or showing an intensified level of emotional involvement. The concept of work engagement has gained academic and practitioner interest in contemporary business age and will thus be discussed.

2.7.2 DEFINITIONS OF WORK ENGAGEMENT

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Various definitions of work engagement exist and most concur that work engagement encompasses passionate drive, involvement, enthusiasm, commitment and energy. An engaged employee is often described as being deeply engrossed in his or her work, which alludes to how one is focused and absorbed at work (Schaufeli, 2013). Researchers and practitioners give work engagement varying definitions. Schaufeli et al. (2002, p. 74) defined work engagement as "positive, fulfilling, work related state of mind that is characterized by vigour, dedication, and absorption." For Macey and Schneider (2008), engagement was referred to as a psychological state where employees feel a vested interest in the company's success and perform to a high standard that may exceed the stated requirements of the job. According to the Towers Perrin Talent Report (2003, p. 5) work engagement referred to "personal satisfaction and a sense of inspiration and affirmation that employees get from work and being a part of the organization." A Hewitt Associates study (2004), was of the view that engaged employees speak positively about their organization, have a strong desire

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to stay with their organization, even in the face of other employment opportunities outside their organization and they strive for extra role behaviour in terms of effort, time and imitativeness. Although the descriptions of work engagement differ, they all speak to job satisfaction, organizational commitment and extra role behaviour (Schaufeli, 2003).

2.7.3 APPROACHES TO DEFINING WORK ENGAGEMENT

Several approaches have attempted to define and explain the concept of work engagement. These include the Needs-Satisfying approach, the Burnout-Antithesis approach, the Satisfaction-Engagement approach and the Multi-dimensional approach, each of which will be briefly discussed.

2.7.3.1 The Needs-Satisfying Approach

Kahn (1990, p. 694) defined engagement as "harnessing of organization members' selves to their work roles: in engagement, people employ and express themselves physically, cognitively, emotionally, and mentally during role performances." According to this approach, an individual expresses their preferred self in a job task. Although this approach is seldom used, it is a useful and unique perspective in understanding work engagement. The Needs-Satisfying approach stipulates that employees become engaged when three psychological conditions are met, namely, meaningfulness, psychological safety and availability. Meaningfulness is defined by Kahn (1990) as the feeling of receiving return on investment of oneself in a role performance. It is largely influenced by the nature of the job and task characteristics thereof. According to Schaufeli (2013), psychological safety is the feeling of being able to apply oneself in a role without fear of negative consequences. Availability refers to one's belief of being capacitated with physical, emotional and psychological resources to engage oneself in a role (Kahn, 1990). The idea of the Needs-Satisfying approach is that work engagement is most likely to occur when one perceives to find meaning, has psychological safety and where resources are available.

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2.7.3.2 The Burnout-Antithesis Approach

The Burnout-Antithesis approach stems from the occupational health background and it is based on the view that engagement and burnout are opposite ends of a continuum (Maslach & Leiter, 1997). According to the Burnout-Antithesis approach, burnout employees are characterised by exhaustion, cynicism and lack of accomplishment, whereas engaged employees are characterised by energy, involvement and efficacy (Schaufeli, 2013). According to Maslach, Schaufeli and Leiter (2001), employees who are highly engaged are characterised by low burnout and burnout employees are more likely to have low engagement.

2.7.3.3 The Satisfaction-Engagement Approach

The Gallup organization's definition of employee engagement is centred on the extent to which an employee is involved, satisfied and enthusiastic about work (Harter, Schmidt, & Hayes, 2002). Research interest has risen over how this definition overlaps with traditional known work concepts such as involvement and job satisfaction, yielding a high correlation of r = .91, thus alluding to close similarity between employee engagement and these traditional concepts. This overlap is accounted for by the nature of the Q^{12} questionnaire construction, in which the questionnaire has been designed to assess antecedents of work engagement and not necessarily the experience of work engagement itself. Harter et al. (2002) noted that the purpose of designing the Q^{12} was to effectively manage jobs so that employees would be more satisfied. Schaufeli (2013) asserted that the Q^{12} has been constructed for actionability and not from a scholarly point of view. Nonetheless, the Gallup study has significant impact in academia, for example, providing a link between engagement and outcomes such as profit, productivity and turnover (Harter et al., 2002).

2.7.3.4 The Multi-Dimensional Approach

According to Saks (2006, p. 602), employee engagement is a "distinct and unique construct consisting of cognitive, emotional, and behavioural components that are associated with individual role performance." This definition is unique in that it brings attention to the distinction between engagement at the job level and engagement at an organizational level.

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However, both of these forms of engagement have been correlated at r = .62, indicating that they are similar concepts. However, job and organizational engagement have varying antecedents and consequences (Schaufeli, 2013).

Collectively, these approaches define work engagement in relation to performance, well-being, resourceful jobs and their organization (Saks, 2006). Schaufeli (2013) asserted that, with the various definitions of work engagement the need arises to ascertain the elements that actually comprise engagement and those that should be excluded from the definition. To this end, Macey and Schneider (2008) proposed an integrated guideline of all elements that have been used to define work engagement. In their synthesis, work engagement encompasses trait, state and behavioural engagement. According to Schaufeli (2013), trait engagement includes aspects such as conscientiousness, trait positive affect and proactive personality. State engagement comprises satisfaction, empowerment and involvement. Lastly, Macey and Schneider (2008) purported that behavioural engagement includes extra-role behaviour, pro-activity and role expansion.

2.7.4 THEORETICAL FRAMEWORKS OF WORK ENGAGEMENT

Work engagement has been explained by various models. Researchers have put forward the following models of work engagement:

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2.7.4.1 The Job Demands-Resources Model

The Job Demands-Resources Model shows the antecedents and consequences of work engagement. According to Bakker (2009), the model explains how resources, namely, job and personal resources result in greater motivation to perform. Job resources refer to those aspects of a job that enable achievement of goals, reduce job demands and stimulate personal growth and betterment (Schaufeli, 2013). These may take the form of feedback on performance, the extent of control one has for their job and the nature of social support from colleagues. Personal resources relate to qualities that foster resilience; these may take the form of self-efficacy, optimism and emotional stability (Bakker, 2009). According to Bakker (2009), both job resources and personal resources, whether separate or in combination, have an influence on work engagement. The Job Demands-Resources Model demonstrates that job resources

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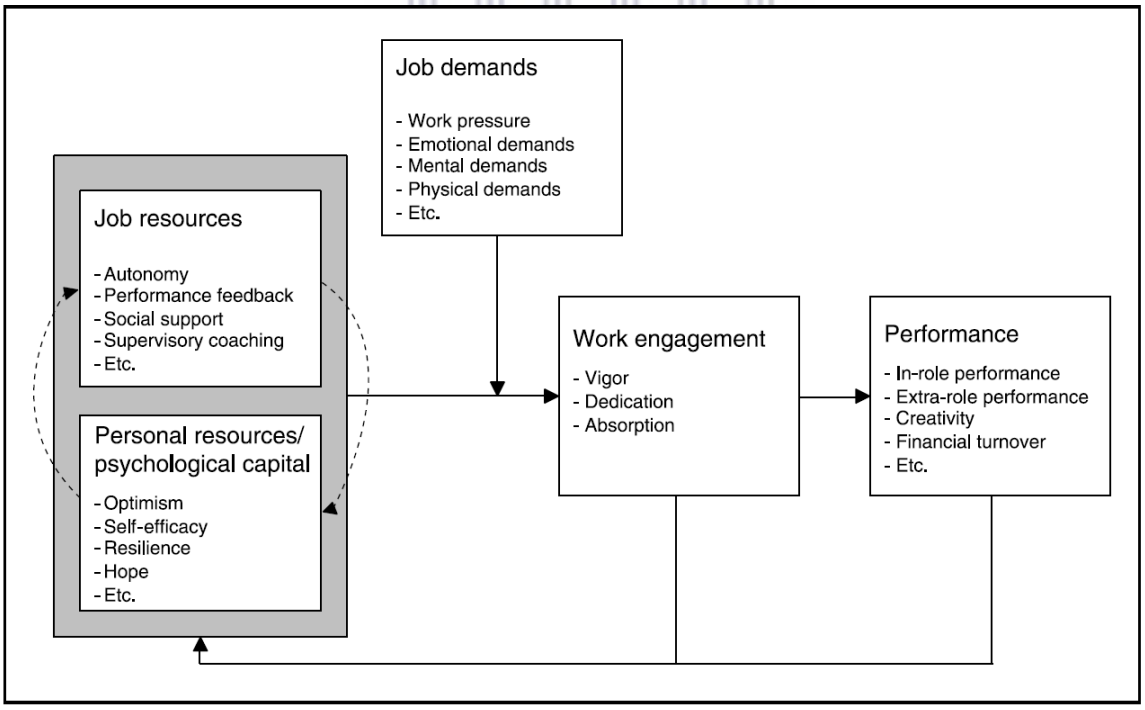
stimulate the energy of employees, get them to persist and thus persevere. This process is termed the motivational process.

The Job Demands-Resources Model also highlights that job demands can enable a health impairment process, which occurs when aspects of the job require sustained physical and mental effort. Job demands such as workload, time pressure and role conflict may catalyze the health impairment process. The model shows that when there are heightened job demands, compensatory effort is required to meet performance goals. However, strenuous effort application may lead to undesirable health impacts such as fatigue, irritability, burnout, depression, cardiovascular diseases, amongst many others (Melamed, Shirom, Toker, Berliner, & Shapira, 2006). Below is a diagram of the Job Demands-Resources Model of work engagement.

Figure 2.2

The Job Demands-Resources Model of Work Engagement



Source: Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology*, *22*(3), 309-28.

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2.7.4.2 The Affective Shift Model

Experiences of work engagement can fluctuate in a short period of time, such as a day or a week, owing to changes in tasks and the type of events that an individual encounters. According to Sonnentag, Dormann and Demerouti (2010), positive and negative affect have implications on work engagement. Schaufeli (2013) noted that work engagement occurs as a result of a shift from a negative affect to a positive affect. A negative affect is necessary for work engagement as it signals that a situation is not well or unfavourable and as such the negativity faced becomes a motivation towards a positive affect. Basically, the Affective Shift Model alludes that work engagement occurs when there is an up-regulation of a positive affect and a down-regulation of negative affect.

2.7.4.3 Social Exchange Theory

According to the Social Exchange Theory of work engagement, as employees experience mutually benefiting resources from their employers, their work relationships transform into trusting and loyal relations (Saks, 2006). It stems from this theory that organizations that provide resources such as decent salary, recognition and continual development to their employees, tend to have employees who feel the need to 'repay' these resources. One of the ways to return these resources is through work engagement. By the same token, employees who do not deem resources they get from their employees to be mutually benefiting, may withdraw or disengage from their work (Schaufeli, 2006).

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2.7.5 DIMENSIONS OF WORK ENGAGEMENT

2.7.5.1 Vigour

According to Schaufeli and Bakker (2003), people who exhibit high levels of vigour are characterised by significant levels of energy and mental resilience while performing tasks. They are willing to put in effort and persist despite challenges they may encounter. Work engaged employees are not inclined to being easily fatigued by circumstances. When engagement is present an individual is prone to execute duties with zest and stamina. In the absence of work engagement tasks are viewed as depleting and disempowering. Shekari

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(2015) noted that vigour encapsulates mental resilience while working and a determined investment in an individual's work.

2.7.5.2 Dedication

Dedication is described by Schaufeli and Bakker (2003, p. 5) as "deriving a sense of significance from one's work, feeling enthusiastic and proud about one's job, and feeling inspired and challenged by it." Those who score high on dedication strongly identify with their work because it is experienced as meaningful, inspiring and challenging. They also usually feel enthusiastic and proud of their work. Those who score low do not identify with their work as they do not experience it to be meaningful, inspiring or challenging; moreover, they feel neither enthusiastic nor proud about their work. Rayton and Yalabik (2014) noted that dedication entails inspiration and high involvement in one's job. According to Shekari (2015), employees who are dedicated derive significance and pride from their work.

2.7.5.3 Absorption

Absorption relates to being totally immersed and happy about one's work and having difficulties disengaging from work. Maslach et al. (2001) described absorption as being fully concentrated and happily engrossed in one's work. When one is absorbed in the work they do, they lose track of time without realizing it. The concentration levels will be high and they get engrossed in their work. They lose recognition of everything in their surroundings and what remains is just them and their work. Engaged individuals get carried away with work and time flies unnoticeably (Bakker, 2009). Maslach et al. (2001) described absorption as being fully concentrated and happily engrossed in one's work.

2.7.6 BUILDING ENGAGEMENT

Work engagement can be encouraged and built for effectiveness (Schaufeli & Salanova, 2007). Human resources practitioners can put various interventions in place that support work engagement. An important starting point is determining the levels of work engagement by assessing the drivers of work engagement as presented in the Job Demand-Resources model. Bakker (2009) was of the view that a qualitative approach of initially interviewing employees

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to find out their current level of engagement and aspects surrounding their jobs is vital. The employees need to represent the various levels found in a particular organization. Having done the initial work engagement status check, the next step would be to incorporate the feedback and validate a Work Engagement Scale that would be administered to employees. Interestingly, at an organizational level, comparisons can be made between departments. Based on the outcome, tailor-made interventions can be brought forward with the aim of reducing the identified job demands and increasing important job resources, with the main goal of harnessing engagement for increased performance. Interventions may include job redesign and training. Bakker, Albrecht and Leiter (2011) encouraged practitioners to make sustained effort towards the building of work engagement.

2.7.7 ORGANIZATIONAL OUTCOMES OF WORK ENGAGEMENT

Resultant impacts of work engagement can be viewed from an individual, team, business unit and organizational level. At the individual and team level, job performance and sickness absence may be useful indicators of the extent of work engagement. At the business unit and organizational level, Schaufeli (2013) asserted that financial returns and productivity show the level of work engagement. The main outcomes of work engagement relate to attitudes of employees and teams, individual health, extra-role behaviour and role performance (Schaufeli, Taris, & Bakker, 2006). Employees who are engaged tend to go the extra mile and strive for goal achievement. Bakker, Demerouti and Verbeke (2004) noted that engaged employees were rated highly by their colleagues in as much as their performance is concerned.

Engaged employees are more likely to perform better in their work. This is so because they often experience positive emotions, have better health, create their own job and personal resources and transfer their engagement to others. Engaged employees are more likely to meet their deliverables because they experience positive emotions such as happiness, joy and enthusiasm (Schaufeli & Salanova, 2007b). According to Cropanzano and Wright (2001), happy people are more likely to be aware of opportunities, more outgoing and are available to help others as well as being confident. In the broaden-and-build theory of Fredrickson (2001), some positive emotions such as joy, interest and contentment have the capacity to broaden peoples' repeated thought-action pattern and build their personal resources. Research findings

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such as the one by Schaufeli, Taris and Van Rhenen (2008) affirmed the positive relationship between health and engagement.

Harter et al. (2002) noted a positive relationship between work engagement and performance of business units in terms of profitability, safety, customer satisfaction, loyalty and reduced turnover. Work engaged employees are more committed to their organization, do not have intentions to leave and are more satisfied with their jobs (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). According to Sonnentag (2003), engaged employees take initiative, are proactive and display a willingness to learn. Work engagement can be converged between individuals or work teams. In a study by Salanova, Agut and Peiró (2005), it was noted how some teams were more engaged than others. This was explained by the contagion effect of emotions and how employees experiencing the same emotion tended to cluster, thus, the concept of collective work engagement.

However, work engagement does not always have positive implications for employees. There are negative associations between health and engagement including psychosomatic health complaints such as headaches and chest pains (Hakanen, Bakker & Schaufeli, 2006). Workaholism, which is known to Bakker and Leiter (2010) as the compulsion or the uncontrollable need to work, incessantly is different from work engagement. Engaged employees are not characterised by compulsion to work, they direct effort into tasks simply because they find work to be fun. Both work engagement and workaholism have a common factor of being marked by high effort involvement in job duties. Workaholism results in adverse work outcomes such as jeopardised well-being and compromised trust in one's work output, whereas work engagement leads to desirable outcomes such as satisfaction; both from the work and personal life perspective, uncompromised state of health and good performance at work (Bakker & Leiter, 2010).

It is important to note that there is a difference between being engaged and being a workaholic (Bakker & Leiter, 2010). With regards to workaholics, they put huge amounts of time in their work and are excessive workers. Workaholics have trouble disengaging from work when they are aware of the amount of work that still needs to be done. This is not the case with engaged employees who are happily involved in their work, work hard but not to out-do their enthusiasm. According to Herbert (2011), in contrast to workaholics, engaged

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workers lack the typical compulsive drive. This does not mean that they do not apply themselves fully but they know when to disengage.

Bakker et al. (2008) are of the view that for workaholics, their need to work is so exaggerated that it endangers their health, reduces their happiness, and deteriorates their interpersonal relations and social functioning. Work engagement has been distinguished from workaholism but it stems that over–engaged employees may create adverse impacts for themselves, such as taking work home. This is supported by the work of Beckers, Van der Linden, Smulders, Kompier, Van Veldhoven and Van Yperen (2004) who found work engaged employees to be related to working overtime. Geurts and Demerouti (2003) cautioned that an encroachment of work into home life can lead to compromised health outcomes. Research on burnout indicates that for one to burn out, they need to have been over applying themselves for a long time. Thus according to Schaufeli et al. (2002), it would imply that, over time, the high arousal, positive affect such as enthusiasm of engaged workers turn into negative affect and strain.

2.7.8 DRIVERS OF WORK ENGAGEMENT

2.7.8.1 Work engagement and job resources

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Work engagement has been attributed to numerous variables such as social support from significant others, skills variety, feedback on performance, learning opportunities and autonomy, amongst other factors (Herholdt, 2015). Bakker and Demerouti (2007) defined job resources as those physical, social or organizational aspects of the job that may reduce job demands and the associated physiological and psychological costs. They enable employees to be functional in achieving work goals or stimulate personal growth, learning and development. It was acknowledged by Bakker et al. (2011) that when job resources result in an individual's learning and further development, they pose intrinsic motivation for the individuals concerned. By the same token, Bakker et al. (2011) acknowledged that job resources have the propensity of extrinsic motivation when they are instrumental in achieving work goals. Several studies including that of Halbesleben (2010) have shown positive correlations between work engagement and job resources. According to the Job Demand–Resources Model, job resources become of paramount importance as they provide motivational potential when employees have high demand job tasks.

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2.7.8.2 Work engagement and personal resources

In addition to job resources, personal resources have been found to predict work engagement (Bakker et al., 2011). Personal resources are acknowledged to be positive self-evaluations that are linked to resiliency and refer to an individual's sense of their ability to control and impact upon their environment successfully. According to Judge, Van Vianen and De Pater (2004), positive self-evaluations catalyse outcomes such as goal-setting, motivation, job and life satisfaction amongst other desirable outcomes. The reasoning is that the broader the individual's resources, the more self-regard one accumulates. In a study by Mauno, Kinnunen and Ruokolainen (2007), it was found that work engaged employees have self-efficacy as they believe in their capacity to meet job demands. In the same study, it was found that work engaged employees generally believe that they will experience good outcomes in life, thus, they were optimistic. However, work engagement can have a crossover effect amongst employees working in the same team. In most organizations, organizational performance is realised by the collective effort of all team members. It follows that a crossover effect of work engagement stimulates greater work performance. Crossover was defined by Bakker, Westman and Hetty van Emmerik (2009) as the transfer of positive or negative experiences from one person to the other.

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2.8. ORGANIZATIONAL COMMITMENT

2.8.1 INTRODUCTION

Organizational commitment is a valuable outcome for organizations. Drucker (cited in Nehmeh 2009, p. 2) posited that "unless commitment is made, there are only promises and hopes, but no plans." Studies have found organizational commitment to have a greater impact on performance (Nehmeh, 2009). This is primarily owing to the assertion that highly committed employees will identify with the goals and values of an organization, will have a stronger desire to belong to an organization and thus be willing to display greater organizational citizenship behaviour (Ghosh & Swamy, 2014). Hui and Lee (2000) identified organizational commitment as an important indicator of employees' attitudes and behaviours in work contexts.

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According to Pinks (1992), human resources should be regarded as an organization's greatest asset, thus committed human resources leverage an organisation's competitive advantage. Although human resources policies vary from entity to entity, most organizations value policies that maximise organizational integration, employee commitment, flexibility and quality of work (Field & Buitendach, 2011). To a human resources practitioner, commitment may be understood as attachment or loyalty (Nehmeh, 2009). However, commitment is diversified and can be that of one's loyalty to their job, profession, department or organization (Anttila, 2014). Organizational commitment was coined by Newstrom and Davis (2007) to consist of identification with the goals and values of the organization, a desire to belong to the organization and a willingness to display effort on behalf of the organization, even in times of unpleasant organizational circumstances.

2.8.2 DEFINITIONS OF ORGANIZATIONAL COMMITMENT

It is widely acknowledged that organizational commitment takes different forms and these variations enable researchers to make precise propositions about the impact of organizational commitment on behaviour. With the existence of a variety of definitions of organizational commitment, Meyer and Herscovitch (2001) asserted that in general, all definitions refer to commitment as an obliging force that gives direction to behaviour. According to Meyer and Herscovitch (2001, p. 301), organizational commitment is defined as "a force that binds an individual to a course of action of relevance to one or more targets." Becker (cited in Powell & Meyer, 2004) argued that commitment refers to an awareness of the cost of discontinuing a course of action. Conner (cited in Herscovitch & Meyer 2002, p. 474) defined commitment as the "glue that provides the vital bond between people and change goals." Allen and Meyer (1990) viewed organizational commitment as a psychological state that increases the likelihood of employees maintaining membership in an organization.

Malik, Nawab, Naeem and Danish (2010) defined organizational commitment in terms of an employee's emotional response, identification with and involvement in the organization. This definition concurs with the one by Muliawan, Green and Robb (2009) which emphasized organizational commitment as the degree to which an employee is involved and identifies with the organization. Miller and Lee (2001) associated organizational commitment with an

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employee's acceptance of organizational goals and their willingness to direct effort on behalf of the organization.

2.8.3 PERSPECTIVES ON ORGANIZATIONAL COMMITMENT

2.8.3.1 The attitudinal and behavioural perspective of commitment

Although organizational commitment has been defined in a number of ways, there is no universal definition of the concept (Allen & Meyer, 1990). Organizational commitment can be viewed from an attitudinal or behavioural point of view. Moshoeu and Geldenhuys (2015) differentiated between the two perspectives of commitment. Attitudinal commitment focuses on the process by which people come to think of their relationship with the organization. This view has attracted research interest including that of Buitendach and De Witte (2005) who sought to understand the strength of identification that employees have for their organization. According to Moshoeu and Geldenhuys (2015), employees become committed to an organization when these pre-requisites are present: a strong belief in the organization's goals, eagerness to put in effort on behalf of the organization and when there is a strong desire to maintain their membership with the organization. Zangaro (2001) noted that in the absence of these characteristics, employees will show lack of commitment to an organization.

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Attitudinal commitment is primarily concerned with how people evaluate their organization's values against their own values and belief system. According to Moshoeu and Geldenhuys (2015), behavioural commitment emphasizes the conditions under which behaviour tends to be repeated and consequently their effects on attitude change. Behavioural commitment refers to the process by which individuals become locked into a certain organization and how they deal with the inflexibility. Becker (as cited in Meyer & Parfyonova, 2010) asserted that commitment occurs when employees value their investment in an organization such that the least preferred intention is that of exiting the organization. This is the case with employees whose organizations provide something significant to them such as seniority or pension. The investments are too valuable to an employee that they feel trapped and need to remain with the organization. Hackney (2012) noted that the distinction between the two perspectives of commitment lies in research. Research on the attitudinal perspective has focused on the

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factors that lead to commitment and research on the behavioural perspective is centred on the consequences of commitment.

2.8.3.2 Becker's Side-bet theory

Becker's theory is considered one of the earliest attempts to explain organizational commitment (Powell & Meyer, 2004). The theory is based on the notion that as people engage in social organizations they either consciously or unconsciously make what are known as 'side-bets' or investments which accumulate over time. For Becker (1960), as side-bets accumulate, people commit to their organizations because of fear of losing side-bets. Hoang (2012) identified side-bets as financial loss, loss of promotion opportunity, established relationships and loss of ease in doing the job. The theory's standing is that the more the side-bets quantify, the complex it is to leave an organization.

Becker (1960) asserted that organizational commitment results when an individual links interest with a consistent line of activity. Powell and Meyer (2004) noted that side-bets take various forms including generalized cultural expectations, self-representation concerns, impersonal bureaucratic arrangements, individual adjustments to social positions and non-work concerns. Generalized cultural expectations entail expectations of reference groups in terms of what is deemed as responsible behaviour. An example of behaviour that may be constituted as responsible is how long one should stay at a job. According to Powell and Meyer (2004), side-bets may result due to self-presentation concerns. This is when one maintains their association with an organization because of a need to present a consistent public image. Organizational commitment is therefore a result of unwillingness to tarnish the preferred public image. Impersonal bureaucratic arrangements denote the willingness to stay with an organization due to policies that reward long term employment such as seniority-based compensation strategies.

Powell and Meyer (2004) described individual adjustments to social positions as efforts made by an individual to adapt to organization-specific needs and hence, commitment results from the time and effort invested in acquiring organization-specific skills. Employees sometimes develop a sense of community which may extend outside of the work context, for this reason, commitment results from the unwillingness to disrupt these associations, termed, non-work

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concerns. Although Becker (1960) categorized side-bets, he noted that side-bets can combine to form complex linkages and the greater the strength of connection, the more the organizational commitment results.

2.8.4 MEYER AND ALLEN'S THREE-COMPONENT FRAMEWORK

Allen and Meyer (1990) developed the three-component model in a bid to integrate the prevalent uni-dimensional concepts of organizational commitment. The underlying principle of organizational commitment is that commitment binds an individual to a course of action. Allen and Meyer (1990) noted that with various motivations for organizational commitment, differentiations lay mainly in the mindset behind the commitment. Meyer and Allen (1991) posited that the three components of organizational commitment develop in different ways and have varying behavioural implications for organizations. Powell and Meyer (2004) noted that continuance commitment is a result of an increase in attachment with conditions or side-bets and affective commitment is aligned to sensitive work experiences such as organizational support. Normative commitment is argued to be as a result of responses to social pressure (Meyer & Allen, 1991). Each of these commitment components will be discussed in greater detail later.

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Each one of the three types of organizational commitment has a unique standpoint, but all three have a common implication, that is, commitment is a psychological state that represents the relationship of employees to their organization and this holds implications for the continuation and discontinuation of that relationship. Cohen (2003) acknowledged the three-component conceptualization of organizational commitment as the most dominant model in research relating to organizational commitment. Although the components of organizational commitment are related, they are distinguishable from one another.

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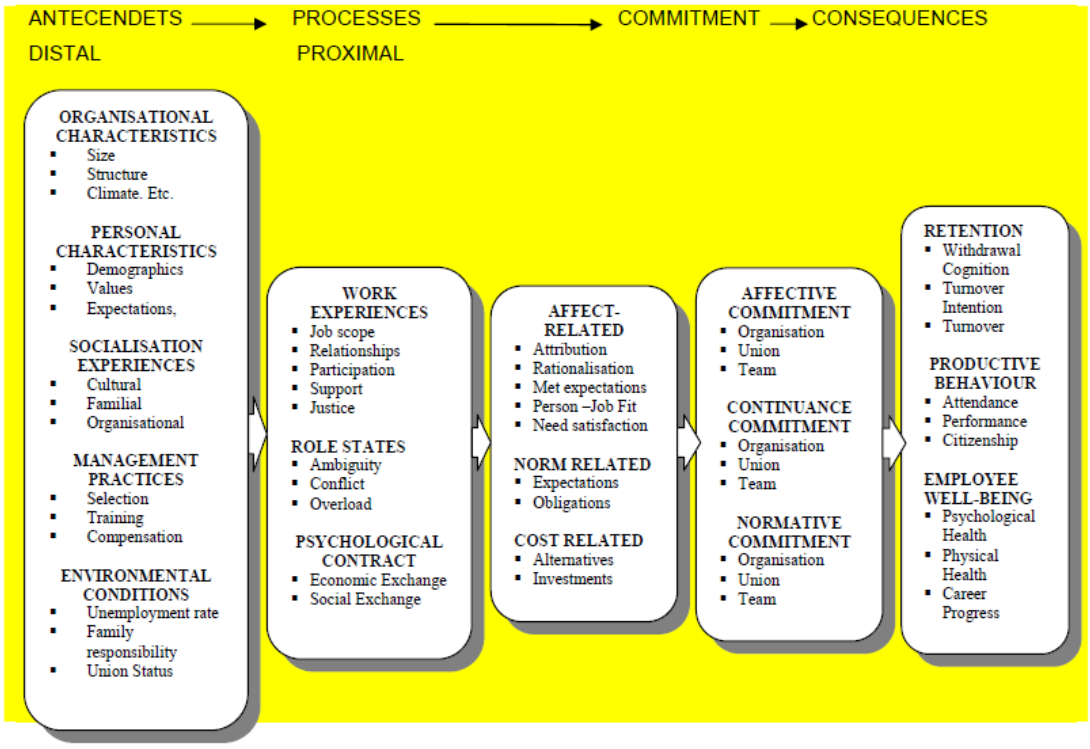
Figure 2.3

Allen and Meyer's (1997) Organizational Commitment Model



Source: Meyer, J. P., & Allen, N. J. (1997). *Commitment in the workplace: Theory, research and application.* CA: Sage Publications.

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2.8.4.1 Affective commitment

Affective commitment is defined by Antitila (2014) as the connective bond an individual feels toward the organization, characterized by identification and involvement with the organization as well as enjoyment in being a member of the organization. Rodriguez, Franco and Santo (2006) added that affective commitment related to emotional adhesion of staff. Employees who identify with their organization at an affective level, are committed because they want to and they identify their values and goals to be congruent to those of their organization. The organizational commitment model of Meyer and Allen (1997) depicted factors such as job challenge, role clarity, goal difficulty, goal clarity, equity, feedback, personal importance, amongst other factors that determine affective commitment. According

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to Beck and Wilson (2000), an individual's development of affective commitment is brought about by identification and internalisation. Identification is the form of desiring to establish a rewarding relationship with an organization and internalisation is the form of the extent to which there is congruency between the individual's values and those of the organization.

Meyer and Herscovitch (2001) noted that, different forms of commitment are associated with different mind-sets and have different behavioural implications. In comparison to normative and continuance commitment, affective commitment was identified to have significant correlations with a wider range of outcome measures and more strongly with any given outcome measure (Meyer & Herscovitch, 2001). This view has been contested, with other authors stipulating that affective commitment has the potential to buffer the negative impact of work stressors on health and well-being and inversely, other authors stipulating that affectively committed employees may experience more negative reactions to such stressors compared to those who are less committed (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002).

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2.8.4.2 Continuance commitment

Continuance commitment was explained by McMahon (2007) as the extent to which a person needs to stay with the organization, due to the costs of forgoing benefits associated with an individual's investments in the organization. The investments in question can take the form of close relations which employees had formed and maintained over time, an established career or pension and benefits accrued, amongst many others. Hackney (2012) stipulated that the development of continuance commitment is associated with the evaluation of two main aspects: investments and alternatives. Investments vary from time, money, effort as well as organizational citizenship behaviour. The perception that investments could be lost if an individual exited an organization leads to continuance commitment. Furthermore, Hackney (2012) identified the second factor that facilitates continuance commitment to be that of alternatives, specifically alternatives for work opportunities. These can be influenced by external forces such as the state of the job market or the economy. Internal factors such as perceived ability to secure another job or perception of one's competence in the field can catalyze continuance commitment. The reason that employees stay with the organization becomes the fear of losing these investments.

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According to Hackney (2012), an employee can also weigh the options they have in the event that they leave an organization. It can turn out that there may be lack of alternatives and as such employees tend to commit to an organization due to this lack of option. In a study amongst temporary workers and their agencies conducted by Van Breugel, Van Olffen and Ollie (2005), affective commitment was found to be higher than continuance commitment, possibly suggesting that a person in need of a job in the case of temporary employees, tends to display more affective commitment than continuance in certain contexts. Meyer et al. (2002) was of the view that employees who resemble high levels of continuance commitment have increased levels of role conflict and role ambiguity as well as low withdrawal cognitions. This situation neither benefits the employee nor the organization as the employee remains in an uncomfortable situation as a result of their need or lack of alternatives.

2.8.4.3 Normative commitment

According to Meyer et al. (2002), normative commitment relates to employees who remain with an organization out of a feeling of obligation or loyalty to stay. An individual's morals as well as sense of responsibility influences the extent to which they are normatively committed. McMahon (2007) stipulated that such an obligation to an organization results from a person's internalized normative pressures, and a committed person may behave in a way in which they do not immediately consider personal benefits but because they believe that course of action to be the morally right behaviour.

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Hackney (2012) noted that normative commitment can be as a result of initial commitment shown by the organization towards an employee, for example, sending an employee for training or paying tuition for the employee, such that the employee feels that it is only right to stay with the organization after such an investment. Normative commitment can be as a result of an individual's psychological contract. Meyer and Allen (1991) defined a psychological contract as those subjective beliefs about the obligation between the individual and the organization. Due to the subjectivity of psychological contracts, experiences vary between individuals. Organizational commitment has been correlated with educational levels of employees and employees with lower levels of education tend to have feelings of organizational loyalty (Meyer et al., 2002).

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2.8.5 ANTECEDENTS OF ORGANIZATIONAL COMMITMENT

There are many factors that bring about organizational commitment. Caldwell, Chatman and O'Reilly (1990) noted that antecedents of organizational commitment have been linked to variables such as personal characteristics, structural characteristics, job-related characteristics and work experiences.

2.8.5.1 Personal Characteristics

Various research have attributed organizational commitment to demographic variables such as age, gender, tenure and education levels, amongst many other factors (Friend, Bellenger, & Boles, 2009). However, it is important to note that the relationship between organizational commitment and demographic variables is not constant and can be indirect or changed when aspects such as work values and rewards are changed (Pinks, 1992). Correlations of commitment with gender have diminished over time due to changes in social values and gender-role conflict, as women are increasingly participating in the workplace than before. However, this is not to say gender does not have a role to play in determining commitment, it is the significance that is consistently challenged. For example, Schaefer and Pettijohn (2006) found that female sales people have greater organizational commitment compared to their male counterparts. Several research have found positive correlations between age and commitment (Chungtai & Zafar, 2006). Okpara (2004) noted that as employees get older, they tend to develop commitment to their organization.

Schaefer and Pettijohn (2006) found that employees who were between the ages of 25-34 displayed more organizational commitment compared to employees under 24 and over the age of 35. Huddleston, Good and Frazier (2002) noted that the education-commitment relationship is highly inconsistent, possibly due to the potential expectations placed on the organization by individuals. In other research, personal factors such as the need for autonomy, affiliation and achievement have been found to correlate with commitment. Personal characteristics involve personal work ethic, locus of control and the centrality of life interest in work (Pinks, 1992).

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2.8.5.2 Structural characteristics

Structural factors relating to an organization determine organizational commitment. They range from organizational size, technology advancement, formalization and the presence of a union (Pinks, 1992). Employees value organizations that exercise fairness in their approaches. Organizational fairness entails a measure of perceived equity in the workplace. Friend et al. (2009) asserted that the higher the perceived level of fairness, the higher the degree of commitment displayed. Organizational fairness has two dimensions, namely, procedural and distributive justice.

Procedural justice encompasses aspects such as pay administration, rule extensions and work pace, while distributive justice includes more outcome based traits such as pay rules, distributing tasks and pay levels. In a sales context, Roberta, Coulson and Chonko (1999) found that distributive justice accounted for commitment of employees to their organization. Moideenkuyyt, Blau, Kumar and Nalakath (2001) noted that organizational support is a predicting variable in the development of organizational commitment. An ethical climate influences organizational commitment and Joo (2010) was of the view that employees who perceive that their organization is trying to improve their ethical climate exert stronger organizational commitment.

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2.8.5.3 Job related characteristics

Aspects of a job that uplift an employee's behavioural involvement and reduces ambiguity results in increased organizational commitment (Schleicher, Hansen, & Fox, 2011). Employees value being included in processes around their jobs such as decision making. Pinks (1992) asserted that a well-defined initiating structure, high levels of job challenge, low levels of role ambiguity and role conflict increase an employee's commitment to an organization.

2.8.5.4 Work experiences

Meyer and Allen (1991) noted that employees display more organizational commitment if their values are in-line with those of their organization. Moreover, employees' experiences

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can be divided into those that satisfy them and add to their physical and psychological health and those that contribute to employees' feelings of competence in their work role. According to Meyer and Allen (1991), variables that satisfy employees were found to correlate with affective commitment.

2.8.6 CONSEQUENCES OF ORGANIZATIONAL COMMITMENT

There are many reasons for an organization to increase the level of commitment among employees. Committed employees result in enhanced job performance, lower employee turnover, decreased absenteeism and long job tenure among other positive outcomes, Pinks (1992). Hackney (2012) identified compliance, intention to leave, stress motivation and withdrawal as some of the outcomes of organizational commitment. Schleicher et al. (2011) found positive relationships between organizational commitment and turnover, turnover intentions, motivation and absenteeism. Employees with low levels of organizational commitment can be unproductive. Lowman (1993) stated that under commitment or over commitment can cause work dysfunction. Cohen (2003) motivated that employee absenteeism, turnover, theft, job dissatisfaction and unwillingness to relocate can be attributed to lack of organizational commitment. There is considerable research that has been conducted investigating psychological capital, work engagement and organizational commitment in various contexts. Luthans et al. (2008) noted that psychological resources have a positive impact on work related outcomes such as work engagement and organizational commitment.

2.8.7 RELATIONSHIPS BETWEEN CONSTRUCTS

Researchers have vested interest in psychological capital, work engagement and organizational commitment and have yielded findings for various relationships between the variables. A study by Bekker (2016) amongst 183 employees from a poultry hatchery in Potchefstroom showed that there was a positive correlation between psychological capital and work engagement and that psychological capital can predict work engagement. A study by Eman-Nafa and Ishak (2016) amongst 414 female teachers in Saudi Arabia found psychological capital to have an influence on work engagement.

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Various research findings have indicated that an increase in work engagement resulted in an increase in psychological capital. Research conducted by Salanova, Bakker and Llorens (2006) amongst a sample of Spanish teachers revealed the close association between work-related flow experiences and organizational resources and self-efficacy. Xanthopoulou et al. (2009) were of the view that work engagement facilitates the mobilization of both job and personal resources, leading to the notion that when employees are engaged, they were more likely to pursue and fulfil their goals, hence they would have a positive regard of their capabilities. Llorens, Schaufeli, Bakker and Salanova (2007) supported the reciprocal relationship between work engagement and psychological capital by noting that employees who are passionate about their work were most likely to believe in their ability to achieve goals. Harris (2012) noted that work engaged employees showed greater self-efficacy, they strived to achieve goals, were positive of future expectations and made progress even after an adverse situation.

Other research have analyzed the relationship between psychological capital and organizational commitment. According to a study in the education context by Sharifi and Shahtalebi (2014), dimensions of psychological capital were found to have positive relationships with organizational commitment. Etebarian, Tavakoli and Abzali (2012) found a positive correlation between organizational commitment and hope as well as an inverse correlation between organizational commitment and resilience. The results concluded that an increase in hope was likely to increase organizational commitment. According to Luthans (2002), resilience is about bouncing back from setbacks and owning the ability to forsake harsh defeat, even positive events such as increased responsibility that will result in change. The inverse relationship noted between organizational commitment and resilience may be attributed to the assertion that employees who are flexible have less fear for loss of jobs or change of circumstance. Therefore, they tend to display less commitment to an organization, particularly, continuous commitment.

Lather and Kaur's (2015) study on psychological capital and organizational commitment amongst 150 employees of both private and public schools indicated a positively significant relationship between psychological capital and organizational commitment. The results also showed that psychological capital predicted organizational commitment in both private and public schools. Diržytė, Patapas, Smalskys and Udavičiūtė (2013), found a statistically

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significant relationship between psychological capital and organizational commitment. The study was conducted amongst 92 working adults in different Lithuanian organizations including service and government. It was therefore positioned that the rates of organizational commitment heightened in response to changes in psychological capital.

Shahnawaz and Jafri (2009) conducted research amongst 160 junior and middle level managers in two organizations. Results showed that psychological capital as a whole could not predict organizational commitment in both organizations. Luthans et al. (2008) found psychological capital to be related to commitment. The research consisted of participants from three studies. Study one consisted of 404 students, study two was made up of 163 employees in an insurance service firm and study three was made up of 170 high tech manufacturing employees. For the purposes of testing the relationship between psychological capital and commitment, participants from study two were excluded. However, a positive relationship between these variables was noted in both study one and study three. This finding is also supported by Larson and Luthans (2006) who found a significant relationship between psychological capital and organizational commitment among 74 manufacturing employees.

Beukes and Botha (2013) conducted a study on work engagement and organizational commitment of nurses. The research findings revealed that there was a positive correlation between the variables, indicating that the greater the extent the nurses viewed their job as a calling, the greater the engagement and commitment they showed. Wu (2010) was of the view that engaged nurses tended to experience meaning in their work. Furthermore, Mangundjaya (2012) found positive relationships between work engagement, organizational commitment and individuals' readiness for change.

Geldenhuys, Laba and Venter (2014) found a positive relationship between work engagement and organizational commitment in their study amongst 415 employees occupying various positions in various organizations in Gauteng Province of South Africa. It was noted that high levels of work engagement were related to lower levels of negative commitment. According to Geldenhuys et al. (2014), the relationship between work engagement and lower levels of negative commitment could have been accounted for by the fact that people experienced their work as a calling and were therefore inclined to be committed.

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Agyemang and Ofei's (2013) study showed a positive relationship between employee work engagement and organizational commitment. The study was conducted amongst 105 employees of three public and private sector employees in a Ghananian context. The study attributed work engagement and organizational commitment of employees to the availability of job resources to execute tasks effectively, leading to the notion that employees who were given necessary resources by their organizations to perform tasks tended to respond favourably and showed organizational commitment.

In a study by Eghlidi and Karimi (2016) amongst 202 female employees at an Iranian University, it was found that there was a relationship between components of work engagement and organizational commitment and that of the three components of work engagement, dedication was the best predictor of organizational commitment. The study pointed out that if jobs were experienced and designed to bring about energy, pride and a great deal of focus, employees would be more likely to move towards aspirations and goals of the organization, thereby increasing organizational commitment. The study concluded that if female employees became aware that the organization needed them or that they were important for the achievement of organizational goals, they would be loyal and display eagerness and positivity in executing tasks. This would increase their work engagement, thereby promoting the alignment of their goals to those of the organization and thus enhancing commitment to the organization.

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Based on the above theoretical framework, the overall aim of this research is to investigate the relationship between psychological capital, work engagement and organizational commitment amongst employees at a selected food processing plant in the Western Cape.

Moreover, the specific research hypotheses are:

- There is a relationship between psychological capital and work engagement.
- There is a relationship between psychological capital and organizational commitment.
- There is a relationship between work engagement and organizational commitment.
- Psychological capital or work engagement has a greater impact on organizational commitment.

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2.9. CONCLUSION

In conclusion, it can be deduced from the literature review that psychological capital is a useful personal resource that holds promise for desirable organizational outcomes such as work engagement and organizational commitment. It is therefore important to harness positive capacities of employees to enable organizations' competitive edge, sustainability, effectiveness, performance and profitability (O'Leary et al., 2002).

The following chapter discusses the research methodology undertaken in this study.

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CHAPTER 3

RESEARCH METHODOLOGY

3.1. INTRODUCTION

In this chapter, the research framework and methodology that were used in the investigation of the relationship between psychological capital, work engagement and organizational commitment will be discussed. The chapter will specifically detail the sampling procedure, measuring instruments, psychometric properties of the measuring instruments, data collection method, statistical methods that were used to assess the hypotheses proposed for this study as well as the ethical considerations.

3.2. RESEARCH DESIGN

For the purpose of this study, a non-probability research design in the form of convenience sampling was used to gather data. The reason for using this design was because the researcher had easy access to the participants. Convenience sampling was defined by Salkind (2010, p. 112) as "the selection of a sample of participants from the population based on how convenient and readily available that group of participants is." Convenience sampling has the advantages that samples are easy to obtain, data are relatively inexpensive to obtain and it is a time efficient method of gathering data. However, Harwell (2011) pointed out that the drawback of convenience sampling is that the results obtained from surveys that utilise this method may not be generalizable or applicable widely as the sample may not be representative of the population relating to the study.

3.3. POPULATION AND SAMPLE

According to Sekaran (2003) population referred to the entire group of people, events or things of interest to the researcher. The population for this study were employees working in various food processing plants in the Western Cape Province of South Africa. Due to the large population, it was not practical to collect data from all the food processing plants in the

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Western Cape Province for the current study. Hence, only one food processing plant in the Western Cape was used for the sample of the study.

Sekaran (2003) defined sample as a subset of the population which comprises some members selected from the population. The selected food processing plant comprised of two hundred and fifty three (253) employees, employed on full-time and part-time in five departments, namely: Production, Investment, Marketing, Technical and Human Resources. All employees were encouraged to take part in the study. Hence, two hundred and fifty three questionnaires were administered of which 218 (86%) were returned. Sekaran (2001) was of the view that a sample of 30% of the population is sufficient for most research purposes. The sample consisted of 100 female (46%) and 118 male employees (54%). The majority (36%) fell in the 25-35 age range. Most of the participants were single (40.83) % and married 40.37%). In terms of qualifications, the majority of the participants (36.70%) had between Grade 10 and Grade 12 (Matric), followed by 30.28 %, who were in possession of a Certificate or Diploma. Most of the participants (32.11 %) had been with the organization for less than a year and 29.82% had been employed by the organization between one to two years. The profile or respondents is shown in Table 3.1.

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3.4. PROCEDURE FOR DATA GATHERING

Permission to conduct the research was obtained from the University of the Western Cape as well as the General Manager and Human Resources Director of the selected food processing plant. Ethical clearance was obtained from the University before embarking on the current research study. The Human Resources Director provided necessary information relating to the organizational chart, reporting structure, number of employees based at the plant and their availability. In a weekly briefing with the Heads of the five departments, the researcher was asked to give an overview of the research - outlining the purpose, timelines and procedure which the Heads of Departments would later, in turn, explain to their subordinates in the respective departmental meetings. The questionnaires were then distributed to participants via their Heads and they were asked to return their questionnaires in a sealed envelope within one week. A total of 253 questionnaires were distributed of which 218 were returned, yielding an 86 % response rate.

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Table 3.1

Profile of respondents

Variable	Frequency	Valid Percentage (%)
Gender		
Male	118	54.13
Female	100	45.87
Age		
18-24	40	18.35
25-35	79	36.24
36-44	47	21.56
45-54	39	17.89
55 years and above	13	5.96
Marital Status		
Married	88	40.37
Single	89	40.83
Divorced	19	8.72
Widowed	15	6.88
Other	7	3.21
Highest completed level of education		
Less than Grade 10	19	8.72
Grade 10 to Matric	80	36.70
Certificate or Diploma	66	30.28
Degree	37	16.97
Postgraduate degree	16	7.34
Tenure		
Less than one year	70	32.11
1-2 years	65	29.82
3-5 years	52	23.85
6-10 years	31	14.22

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3.5. MEASURING INSTRUMENTS

The research aimed to understand the relationship between three variables (namely, psychological capital, work engagement and organizational commitment). A biographical questionnaire and three other questionnaires were administered. For the purpose of the research study, a quantitative method in the form of questionnaires was used. Babbie and Mouton (2001) explained quantitative research as a research method that emphasized objective measurement and numerical analysis of data collected through polls, questionnaires and surveys.

According to Harwell (2011), the advantages of quantitative research methods are that the researcher can measure and analyze data using statistical methods, the method allows for more objective analysis of data, data is easy to compile in graphs and table forms and that quantitative research works well with large surveys as it allows for uniform entry of information. However, quantitative research methods are costly and the context in which the study is conducted is often ignored.

3.5.1 BIOGRAPHICAL QUESTIONNAIRE

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A self-developed biographical questionnaire was administered to acquire personal data. The items included were: gender, age, marital status, educational background and years of work experience in the organization. The information was used to describe the characteristics of the sample. The demographics of participants have been presented in Table 3.1.

3.5.2 PSYCHOLOGICAL CAPITAL QUESTIONNAIRE

The Psychological Capital Questionnaire developed by Luthans, Youssef and Avolio (2007) was used.

3.5.2.1 Nature and composition

The Psychological Capital Questionnaire has twenty four items on four subscales (self-efficacy, hope, resilience and optimism). Each subscale is assessed by 6 items. A sample item

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from the self-efficacy subscale is "I feel confident analyzing a long-term problem to find a solution." A sample item for assessing optimism is "I am optimistic about what will happen to me in the future." A sample item from the hope subscale is "At the present time, I am energetically pursuing my goals." Resiliency is measured by items such as "I usually manage difficulties one way or another." The responses are coded on a six-point Likert scale as follows: 1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = somewhat agree, 5 = agree, 6 = strongly agree (Luthans et al., 2007).

3.5.2.2 Reliability of the Psychological Capital Questionnaire

The reliability of a measure was defined by Foxcroft and Roodt (2001) as the consistency with which it measures whatever it measures. Bless and Higson-Smith (2000) were of the view that a measure was highly reliable when it could be entrusted to give a consistent, unchanging value across different contexts. Several studies on psychological capital have yielded reliability alphas that were above the minimum acceptable level of .70. Avey et al. (2008) reported a reliability alpha of .78 in their research on 106 engineers and Gooty, Gavin, Johnson, Frazier and Snow's (2009) research on 158 marching band members yielded a reliability alpha of .75.

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Individual subscales of psychological capital have been tested for reliability. Internal consistency for optimism ranged between .63 – .69 (Avey, Patera, & West, 2006; Luthans, Avey, Clapp-Smith, & Li, 2008; Roberts, Scherer, & Bowyer, 2011). Internal consistency for resilience was noted by Combs, Milosevic, Jeung and Griffith (2012) in their study on 380 undergraduate students to be .63. Luthans et al. (2008) found in their study resilience to have internal consistency of .66.

Good internal consistency on hope (.72, .75, .80 and .76) as well as on self-efficacy (.75, .84, 0.85 and .75) were noted by Luthans et al. (2007). According to Herbert (2011), the cronbach alphas reported were as follows for the various scales: hope .87; optimism .78; resilience .72; and self-efficacy .87. Furthermore, acceptable reliability coefficients have been reported in South African samples for the four scales with alpha coefficients ranging from .67 to .83 (Herbert, 2011). Research by Simons and Buitendach (2013) in a South African study has confirmed acceptable levels of reliability for the Psychological Capital Questionnaire.

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3.5.2.3 Validity of the Psychological Capital Questionnaire

Foxcroft and Roodt (2001, p. 17) defined validity as "what the test measures and how well it does so." Gooty et al. (2009) in their research on psychological capital of followers and perceptions of transformational leadership, reported discriminant validity where CFA showed a significant distinction between variables. According to Luthans et al. (2007), the four sub scales of psychological capital were selected on the basis of sound validity and reliability, with clear reference to the workplace.

3.5.3 UTRECHT'S WORK ENGAGEMENT SCALE (UWES-17)

Work engagement was measured using the Utrecht Work Engagement Scale which was developed by Schaufeli and Bakker (2003).

3.5.3.1 Nature and composition

This questionnaire comprises of 17 items on three subscales (vigour 6 items, dedication 5 items and absorption 6 items). The Utrecht Work Engagement Scale is scored on a seven-point Likert scale with responses ranging from 0 = never to 7 = everyday. Vigour is assessed by six items, a high score of which shows that one has much energy, zest and stamina when working, whereas a low score shows that one has less energy and stamina when working. An example of an item from the vigour scale is "when I get up in the morning, I feel like going to work" (Bakker, 2009).

Dedication is measured by five items that relate to getting a sense of significance from one's work and being proud of one's job. An example of an item from the dedication scale is "I find the work that I do full of meaning and purpose." It follows that those who obtain a high score on dedication strongly identify with their work and experience meaning of what they do. A low score on dedication shows that one does not find their work to be inspiring, challenging and does not identify with it (Schaufeli & Bakker, 2004). Absorption is measured by six items, one of which is "When I am working, I forget everything else around me." A high score on absorption entails that one is deeply engrossed in his or her work, while a low score shows that one is not immersed in his or her job (Schaufeli & Bakker, 2003).

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3.5.3.2 Reliability of the Utrecht Work Engagement Scale

The UWES was originally made up of 24 items. There were 9 items that measured vigour, 8 items measured dedication and 7 items were on absorption (Schaufeli & Bakker, 2003). However, after psychometric evaluation using two different samples of employees and students, 7 items were found to be unsound and thus eliminated from the UWES, hence the development of the 17 item UWES.

The three dimensions of the UWES have been found to be closely related. According to Demerouti et al. (2001), correlations between the three dimensions exceeded .65. Schaufeli and Bakker (2003) noted that the internal consistency of the three scales were satisfactory, with Cronbach alphas of .70 or more. The UWES was found to have alpha coefficients for internal consistency and reliability for the three subscales ranged from .78 to .89 within a South African context (Schaufeli & Bakker, 2003).

In a study by Schaufeli et al. (2002), the internal consistency reliability estimates for the UWES were .78 and .79 for vigour, .84 and .89 for dedication and .73 and .72 for absorption. Based on these findings, Schaufeli et al. (2002) confirmed that the UWES had satisfactory and acceptable internal consistencies.

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3.5.3.3 Validity of the Utrecht Work Engagement Scale

According to Sonnentag (2003), the factorial validity showed that the hypothesized three-factor structure of the Utrecht's Work Engagement Scale was superior to the one-factor model. Confirmatory factor analyses proved that the three factor structure of the UWES were more water tight than the one factor model and was applicable to different samples from the Netherlands, Spain and Portugal (Schaufeli & Bakker, 2003).

Work engagement is conceptualised as the opposite end of burnout. In a study by Maslach, Jackson and Leiter (1996), the UWES and the Maslach Burnout Inventory (MBI) scales were significantly negatively correlated (r = - .47 and – .62). Similar findings by Schaufeli and Salanova (2007) highlighted negative correlations (r = - .58, - .46, - .62 and – .20) between the UWES and the MBI.

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3.5.4 ORGANIZATIONAL COMMITMENT QUESTIONNAIRE

Allen and Meyer's (1990) instrument was used to measure the participants' organizational commitment.

3.5.4.1 Nature and composition

The Organisational Commitment Questionnaire which was developed by Allen and Meyer (1990) contains 24 items, divided between three subscales namely, affective, continuance and normative commitment. The affective commitment subscale is measured by 8 items, an example of which is "I would be very happy to spend the rest of my career with this organization." The continuance commitment subscale also contains 8 items, one of which is "It would be too costly for me to leave my organization now." The normative commitment subscale is assessed by 8 items, which include "One of the major reasons I continue to work for this organization is that I believe that loyalty is important and therefore, feel a sense of moral obligation to remain" (Albdour & Altarawneh, 2014).The questionnaire is scored on a five-point Likert scale with responses ranging from 1 = strongly agree to 5 = strongly disagree.

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3.5.4.2 Reliability of the Organizational Commitment Questionnaire

Research findings of Albdour and Altarawneh (2014) on work engagement and organizational commitment of 336 bank employees in Jordan found cronbach alphas ranging from .82 to .90. These values are above the minimum acceptable value of .70. A study by Field and Buitendach (2011) on happiness, engagement and commitment of tertiary support staff yielded cronbach alpha coefficients of .87 for the affective commitment subscale, .75 for the continuance commitment subscale and .79 for the normative commitment subscale. In another study by Khwela (2001), a cronbach alpha coefficient of .87 was reported. Reliability coefficients of above .80 have also been reported on each one of the three types of organizational commitment in a study carried out by Allen and Meyer (1990). The Organizational Commitment Questionnaire as a whole has been acknowledged to be reliable.

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3.5.4.3 Validity of the Organizational Commitment Questionnaire

According to Bergman (2006), the normative commitment subscale has not shown high degree of discriminant validity with the affective commitment subscale. In Confirmatory Factor Analysis, Jaros (2007) noted that both versions, the six-item and the 8-item version, of the normative commitment subscale highly correlated with the affective commitment subscale showing .77 and .54 respectively. These correlations were not conclusive of the redundancy between the two scales and according to Jaros (2007), in Western countries, the normative commitment subscale does not offer much explanatory power when used to predict outcomes in conjunction with affective commitment.

However, in non-Western cultures such as Taiwan, the normative commitment subscale has been found to predict outcomes better when modelled together with the affective commitment subscale, showing correlations of .66 (Chang, Chi, & Miao, 2007). In a Chinese study, Chen and Francesco (2003) found correlations of .64 between the affective commitment and normative commitment subscales. However, despite the high correlations, Meyer and Allen (1997) noted evidence of construct distinctiveness at least in Eastern cultures which are collectivist in nature, where commitment is based on obligation. In a study by Powell and Meyer (2004), social-cost side-bets were found to predict normative commitment strongly than continuance commitment. This finding has face validity as it would have been generalised that employees stay with an organization due to feelings of guilt, reciprocity and obligation.

3.5.4.4 Rationale for using these questionnaires

The rationale for using the above questionnaires was because they have been found to be reliable and valid.

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3.6. STATISTICAL ANALYSIS

3.6.1 Missing values

It is common for data collection to yield incomplete values (Pallant, 2016). It is crucial to identify missing values before analysing research data as nearly all standard statistical methods presume complete information on the variables due for statistical analysis. The researcher needs to understand the reasons for missing data such as unwillingness to reveal private information or inappropriateness of a question and note if missing values occurred randomly or followed a pattern (Williams, 2015). Pallant (2016) cautioned on the treatment of missing values as total exclusion may have dramatic effects on the results. LISREL statistical analysis software encompasses the PRELIS programme which addresses the problem of missing values. There are various ways of dealing with missing values including listwise deletion, imputation methods, multiple imputation and maximum likelihood as discussed below.

3.6.1.1 Listwise deletion

This technique of handling missing values entails excluding a case that has missing data for any of the variables. Briggs, Wolstenholme and Clarke (2003) noted that it is the default method in most statistical packages. The listwise deletion method has a limitation of excluding large fractions of the original sample. Nakai and Ke (2011) posited that the listwise deletion method works well when data are missing completely at random.

3.6.1.2 Imputation methods

Imputation methods handle missing values by substituting each missing value with a reasonable guess. Thereafter, statistical analysis is performed as though there were no missing values. There are two main imputation methods, namely, marginal mean imputation and conditional mean imputation. Allison (2001) cautioned that imputation methods in general have a drawback of underestimation of standard errors, thus, they lead to overestimation of test statistics.

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3.6.1.3 Multiple imputation

This technique involves drawing imputed values from a distribution, so that they inherently contain some variation. Soley-Bori (2013, p.7) asserted that "multiple imputation solves the limitations of single imputation by introducing an additional form of error based on variation in the parameter estimates across the imputation, which is called, between imputation error". Although multiple imputation is advantageous in that it can be used with any kind of data and model with conventional software, it can be challenging and complex as it produces different estimates every time it is used and thus may pose a situation where different researchers obtain different numbers from the same data (Nakai & Ke, 2011).

3.6.1.4 Maximum likelihood

Soley-Bori (2013) noted that the maximum likelihood method is applied to obtain the variance-covariance matrix for the variables in the model based on all the available data points, and then use the resultant variance-covariance matrix to estimate the regression model. This method has been identified to be simpler as it only requires specification of the model of interest and an indication that one wants to use Maximum likelihood for missing values analysis (SAS Institute, 2005).

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3.6.2 Item Analysis

Item (reliability) analysis was conducted to eliminate items that appeared unrelated to the total subscale or that had a low relation with it. Mahembe (2010) asserted the purpose of performing item analysis is to increase homogeneity of the components of a subscale, thereby, increasing content validity of the subscale. Ghiselli, Campbell and Zedeck (1981) were of the notion that the main aim of a test is to measure the same traits, therefore, individual item scores of the subscale should display positive correlations and moderately high intercorrelations. Item analysis was executed using the reliability-analysis procedure available in SPSS version 23. Pallant (2010) noted that items with an item-total correlation value of less than .30 result in an increase in the reliability coefficient of a subscale. Therefore, an item with less than .30 item-total correlation was excluded from further analyses if its exclusion resulted in a significant increase in the subscale's reliability

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coefficient. Levels of reliability for the scales were determined by guidelines stipulated by Nunnally (1967) as indicated in Table 3.2.

Table 3.2

General guidelines for interpreting reliability coefficients

Reliability coefficients value	Interpretation
0.9 and above	excellent
0.80 – 0.89	good
0.70 – 0.79	adequate
Below 0.70	May have limited applicability

Source: Nunnally, J.C., & Bernstein, I. (1994). *Psychometric Theory* (3rd ed.). New York: McGraw-Hill.

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3.6.3 Dimensional analysis using Exploratory Factor Analysis (EFA)

Pallant (2010) posited the purpose of factor analysis as that of reducing or summarising data. Yong and Pearce (2013, p. 80) asserted that "factor analysis operates on the notion that measurable and observable variables can be reduced to fewer latent variables that share a common variance and are unobservable, which is known as reducing dimensionality." Exploratory Factor Analysis is recommended for use when the intention is to find out the number of factors influencing variables and to discover variables that go together. Large sets of data that consist of several variables can be reduced by observing clumps or groups of variables, which are factors that assemble common variables into descriptive categories.

In the present study, dimensionality analysis was performed to confirm the uni-dimensionality of each subscale as well as to identify and remove items with inadequate factor loadings. Factor analysis has some requirements before it can be performed. Child (2006) postulated that in order to perform factor analysis, univariate and multivariate normality has to be present within the data. Field (2005) was of the view that univariate and multivariate outliers must not be present in the data. The eigenvalues-greater-than-unit rule

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will be applied to determine the amount of scales to remove. Mahembe (2010) noted that there are rules that are applied in order to determine the number of factors to be extracted as well as the items to be included in each factor when performing exploratory factor analyses. The rules are as follows:

- The number of factors to be extracted should not be more than the number of eigenvalues greater than 1.00, according to Kaiser's (1961) criterion.
- An item not loading greater than .30 on any factor will be excluded (Field, 2005; Pallant, 2010; Tabachnick & Fidell, 2001).
- An item loading greater than .30 on more than one factor would be excluded if the difference between the higher and the lower loading was less than .25 (Nunnally & Bernstein, 1994; Tabachnick & Fidell, 2001).
- A Kaiser-Meyer-Olkin measure of sampling adequacy (KMO index) value close to 1, indicating that patterns of correlations are relatively compact and therefore factor analysis should present distinct and reliable factors (Field, 2005). The cut-off value d in this study was .7. Kaiser (as cited in Field, 2005) recommended accepting values greater than .5 as acceptable, values between .5 and .7 as mediocre, and values between .7 and .8 as good while values between .8 and .9 are great and values above .9 are superb.

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3.6.4 Structural equation modelling (SEM)

The focus of structural equation modelling is often on theoretical constructs, which are represented by the latent factors. According to Hox and Bechger (1998), structural equation modelling implies a structure for the covariances between the observed variables and provides a general and convenient framework for statistical analysis which includes several traditional multivariate procedures. Although structural equation modelling is acknowledged to contain a variety of powerful analysis techniques, caution of causal interpretation, statistical assumptions and required sample sizes was presented (Hox & Bechger, 1998). According to Brown (2006), SEM models can take the form of measurement or structural models. The measurement model specifies the number of factors, thereby showing the manner in which various indicators relate to the latent variables. The structural model specifies the relationships between the latent variables (Mahembe, 2014).

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CRITERIA FOR ASSESSING THE MEASUREMENT AND STRUCTURAL MODELS

Table 3.3

Criteria of goodness-of-fit

	Absolute fit measures
Root Mean Square Error of Approx (RMSEA)	Values of 0.08 or below indicate acceptable fit, those below 0.05 indicate good fit, and values below 0.01 indicate outstanding fit.
P-Value for Test of Close Fit (RMSEA < 0.05)	Values > 0.05 indicate good fit.
Root Mean Square Residual (RMR)	Lower values indicate better fit, with values below 0.08 indicative of good fit.
Standardised RMR	Lower values indicate better fit, with values less than 0.05 indicating good fit.
Goodness of Fit Index (GFI)	Values closer to 1 and > 0.90 represent good fit.
	Incremental fit measures
Normed Fit Index (NFI)	Values closer to 1 indicate better fit, with values > 0.09 indicative of good fit.
Non-Normed Fit Index (NNFI)	Higher values indicate better fit, with values > 0.90 indicative of good fit.
Adjusted Goodness of Fit (AGFI)	Values closer to 1 indicate better fit, with values > 0.90 indicative of good fit.
Comparative Fit Index (CFI)	Values closer to 1 indicate better fit, with values > 0.90 indicative of good fit.
Incremental Fit Index (IFI)	Values closer to 1 indicate better fit, with values > 0.90 indicative of good fit.
Relative Fit Index (RFI)	Values closer to 1 indicate better fit, with values > 0.09 indicative of good fit.

3.6.5 ITEM PARCELING

According to Holt (2004), item parcelling refers to the combination of items into small groups of items within scales or subscales. Bandalos and Finney (2001) asserted that item parcels are created to increase the stability of the parameter estimates, remedy small sample sizes and improve the variables to sample size ratio. In comparison to solutions derived from individual items, item parcelled solutions are acknowledged to result in less bias in estimates of structural parameters under the uni-dimensionality condition (Little, Cunningham, Shahar, & Widaman, 2002).

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3.6.6 REGRESSION ANALYSIS

Multiple regression analysis is a useful method in explaining the relationship between dependent variable and two or more independent variables. In this study, the method will be used to determine which of the two variables has a more significant impact on organizational commitment.

3.7. ETHICAL CONSIDERATIONS

Research investigations may tap into issues that encompass the participants' cultural, legal, economic and political phenomena. According to Biber (2005), the complexity of research should ensure moral integrity and trustworthiness of the research process and findings. Mollet (2011) noted that research involves human subjects and it is appropriate to show respect for ethical concerns before embarking on research.

3.7.1 Informed consent

Prior to completing the questionnaires, the nature and rationale for the research was explained to participants. This information was also highlighted in the attached cover letter. Informed consent was attached and also explained to the participants. They were asked to place a tick as an indication of their consent to partake in the research.

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3.7.2 Confidentiality and anonymity

The participants were assured that answering the questionnaires would be done anonymously. Responses would be anonymous as no identifying data were required. Furthermore, they were assured that the information would be kept confidential and would be used for research purposes only.

3.7.3 Voluntary participation

Participants were also informed that the research participation was voluntary and that they could willingly withdraw at any point of the research without repercussions.

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3.8. CONCLUSION

In this chapter, the methodology employed in the research study was discussed. The measuring instruments, their psychometric properties as well as the techniques used to evaluate the data in order to answer the research problem were also discussed.

The following chapter will be a presentation and discussion of research results.

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CHAPTER 4

PRESENTATION OF RESULTS

4.1 INTRODUCTION

The research study was set with the overarching objective of assessing the relationship between psychological capital, work engagement and organizational commitment amongst employees at a selected food processing plant in the Western Cape. The stipulated overarching objective translated into four objectives which led to the formulation of the research hypotheses of the study. The present chapter aims at presenting research findings of this study. Data analysis was executed through the SPSS version 23 and the LISREL 8.80 statistical analysis software. The problem of missing values is outlined first, followed by presentation of the results of the reliability analysis of the surveys on psychological capital, work engagement and organizational commitment. Results of the check for uni-dimensionality are outlined, followed by the output pertaining to the goodness-of-fit indices of both the measurement and structural models as well as the nature of the hypothesized relationships between variables under investigation in this study.

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4.2 MISSING VALUES

Missing values occur when no data is recorded under a given variable in a study. This may be as a result of several factors including research participants refusing or forgetting to answer questions, improper recording of data or lost data files (Pigott, 2001). Missing values are a problem as nearly all standard statistical methods presume complete information for all the variables included in the data analysis (Soley-Bori, 2013). The problem of missing values is common in research and can have significant effects on conclusions drawn from research data. Appropriately dealing with missing values requires careful examination of data for the patterns in the variables with missing values, whether random or systematic. In the present study, respondents completed questionnaires fully and no missing values were noted.

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4.3 ITEM ANALYSIS

Three questionnaires discussed in Chapter 3 were used to collect data from the research sample. The SPSS version 23 was used to assess the reliability of the variables. Conducting item analysis enabled the identification and elimination of items that did not add to the internal consistency of the variables assessed by subscales, thereby improving reliability of the scales. The 3 instruments used in the study were subjected to item analyses and the output in discussion in the section below.

4.3.1 Item analysis of the Psychological Capital Questionnaire

The Psychological Capital Questionnaire, which was developed by Luthans, Youssef and Avolio (2007) is a self-reporting 24-item questionnaire. It has four subscales, namely, self-efficacy, hope, resilience and optimism. The items are measured on a 6 point Likert scale. Hence items analysis was performed on each of the respective subscales of the instruments used in the study.

4.3.1.1 Self-efficacy

A Cronbach alpha of α = .80 was obtained for the *Self-efficacy subscale*. According to Pallant (2016), acceptable values for the Cronbach's alpha should be above .70, hence the reliability coefficient of the Self-efficacy subscale was satisfactory. The Item-Total Statistics table has a Corrected Item-Total Correlation column, whose values show the degree to which each item correlates with the total scale. According to Pallant (2016), values showing the Corrected Item-Total Correlation should not be below .30 as it indicates that the item is measuring something different from the scale as a whole. As shown in Table 4.1, all the corrected item-total correlations were larger than .30. The Item-Total Statistics shows the impact of deleting an item from a scale. Deleting a poor item results in an increase in the Cronbach alpha of a scale, while deleting a good item reduces the reliability (Cronbach alpha) of a scale. With regards to the Self-efficacy subscale, no item would result in a significant increase in the Cronbach alpha when deleted, hence, all the items were retained.

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Table 4.1

The reliability analysis output for the Self-efficacy subscale

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.800	.801	6

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
PC1	24.72	13.723	.521	.365	.777
PC2	24.59	13.819	.608	.525	.757
PC3	24.59	13.395	.638	.463	.749
PC4	24.51	14.122	.550	.317	.770
PC5	24.68	14.035	.499	.369	.782
PC6	24.66	14.024	.523	.331	.776

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4.3.1.2 Hope

The *Hope subscale* has an internal consistency coefficient of α = .694. The Cronbach alpha was marginally below the cut off value of .70 which is viewed as satisfactory in this study (Pallant, 2016). None of the items were flagged to be problematic. The corrected item-total correlation indicated that all the items correlated satisfactorily above .30 which is acceptable (Pallant, 2016). None of the items would significantly increase the Cronbach alpha if deleted and all the items were retained as depicted in Table 4.2.

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Table 4.2

The reliability analysis output for the Hope subscale

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.694	.694	6

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
PC7	24.33	11.476	.394	.226	.663
PC8	24.28	10.790	.416	.226	.657
PC9	24.08	12.542	.307	.150	.687
PC10	24.65	11.233	.396	.219	.663
PC11	24.44	11.095	.531	.333	.623
PC12	24.79	10.167	.513	.388	.622

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4.3.1.3 Resilience

Resilience relates to the ability to bounce back from setbacks. The reliability analysis on the *Resilience subscale* yielded a Cronbach alpha of α = .55 which fell below the acceptable cut off value of .70 (Foxcroft & Roodt, 2009). The corrected item-total correlation indicated that all the items, except for item PCR13, correlated satisfactorily above .30 which is acceptable (Pallant, 2016). Item PCR13 was flagged to be problematic with corrected item-total correlation of -.18. A decision was taken to exclude the item as it decreased the internal consistency coefficient and its deletion significantly increased the Cronbach alpha to .682 as indicated in Table 4.3.

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Table 4.3

The reliability analysis output for the Resilience subscale

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.555	.603	6

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
PC14	22.32	10.604	.457	.289	.450
PC15	22.33	9.800	.381	.183	.467
PC16	22.61	10.664	.331	.219	.494
PC17	21.97	10.672	.444	.272	.455
PC18	22.56	10.497	.365	.218	.479
PCR13	23.56	12.413	-.018	.023	.682

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4.3.1.4 Optimism

Optimism relates to the expectation of good things to happen. The initial round of reliability analysis on the *Optimism subscale* produced an internal consistency coefficient of α = .47. The Cronbach alpha was below the critical cut off value of .70 for this study. The corrected item-total correlation indicated that items PC21 and PC22 correlated above .30 and items PC19, PCR20, PCR23 and PC24 correlated below .30. Item PCR20 and PCR23 had the lowest corrected item-total correlation of .163 and .110 (see Table 4.4) respectively and their exclusion resulted in a significant increase in the internal consistency coefficient of α to .646.

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Table 4.4

The reliability analysis output for the Optimism subscale

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.475	.506	6

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
PC19	21.34	13.285	.208	.202	.446
PC21	20.95	11.989	.436	.250	.327
PC22	20.72	13.216	.332	.252	.390
PC24	21.29	13.019	.260	.163	.418
PCR23	21.94	13.301	.110	.162	.514
PCR20	22.08	13.326	.163	.179	.473

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4.3.2 Item analysis of the Work Engagement Subscale

The Utretch's Work Engagement Scale as outlined in Chapter 3 is composed of vigour, dedication and absorption. It is a self-reporting questionnaire with 17 items. Item analysis of the 3 subscales is presented in this section.

4.3.2.1 Vigour

A Cronbach alpha of .77 was obtained for the Vigour subscale. The corrected item-total correlation values shown in the Item-Total Statistics table give an indication of the degree to which each item correlates with the total scale (Mahembe, 2014). Low values of less than .30 indicate that the item is measuring something different from the scale as a whole (Pallant, 2016). As indicated in Table 4.5, all the corrected item-total correlations were larger than .30, ranging from .45 to .58, indicating that all were good items and were thus retained. This is depicted in Table 4.5.

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Table 4.5

The reliability analysis output for the Vigour subscale

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.772	.773	6

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
WE1	20.81	23.142	.583	.392	.722
WE4	20.56	23.169	.589	.394	.720
WE8	21.16	23.158	.497	.287	.745
WE12	20.55	23.696	.530	.307	.735
WE15	20.67	24.775	.456	.263	.753
WE17	20.38	24.827	.453	.251	.754

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4.3.2.2 Dedication

A Cronbach alpha of .804 was obtained for the Dedication subscale. The Cronbach alpha was significantly high above the critical cut off value of .70 (Nunnally & Bernstein, 1994). All the corrected item-total correlations were larger than .30 which is acceptable (Pallant, 2016). The item-total statistics indicated that the Cronbach alpha would increase slightly to .848 if item WE13 was deleted. However, item WE13 was not deleted as the magnitude of the change in the Cronbach alpha was not substantial. This is shown in Table 4.6.

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Table 4.6

The reliability analysis output for the Dedication subscale

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.804	.815	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
WE2	17.86	17.999	.681	.470	.740
WE5	18.04	17.870	.675	.554	.741
WE7	18.14	16.712	.688	.541	.733
WE10	17.89	18.897	.610	.402	.762
WE13	18.14	19.456	.357	.157	.848

4.3.2.3 Absorption

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A reliability coefficient of .734 was obtained for the *Absorption subscale* which is considered satisfactory in this study. All the corrected item-total correlations were larger than .30 which is acceptable (Pallant, 2016). None of the items were flagged as problematic. This suggests a strong relationship among items (Pallant, 2016). The output is shown in Table 4.7.

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Table 4.7

The reliability analysis output for the Absorption subscale

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.734	.736	6

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
WE3	19.98	26.092	.400	.199	.717
WE6	20.72	23.511	.516	.295	.683
WE9	20.22	25.889	.487	.330	.693
WE11	20.32	26.651	.463	.300	.701
WE14	20.46	25.696	.440	.233	.705
WE16	20.84	23.266	.522	.326	.681

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4.3.3 Item analysis of the Organizational Commitment Questionnaire

The Organizational Commitment Questionnaire was developed by Allen and Meyer (1990). It is a self-report instrument with 24 items on 3 subscales, which are, affective commitment, normative commitment and continuance commitment. Item analysis of the 3 subscales is presented in this section.

4.3.3.1 Affective commitment

A Cronbach alpha of .646 was obtained for the affective subscale. The Cronbach alpha was below the cut off value of .70 which is viewed as satisfactory in this study. The corrected item-total correlation indicated that most of the items correlated satisfactorily above .30 with the total score with the exception of items AC2, AC3 and ACR4 (Pallant, 2016). The exclusion of item ACR4 would result in a significant increase in the Cronbach alpha. The item was deleted and an internal consistency coefficient $\alpha = .661$ was obtained.

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Table 4.8

The reliability analysis output for the Affective commitment subscale

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.646	.647	8

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
AC1	18.96	20.501	.418	.200	.592
AC2	19.55	22.507	.236	.187	.641
AC3	18.90	21.916	.291	.167	.627
AC7	19.29	21.655	.330	.148	.616
ACR4	18.63	23.285	.159	.152	.661
ACR5	19.57	21.666	.351	.288	.611
ACR6	19.14	19.373	.545	.359	.556
ACR8	19.35	21.077	.402	.243	.598

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4.3.3.2 Continuance commitment

The Continuance subscale had an internal consistency of α= .58. This internal consistency value was below the critical cut off of .70. The corrected item-total correlation indicated that all the items correlated above .30 with the exception of item CCR1 (see Table 4.9) and CCR4 (Pallant, 2016) which were poor and negative items respectively. The negative item CCR4 was reversed and after being reversed, the item remained a poor item with a corrected item-total correlation of -.098. Both items CCR1 and CCR4 were excluded from the scale to increase the internal consistency to .71.

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Table 4.9

The reliability analysis output for the Continuance commitment subscale

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.589	.598	8

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
CC2	18.65	20.827	.377	.369	.528
CC3	18.74	19.639	.472	.399	.495
CC5	18.95	21.652	.415	.216	.524
CC6	18.44	21.270	.372	.246	.532
CC7	18.50	20.952	.395	.260	.524
CC8	18.69	20.960	.348	.154	.537
CCR1	18.83	23.275	.146	.088	.602
CCR4	18.70	26.608	-.098	.057	.669

4.3.3.3 Normative commitment

The Normative commitment subscale has an internal consistency coefficient of α = .719. In the initial round of reliability analysis, an internal consistency coefficient of α =.522 was recorded. The corrected item-total correlation indicated that only items NC4, NC6 and NC7 (see Table 4.10) correlated above .30 with the total scale. Item NC1 was found to be a negative item and it was reversed. After being reversed, it was still found to be a poor item and was excluded together with item NCR8 which was also a poor item and did not add to the internal consistency of the scale. Following the exclusion of the two problematic items, the normative commitment scale's internal consistency increased to .617. Further reliability analysis showed in the corrected item-total correlation column that all items correlated above

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.30 with the total score except for items NCR2 and NCR3. The deletion of items NCR2 and NCR3 increased the Cronbach's alpha to α = .719. It was decided to exclude the items from further analyses.

Table 4.10

The reliability analysis output for the Normative commitment subscale

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.522	.510	8

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
NC1	21.26	21.676	-.030	.048	.574
NC4	20.78	16.074	.462	.304	.398
NC5	20.16	17.638	.282	.260	.473
NC6	20.59	16.511	.446	.299	.408
NC7	20.57	18.025	.325	.249	.459
NCR2	20.86	18.528	.220	.215	.497
NCR3	20.47	19.135	.210	.231	.499
NCR8	20.53	20.785	.045	.101	.554

4.4. DIMENSIONALITY ANALYSIS

In this section, exploratory factor analysis results of the instruments used will be reported. The main reason for conducting exploratory factor analysis is to ascertain the uni-dimensionality of each of the sub-scales of the measuring instruments used in this study as well as to identify items with insufficient loadings (Mahembe, 2010). The eigenvalue greater than unit rule was used to determine the number of factors to extract. The SPSS version 23 was used to execute the analyses.

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4.4.1 Dimensional analysis of the Psychological Capital Questionnaire (PCQ)

4.4.1.1 The dimensionality analysis of the Self-efficacy subscale

The Self-efficacy subscale obtained a Kaiser-Meyer-Olkin measure of sampling adequacy value of .758 and the Bartlett's Test of Sphericity test statistic value was 395.157 (*df* = 15; p = 0.000) which allowed for the identity matrix null hypothesis to be rejected. There was therefore strong evidence that the correlation matrix was factor analyzable. Tabachnick and Fidell (2007), "The Kaiser-Meyer-Olkin (KMO) is said to be a measure of sampling adequacy and reflects the ratio of the sum of the squared inter-item correlations to the sum of the squared inter-item correlations plus the sum of the squared partial inter-item correlations, summed across all correlations. When the KMO approaches unity, or at least achieves a value bigger than .60, the correlation matrix is deemed factor analyzable".

Horn (1965) asserted that sampling adequacy of .50 and below is unacceptable, values of .50 are miserable, values of .60 are mediocre, values of .70 are described as middling, those of .80 are meritorious and values of .90 and over are marvellous. All the items of the Self-efficacy subscale were included in the dimensionality analysis as none of the items were found to be poor item in the item analysis. One factor was extracted, since only that one factor obtained an eigenvalue greater than one. A total variance of 50.35% was accounted for by the one Self-efficacy factor. The factor matrix indicated that all the items loaded on one factor satisfactorily as all factor loadings were larger than .50 and they ranged between .54 and .74. This is shown in the table 4.11.

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Table 4.11

Factor matrix for the Self-efficacy subscale

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.758
Bartlett's Test of Sphericity	Approx. Chi-Square	395.157
	Df	15
	Sig.	.000

Factor Matrix[a]	
	Factor 1
PC1	.601
PC2	.710
PC3	.745
PC4	.622
PC5	.549
PC6	.580

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4.4.1.2 The dimensionality analysis of the Hope subscale

The Hope subscale obtained a Kaiser-Meyer-Olkin measure of sampling adequacy value of .690 and the Bartlett's Test of Sphericity test statistic obtained a value of 221.899 (*df* = 15; p = 0.000) which allowed for the identity matrix null hypothesis to be rejected. There was therefore strong evidence that the correlation matrix was factor analyzable (Kaiser as cited in Field, 2005).

The initial round of analysis brought about two factors that had an eigenvalue of more than one. In order to obtain one factor from the subscale, item PC9 had to be excluded for the analysis as it proved to be a complex item. After the exclusion of the complex item, only one factor with an eigenvalue greater than one was obtained. All items loaded satisfactorily above .50 with the exception of two items (PC7 and PC8) which loaded below .50 as shown in the

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factor matrix table. Hence the uni-dimensionality assumption was validated. The results are displayed in the table 4.12.

Table 4.12

Factor matrix for the Hope subscale

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.690
Bartlett's Test of Sphericity	Approx. Chi-Square	221.899
	Df	15
	Sig.	.000

Factor Matrix[a]	
	Factor 1
PC7	.399
PC10	.520
PC12	.732
PC8	.491
PC11	.634

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4.4.1.3 The dimensionality analysis of the Resilience subscale

During item analysis, item PCR13 was noted to be a poor item and was hence not included in the dimensional analysis. Exploratory factor analysis was performed on the Resilience subscale. The KMO index and the Bartlett's test of sphericity were computed and yielded values of .710 and 165.227 (*df* = 10; p=0.000) respectively. According to Kaiser (as cited in Field, 2005), these values are acceptable and show that the correlation matrix of the Resilience subscale was factor analyzable. The Resilience subscale was found to be uni-dimensional. Only one factor with an eigenvalue greater than one was obtained and this factor accounted for 44.77% of the variance. The factor loadings were above .50 with the exception of factor PC15 and PC16 which were marginally below .50 at .48 and .49 respectively. The results are shown in Table 4.13.

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Table 4.13

Factor matrix for the Resilience subscale

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.710
Bartlett's Test of Sphericity	Approx. Chi-Square	165.227
	Df	10
	Sig.	.000

Factor Matrix[a]	
	Factor 1
PC14	.610
PC15	.485
PC16	.496
PC17	.635
PC18	.552

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4.4.1.3 The dimensionality analysis of the Optimism subscale

The Optimism subscale obtained a Kaiser-Meyer-Olkin measure of sampling adequacy value of .691 and the Bartlett's Test of Sphericity test statistic achieved a value of 110.563 (*df* = 6; p = 0.000). This permitted for the identity matrix null hypothesis to be rejected. There was enough evidence that the correlation matrix was factor analyzable (Kaiser as cited in Field, 2005). One factor with an eigenvalue greater than one was obtained when the results were drawn and a total variance of 48.88%. All factor loadings were loaded above .50 with the exception of factor PC24 which loaded at .49. Hence the uni-dimensionality postulation was confirmed. The results are displayed in the table 4.14.

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Table 4.14

Factor matrix for the Optimism subscale

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.691
Bartlett's Test of Sphericity	Approx. Chi-Square	110.563
	Df	6
	Sig.	.000

Factor Matrix[a]	
	Factor 1
PC19	.534
PC21	.574
PC22	.653
PC24	.496

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4.4.2 Dimensional analysis of the Work Engagement Questionnaire

4.4.2.1 Dimensional analysis of the Vigour Subscale

The Vigour subscale obtained a Kaiser-Meyer-Olkin measure of sampling adequacy value of .788 and the Bartlett's Test of Sphericity test statistic achieved a value of 302.832 (*df* = 15; p = 0.000). This permitted for the identity matrix null hypothesis to be rejected. There was enough evidence that the correlation matrix was factor analyzable (Kaiser as cited in Field, 2005). One factor with an eigenvalue greater than one was obtained when the results were drawn. All factor loadings were satisfactorily greater than .50 ranging from .51 to .70 and the factor matrix indicated that all items loaded adequately on one factor. The uni-dimensionality assumption was validated. The results are displayed in the table 4.15.

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Table 4.15

Factor matrix for the Vigour subscale

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.788
Bartlett's Test of Sphericity	Approx. Chi-Square	302.832
	Df	15
	Sig.	.000

Factor Matrix[a]	
	Factor 1
WE1	.689
WE4	.702
WE8	.581
WE12	.613
WE15	.517
WE17	.511

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4.4.2.2 Dimensional analysis of the Dedication Subscale

The Dedication subscale obtained a Kaiser-Meyer-Olkin measure of sampling adequacy value of .821 and the Bartlett's Test of Sphericity test statistic achieved a value of 394.710 (*df* = 10; p = 0.00). This permitted for the identity matrix null hypothesis to be rejected. There was enough evidence that the correlation matrix was factor analyzable (Kaiser as cited in Field, 2005). One factor with an eigenvalue greater than one was obtained when the results were drawn and a total variance of 58.63%. All factor loadings were satisfactorily loaded above .50 with the exception of factor WE13 which loaded at .39. Hence the uni-dimensionality postulation was confirmed. The results are displayed in the table 4.16.

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Table 4.16

Factor matrix for the Dedication subscale

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.821
Bartlett's Test of Sphericity	Approx. Chi-Square	394.710
	Df	10
	Sig.	.000

Factor Matrix[a]	
	Factor 1
WE2	.756
WE5	.802
WE7	.804
WE10	.693
WE13	.386

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4.4.2.3 Dimensional analysis of the Absorption Subscale

Exploratory factor analysis shows that the Absorption subscale is factor analyzable as indicated by KMO index and the Bartlett's test of sphericity values of .743 and 252.277 (*df* = 15; p=0.000) respectively. According to Kaiser (as cited in Field, 2005), these values are satisfactory and indicate the factor analyzability of the correlation matrix of the Absorption subscale. The Absorption subscale was found to be uni-dimensional. Only one factor with an eigenvalue greater than one was obtained and this factor accounted for 43.222% of the variance. Most of the factor loadings were above .50 with the exception of factor WE3 which loaded at .47 suggesting that the factor solution provided a valid explanation of the observed inter-item correlation matrix. The results are shown in Table 4.17.

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Table 4.17

Factor matrix for the Absorption subscale

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.743
Bartlett's Test of Sphericity	Approx. Chi-Square	252.277
	Df	15
	Sig.	.000

Factor Matrix[a]	
	Factor 1
WE3	.471
WE6	.604
WE9	.596
WE11	.567
WE14	.512
WE16	.630

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4.4.3 Dimensional analysis of the Organizational Commitment Questionnaire

4.4.3.1 Dimensional analysis of the Affective Commitment Subscale

When the Affective commitment subscale was subjected to item analysis, item ACR4 was found to be a problematic item and was excluded from item analysis and was thus not included in the dimensional analysis. The Affective commitment subscale obtained a Kaiser-Meyer-Olkin measure of sampling adequacy value of .685 and the Bartlett's Test of Sphericity test statistic obtained a value of 121.081 (df = 6; p = 0.000) which allowed for the identity matrix null hypothesis to be rejected. There was therefore strong evidence that the correlation matrix was factor analysable.

The Affective commitment subscale could not be proven to be uni-dimensional in the initial round of exploratory factor analysis. The items identified as complex were AC2, AC3 and AC7 and their factor loading were all below .50 at .34, .37 and .38 respectively. When the

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three items were removed uni-dimensionality was achieved. Only one factor with an eigenvalue greater than one was obtained, which accounted for 49.37% of the total variance. The factor loadings were all substantially above .50 with the exception of item AC1 which loaded at .37. The results are shown in Table 4.18.

Table 4.18

Factor matrix for the Affective commitment subscale

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.685
Bartlett's Test of Sphericity	Approx. Chi-Square	121.081
	Df	6
	Sig.	.000

Factor Matrix[a]	
	Factor 1
AC1	.365
ACR5	.637
ACR6	.668
ACR8	.603

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4.4.3.2 Dimensional analysis of the Continuance Commitment Subscale

The value of the Kaiser-Meyer-Olkin measure of sampling adequacy for the Continuance commitment subscale was .704. The Bartlett's Test of Sphericity was 207.895 (*df* = 10; p = .000). Items CCR1 and CCR4 were found to be problematic items during item analysis and were not included in the dimensional analysis. The initial round of Exploratory Factor Analysis showed that item CC8 was a complex item loading on two factors. The Continuance subscale achieved uni-dimensionality when item CC8 was removed. The factor loadings were all substantially above .50 with the exception of item CC6 which loaded marginally below .50 at .49. The results are shown in Table 4.19.

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Table 4.19

Factor matrix for the Continuance commitment subscale

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.704
Bartlett's Test of Sphericity	Approx. Chi-Square	207.895
	Df	10
	Sig.	.000

Factor Matrix[a]	
	Factor 1
CC2	.656
CC3	.715
CC6	.487
CC7	.502
CC5	.529

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4.4.3.3 Dimensional analysis of the Normative Commitment Subscale

The Normative commitment subscale obtained a Kaiser-Meyer-Olkin measure of sampling adequacy value of .757 and the Bartlett's Test of Sphericity test statistic obtained a value of 155.213 (*df* = 6; p = .000) which allowed for the identity matrix null hypothesis to be rejected. There was therefore strong evidence that the correlation matrix was factor analysable (Kaiser as cited in Field, 2005).

During item analysis, items NCR1, NCR8, NCR2 and NCR3 were found to be problematic items and were not included in the dimensional analysis. The Normative commitment subscale was found to be uni-dimensional. Only one factor with an eigenvalue greater than one was obtained and this factor accounted for 54.38% of the variance. The factor loadings were above .50, ranging from .58 to .67. The results are shown in Table 4.20.

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Table 4.20

Factor matrix for the Normative commitment subscale

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.757
Bartlett's Test of Sphericity	Approx. Chi-Square	155.213
	Df	6
	Sig.	.000

Factor Matrix[a]	
	Factor 1
NC4	.665
NC5	.591
NC6	.670
NC7	.577

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4.5 THE OVERALL MEASUREMENT MODEL

Item parcels were created for the overall measurement model based on the manifest variables for each of the latent variables in this study. Items were assigned based on the achievement of uni-dimensionality in each of the scales. The initial overall measurement was performed using parcels that were created using the dimensions of each of the scales. For example, for organisational commitment 3 parcels were created for the affective, normative and continuance subscales.

The goodness of fit for this original overall measurement indicated poor fit. The RMSEA value of .0833 indicated poor model fit while the p-value for test for close fit indicates that the model failed to show close fit with the data. Both the RMR and standardised RMR values missed the good fit threshold of 0.05. Table 4.21 shows the values of the NFI, NNFI, CFI, IFI and GFI which are .90, .91, .984, .94 and .92. According to Diamantopoulos and Siguaw (2000), these indices generally indicate a good fit of the model over the independence model as acceptable values are above .90. The RFI value of .86 missed the good fit threshold. An

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inspection of the completely standardised factor loadings indicated that the problem lay in the factor loadings for the commitment scale which were below the recommended .30 threshold with the exception of the factor loadings for affective commitment (refer to Table 4.22). A decision was therefore made to re-specify the model with only affective commitment since it has been documented in literature as the best predictor of commitment (Meyer & Herscovitch, 2001).

4.5.1 Goodness of Fit Statistics

Table 4.21

Goodness of fit of the original model

Fit index	**Value**
Degrees of Freedom	32
Minimum Fit Function Chi-Square	89.845 (P = 0.000)
Normal Theory Weighted Least Squares Chi-Square	93.781 (P = 0.000)
Satorra-Bentler Scaled Chi-Square	80.188 (P = 0.000)
Chi-Square Corrected for Non-Normality	82.868 (P = 0.000)
Estimated Non-centrality Parameter (NCP)	48.188
90 Percent Confidence Interval for NCP	(25.585 ; 78.475)
Minimum fit function value	0.414
Population Discrepancy Function Value (F0)	0.222
90 Percent Confidence Interval for F0	(0.118 ; 0.362)
Root Mean Square Error of Approximation (RMSEA)	0.0833
90 Percent Confidence Interval for RMSEA	(0.0607 ; 0.106)
P-Value for Test of Close Fit (RMSEA < 0.05)	0.00943
Expected Cross-Validation Index (ECVI)	0.582
90 Percent Confidence Interval for ECVI	(0.477 ; 0.721)
ECVI for Saturated Model	0.507
ECVI for Independence Model	3.920
Normed Fit Index (NFI)	0.903
Non-Normed Fit Index (NNFI)	0.914
Parsimony Normed Fit Index (PNFI)	0.642
Comparative Fit Index (CFI)	0.939
Incremental Fit Index (IFI)	0.940
Relative Fit Index (RFI)	0.864
Root Mean Square Residual (RMR)	0.0590
Standardised RMR	0.0790
Goodness of Fit Index (GFI)	0.920
Adjusted Goodness of Fit Index (AGFI)	0.863
Parsimony Goodness of Fit Index (PGFI)	0.535

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Table 4.22

Completely Standardized Solution for PsyCap Questionnaire, Work Engagement Scale and Organizational Commitment Questionnaire.

LAMBDA-Y

	WENGAGE	COMMIT
VIG	0.902	- -
DEDI	0.742	- -
ABS	0.816	- -
AFFECT	- -	0.793
CONT	- -	0.168
NORM	- -	0.189

LAMBDA-X

	PSYCAP
HOPE	0.773
OPTI	0.581
RES	0.581
SEFF	0.650

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4.6 The Goodness of fit of the revised model

In line with the decision made in the foregoing paragraph to exclude the normative and continuance dimensions of commitment, a revised model was performed using only affective commitment. The goodness of fit indices for the revised overall measurement model are presented in this section.

The P-value associated with the Satorra-Bentler scaled chi-square returned a value of 37.906 ($p = 0.0354$) which is indicative of a significant test statistic ($p < .05$). According to Mahembe (2014), this outcome suggest the presence of a significant discrepancy between the covariance matrix implied by the measurement model and the observed covariance matrix, thus allowing for the rejection of the exact fit null hypothesis. The RMSEA associated with the root mean square error of approximation of the measurement model is 0.0517 which marginally misses the < .05 mark of good fit. (RMSEA < 0.05) is 0.0432 which shows a good fit. LISREL 8.80 also provides a 90 percent confidence interval for the RMSEA

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(0.0138; 0.0817) indicating that the hypothesis of close fit is not rejected since the interval includes the RMSEA value.

The values of the root mean squared residual (RMR) and standardized RMR as per table 4.21 are 0.0290 and 0.0432. These values are less than 0.05 which indicates an acceptable fit. The GFI and AGFI have acceptable fit values of 0.956 and 0.917 respectively. Table 4.26 shows the values of the NFI, NNFI, CFI, RFI and IFI, which are 0.958, 0.976, 0.984, 0.937 and 0.984. According to Diamantopoulos and Siguaw (2000), these indices generally indicate a good fit of the model over the independence model as acceptable values are above .90.

Table 4.23

Goodness of fit statistics for the overall measurement model

Degree of Freedom	24
Satorra-Bentler Scaled Chi-Square	37.906 (P = 0.0354)
Chi-square corrected for Non-Normality	43.802 (P=0.00804)
Root Mean Square Error of Approximation (RMSEA)	0.0517
90 Percent Confidence Interval for RMSEA	(0.0138; 0.0817)
P-Value for Test of Close Fit (RMSEA < 0.05)	0.432
Normed Fit Index (NFI)	0.958
Non-Normed Fit Index (NNFI)	0.976
Parsimony Normed Fit Index (PNFI)	0.638
Comparative Fit Index (CFI)	0.984
Incremental Fit Index (IFI)	0.984
Relative Fit Index (RFI)	0.937
Critical N (CN)	247.046
Root Mean Square Residual (RMR)	0.0290
Standardized RMR	0.0432
Goodness of Fit Index (GFI)	0.956
Adjusted Goodness of Fit index (AGFI)	0.917
Parsimony Goodness of Fit Index (PGFI)	0.510

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4.7 Goodness of fit for the structural model

The structural model provides a description of the relationships between the latent variables themselves. The LISREL program version 8.80 (Jöreskog & Sörbom, 2006) was used to determine the fit of the comprehensive model.

The RMSEA for the structural model is 0.0514 which marginally misses the good fit category. The P-value for the test of close fit was also measured (RMSEA < 0.05) at 0.0437 which is an acceptable value. The RMR yielded a value of 0.0328 and the standardised RMR had a value of 0.0483. Both of these figures are below the acceptable value of 0.05 and indicate a good fit.

Table 4.24

Goodness of fit statistics for the structural model

Degree of Freedom	24
Satorra-Bentler Scaled Chi-Square	37.764 (P = 0.0366)
Chi-square corrected for Non-Normality	43.546 (P=0.00861)
Root Mean Square Error of Approximation (RMSEA)	0.0514
90 Percent Confidence Interval for RMSEA	(0.0131; 0.0814)
P-Value for Test of Close Fit (RMSEA < 0.05)	0.437
Normed Fit Index (NFI)	0.958
Non-Normed Fit Index (NNFI)	0.976
Parsimony Normed Fit Index (PNFI)	0.639
Comparative Fit Index (CFI)	0.984
Incremental Fit Index (IFI)	0.984
Relative Fit Index (RFI)	0.937
Critical N (CN)	247.971
Root Mean Square Residual (RMR)	0.0328
Standardized RMR	0.0483
Goodness of Fit Index (GFI)	0.956
Adjusted Goodness of Fit index (AGFI)	0.917
Parsimony Goodness of Fit Index (PGFI)	0.510

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The goodness of fit and adjusted goodness of fit indices are 0.956 and 0.917 respectively. The value for Normed Fit Index (NFI) = 0.958, Non-Normed Fit Index (NNFI) = 0.976, Comparative Fit Index (CFI) = 0.984, Incremental Fit Index (IFI) = 0.984 and Relative Fit Index (RFI) = 0.937, which show good fit as they are above the .90 mark of good fit (Diamantopoulos & Siguaw, 2000). The goodness-of-fit index (GFI) is generally recommended as the most reliable measure of absolute fit (Mahembe, 2014). In this study, the value of the GFI (0.956) shows satisfactory fit.

4.8 HYPOTHESES TESTING

4.8.1 Hypothesis 1:

There is a relationship between psychological capital and work engagement ($t = 3.955$, $p < 0.05$) (see Table 4.28). Hence, the null hypothesis was rejected

4.8.2 Hypothesis 2:

There is a relationship between psychological capital and affective[1] commitment ($t = -2.802$, $p > 0.05$). This finding is not significant

4.8.3 Hypothesis 3:

There is a relationship between work engagement and affective commitment ($t = -3.682$, $p > 0.05$) (see Table 4.28). This finding is not significant.

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4.8.4 Hypothesis 4:

Psychological capital or work engagement has a greater impact on affective commitment.

Hypothesis four was tested using regression analysis. In order to conduct regression analysis, the variables under investigation must be correlated as indicated in Table 4.28.

[1] Due to the fact that a decision was made to use only affective commitment, the original hypotheses (2, 3 and 4) were changed as this dimension was the only one with sound psychometric properties in the confirmatory factor analysis output.

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Table 4.25

Correlational Output between Psycap, Work engagement and Affective commitment

Correlations

		Total Psychological capital	Total Affective commitment	Total Work engagement
Total Psychological capital	Pearson Correlation	1	-.176**	.396**
	Sig. (2-tailed)		.009	.000
	N	218	218	218
Total Affective commitment	Pearson Correlation	-.176**	1	-.271**
	Sig. (2-tailed)	.009		.000
	N	218	218	218
Total Work engagement	Pearson Correlation	.396**	-.271**	1
	Sig. (2-tailed)	.000	.000	
	N	218	218	218

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

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The relationships between Psychological capital, work engagement and affective commitment were tested using the Pearson correlation co-efficient. Before the Pearson correlation was conducted, the assumptions relating to normality, homoscedasticity and linearity were conducted. There was a significant, negative correlation between psychological capital and affective commitment; affective commitment and work engagement; and a positive relationship between work engagement and psychological capital.

The adjusted R square indicates that this model only explains 7% of the variance (see Table 4.26).

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Table 4.26

The Model Summary for PSYCAP and Work engagement

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.281[a]	.079	.070	3.212	.079	9.221	2	215	.000

a. Predictors: (Constant), TWENGAGE, TPSYCAP

In order to assess the regression model the ANOVA table is used (Table 4.27). This tests the null hypothesis that multiple R in the population equals 0. The model in this study is significant (Sig. = .000; p<.0005) (see Table 4.27).

Table 4.27

The ANOVA Table for PSYCAP, Work engagement and Affective commitment

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	190.276	2	95.138	9.221	.000[b]
	Residual	2218.367	215	10.318		
	Total	2408.642	217			

a. Dependent Variable: TAFF

b. Predictors: (Constant), TWENGAGE, TPSYCAP

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According to Pallant (2010, p. 158), the "Tolerance is an indicator of how much of the variability of the specified independent is not explained by the other independent variables in the model and is calculated using the formula 1–R squared for each variable. If this value is very small (less than .10) it indicates that the multiple correlation with other variables is high, suggesting the possibility of multicollinearity. The other value given is the VIF (Variance inflation factor), which is just the inverse of the Tolerance value (1 divided by Tolerance). VIF values above 10 would be a concern here, indicating multicollinearity." In this case, these values are within the acceptable limits indicating no multicollinearity.

Table 4.28

The Coefficients Output for PSYCAP, Work engagement on Affective commitment

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Correlations			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	16.822	1.938		8.680	.000					
	TPSYCAP	-.025	.022	-.081	-1.143	.254	-.176	-.078	-.075	.843	1.186
	TWENGAGE	-.053	.016	-.239	-3.348	.001	-.271	-.223	-.219	.843	1.186

a. Dependent Variable: TAFF

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The coefficients table (Table 4.28) also indicates the contribution made by each of the variables in predicting the dependent variable using the unstandardized beta column. In this case, only work engagement is a significant predictor of affective commitment. In other words, work engagement is making a statistically significant *unique* contribution to the regression equation under investigation.

4.9 CONCLUSION

The purpose of this chapter was to show the results of the statistical analyses performed on the research data. Item analysis was performed to identify poor items and dimensional analysis was executed to determine the uni-dimensionality of each of the measuring instrument's subscales. The overall measurement model was tested using item parcels. Both the measurement and structural model fitted the data reasonably well. The results showed a significant relationship between psychological capital and work engagement and no significant relationship between psychological capital and organizational commitment as well as no relationship between work engagement and organizational commitment. The following chapter will provide a discussion of the results, suggestions for future research, implications and recommendations for the organization.

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CHAPTER 5

DISCUSSION OF RESEARCH RESULTS AND RECOMMENDATIONS FOR FUTURE RESEARCH

5.1. INTRODUCTION

In the preceding chapters, an overview of the research problem and objectives of the present study were given. This was followed by a review of relevant literature in Chapter two, relating to the constructs of the study, namely, psychological capital, work engagement and organizational commitment. Chapter three detailed the research design and methodology utilised to test the propositions that were formulated based on the literature review. In Chapter four, the results of the statistical analyses were presented, aiming to answer the research questions of the present study and to reach conclusions about the viability of each of the research propositions. The present chapter is aimed at discussing findings presented in Chapter four.

The objective of the present study was to investigate the relationship between psychological capital, work engagement and organizational commitment amongst employees at a selected food processing plant in the Western Cape. The specific objectives of the study consequently were to:

- To determine the relationship between psychological capital and work engagement.
- To establish if there is a relationship between psychological capital and organizational commitment.
- To determine the relationship between work engagement and organizational commitment.
- To determine which of the two variables, namely, psychological capital or work engagement has a greater impact on organizational commitment.

Before evaluation of the fit of the measurement and structural models, item and exploratory factor analyses were performed on the measuring instruments of this research study. Pallant (2016) posited that item analysis is conducted for the purposes of assessing the reliability coefficients of the scales as well as identifying items that do not correlate well with other

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items in the scale. This is done before combining items into linear composites meant to represent the latent variables when fitting the proposed model of a research study. Item analysis was executed through SPSS version 23, which yielded item statistics estimates which were referred to for correlations cut-offs. In conclusion, the findings of the research will be discussed in relation to other studies carried out on the same variables. Limitations and recommendations for future research will also be put forth.

5.2 ASSESSMENT OF THE MODEL FIT

5.2.1 Measurement model

According to Diamantopoulos and Siguaw (2000), the measurement model fit indicated the extent to which a hypothesized model fits the data as well as providing information on the validities and reliabilities of the observed indicators. The p-value of the Satorra-Bentler scaled chi-square showed a value of 37.906 ($p = 0.0354$) which indicated a significant test statistic ($p < .05$).

The RMSEA for closeness of fit for the overall measurement model had a value of .0517 which indicated reasonable model fit (Diamantopoulos & Siguaw, 2000). The p-value of close fit (RMSEA < 0.05) was equal to .432 which was indicative of close model fit indicating that the model can be generalized beyond the sample. Table 4.23 provided a summary of the fit indices. The RMR and standardised RMR values were .0290 and .0432 respectively, these values were below the .05 cut-off level and they indicated good model fit. The GFI and AGFI indicated good fit as the values were .965 and .917. In the case of the NFI, NNFI, CFI, RFI and IFI, values ere .958, .976, .984, .937 and .984 (see Table 4.23). These indices showed good model fit.

5.2.2 Structural model

The RMSEA of the structural model was .0514 which was marginally above the good fit cut-off level of .05 region of good fit. The p-value for the test of close fit .437 was acceptable. The RMR and standardised RMR values were .0328 and .0483 respectively, the values were below .05 and provided for reasonable fit. The goodness of fit and adjusted goodness of fit

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indices were .956 and .917. The values showed Normed Fit Index (NFI) = .958, Non-Normed Fit Index (NNFI) = .976, Comparative Fit Index (CFI) = .984, Incremental Fit Index (IFI) = .984 and Relative Fit Index (RFI) = .937 (see Table 4.24).

5.3. DISCUSSION OF MODEL HYPOTHESES

Below is a discussion relating to the four hypotheses of the research study. Due to the fact that a decision was made to use only affective commitment, the original hypotheses 2, 3 and 4 were changed as affective commitment was found to be the only sub-dimension of organizational commitment which had sound psychometric properties in the confirmatory factor analysis output.

5.3.1 Hypothesis 1: ($t = .396$, $p < 0.01$)

There is a relationship between psychological capital and work engagement.

The relationship between psychological capital and work engagement was supported as the t-value between the two variables is greater than 1.96. A significant ($p < 0.01$) and positive relationship is therefore evident between psychological capital and work engagement. The null hypothesis can be rejected in favour of the alternate hypothesis.

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This is consistent with research findings by Ferreira (2015), whose research study amongst 122 correctional officers found a statistically significant relationship between dimensions of psychological capital and dimensions of work engagement. The findings were attributed to the capabilities of correctional officers using their psychological strengths of self-efficacy, hope, optimism and resilience to be engaged in their workplace, thus buffering unfavourable work conditions from deterring their drive to meet performance goals.

The current study's results also corroborate with the results yielded by Tabaziba's (2015) research study amongst 203 white-collar workers in South Africa and Zimbabwe. The research showed a positive relationship between psychological capital and work engagement, leading to the conclusion that employees who possessed psychological capital would have high levels of work engagement. The findings also confirmed the predictive ability of

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psychological capital on work engagement, indicating the enabling role of psychological capital and resulting and enhancement of work engagement. Tabaziba (2015) was of the opinion that the positive relationship between psychological capital and work engagement facilitated the importance of developing personal resources of employees in organizations. According to Youssef and Luthans (2007), an increase in personal resources is acknowledged to result in an increase in an individual's self-regard, which results in high motivation to pursue goals. Hobfoll (as cited in Xanthopoulou et al., 2009) postulated that work engagement is determined by both environmental and individual factors, which encapsulate psychological capital. The findings of this study concur with literature by Bakker and Demerouti (2008), who positioned that engaged employees use their psychological capacities to influence their work environments successfully.

The results of the present study were also supported by similar findings obtained from a cross-sectional study conducted by Harris (2012), which investigated the significance of a relationship between psychological capital and work engagement. The study was carried out amongst 276 customer representatives at a South African national automotive company and findings showed a positive relationship between psychological capital and work engagement. The research results of Harris's (2012) study showed that optimism had a slightly lower relationship with work engagement but the other dimensions of psychological capital, namely, efficacy, hope and resilience, had a substantial positive relationship with work engagement. Bakker et al. (2008) also purported research results showing positive relationships between work engagement and dimensions of psychological capital.

Furthermore, a longitudinal study by de Waal and Pienaar (2013) yielded a positive relationship between psychological capital and work engagement, specifically revealing that work engagement at time 1 of the longitudinal study predicted psychological capital at time 2. This research finding was supported by literature of Bakker and Demerouti (2007), which revealed that work engagement can facilitate the mobilisation of job and personal resources.
Additionally, Sihag and Sarikwal (2014) found a positive impact of psychological capital on the engagement of 420 middle level IT professionals in an Indian context. The results revealed that IT professionals who possessed high levels of psychological capital had higher levels of engagement. The results of the present research study are also consistent with findings by Murthy (2014). Results obtained from a cross-sectional survey research on

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psychological capital and work engagement of 270 executives from six organizations showed a positive relationship between psychological capital and work engagement. Erbasi and Ozbek (2017) in their study on 280 research assistants at a Turkey university found consistent results with those of the present research. They noted that psychological capital had an effect on work engagement.

5.3.2 Hypothesis 2: ($t = -.176$, $p > 0.01$)

There is a relationship between psychological capital and affective commitment.

This hypothesis was changed to investigate the relationship between psychological capital and affective commitment as it was found to be the only dimension of organizational commitment with sound psychometric properties in the confirmatory factor analysis output. The findings revealed a significant, negative relationship between psychological capital and affective commitment. The researcher could not find specific relevant studies in the literature to concur with the significant, negative relationship between these two variables. Contrary to the current findings, research conducted by Rowe (2013) in a study amongst employees across five distinct industries in New Zealand, showed a moderately positive relationship between psychological capital and affective commitment. However, this relationship was noted to be mediated by control variables such as self-directed career management in-line with employees' personal values, demographics as well as work experience variables.

A study by Wu (2015) which investigated the relationship between psychological capital and affective commitment amongst 288 participants found a positive relationship between the variables. Chaudhary (2015) also found positive relationships between affective commitment and each of the dimensions of psychological capital. The study was conducted amongst 303 male employees in a banking and insurance sector of Haryana State. Naotunna (2015) investigated the relationship between psychological capital and affective commitment in relation to change. The research was conducted amongst 396 undergraduates in the Faculty of Management Studies, at a university in Sri Lanka. Research results found psychological capital to be significantly associated with affective commitment to change.

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A study by Etebarian et al. (2012) which investigated the relationship between psychological capital and organizational commitment found that of the three dimensions of organizational commitment, emotional (affective) commitment had a significant relationship with psychological capital, implying that the higher the employee's psychological capital, the higher their emotional (affective) commitment to the organization.

Pariat (2017) found affective commitment to have a relationship with dimensions of psychological capital, except for optimism. Shahwanaz and Jafri (2009) noted that psychological capital and organizational commitment (especially affective and normative commitment), were positive constructs and their chances of influencing each other were therefore very high, although there may be moderating variables to these relationships. Similarly, a study conducted by Jain and Kumar (2017) on 147 middle level managers in Indian banks found that within the organizational commitment scale, affective commitment correlated positively with psychological capital. The researchers proposed that the more resilient and hopeful a person is in the face of adversity and the more confidence and self-efficacy they have, the more likely they are to have emotional connections to an organization.

5.3.3 Hypothesis 3: ($t = -.271$, $p > 0.01$)

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There is a relationship between work engagement and affective commitment

Since affective commitment was found to be the only psychometrically sound sub-dimension of organizational commitment in the confirmatory factor analysis output, the current hypothesis investigated the relationship between work engagement and affective commitment. The current research findings highlighted a significant, negative relationship between work engagement and affective commitment.

Pillay (2008) investigated the relationship between work engagement and affective commitment and the findings indicated that the three components of work engagement namely, vigour, dedication and absorption had a positive and significant relationship with affective commitment. The research was conducted amongst 46 employees at an automotive development organization in South Africa. Eisenberger, Huntington, Hutchison and Sowa (as

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cited in Chalofsky & Krishna, 2009) attested that of all the sub-dimensions of commitment, affective organizational commitment had the strongest positive relationship with desirable organizational outcomes. Lockwood (2007) also noted that engaged employees tended to work harder, were more committed to their organization and would tend to go over and above the expectations of their work.

Similar findings to the above studies were found by Field and Buitendach (2011) amongst 123 employees from an educational institution in South Africa. The research highlighted a significant positive relationship between affective organizational commitment and work engagement. The research confirmed that in comparison to two independent variables (namely, well-being and satisfaction), work engagement was the most statistically significant predictive value for affective organizational commitment. This finding is compatible with theory noted by Cohen (2014) who stipulated that engaging employees to their work would be the initial step towards harnessing a committed organizational environment. Scrima, Lorita, Parry and Falgares (2014) whose study was amongst 405 Italian working adults found work engagement to be positively correlated to affective commitment. In another study, Lolitha and Johnson (2015) conducted research amongst selected IT sector employees in Kerala and also found a significant positive relationship between employee engagement and affective commitment. This finding implied that employees who were equipped with the necessary resources to perform their tasks effectively showed an inclination of commitment towards their organization.

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Gokul, Sridevi and Srinivasan (2012) investigated the existence of a relationship between work engagement and affective commitment amongst 102 employees in the petrochemical industry. According to their findings, only the dedication dimension of work engagement showed a positive significant relationship with affective commitment. Research findings by van Gelderen and Bik (2016) indicated that affective organizational commitment was positively related to a higher level of work engagement as well as extra-role performance. This finding led to the conclusion that the relationship between affective organizational commitment may vary in response to internal and external service performance. These findings found support in the work of Saks (2006) who coined job and organizational engagement to be significantly related to affective commitment.

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5.3.4 Hypothesis 4:

Psychological capital or work engagement has a greater impact on affective commitment

Affective commitment was found to be the only sub-dimension of organizational commitment with sound psychometric properties in the confirmatory factor analysis output, hence the change in the initial hypothesis. The results of the present study found that work engagement was the more significant predictor of affective commitment than psychological capital.

This finding is supported by research conducted by Field and Buitendach (2011), where the researchers found that work engagement was the most predictive of affective organizational commitment when all the other variables in their study were constant. The current research results are also consistent with findings of a study which was conducted amongst 139 community health service employees; employee engagement was found to have a positive influence on affective commitment (Albrecht & Andreetta, 2011). The researchers concluded that when employees perceived their leaders' and managers' leadership style to be empowering them, in turn, they felt empowered, engaged and developed affective connections to their organization. In a study conducted with a sample of 92 employees from a Malaysian company by Poon (2010), the results of multiple regression analysis results showed that affective commitment predicted work engagement.

A study by Murthy (2014) investigated the predictive value of self-efficacy, work engagement and organizational commitment amongst 250 executives from six organizations. Organizational commitment was measured using just the affective commitment scale. Multiple linear regression analysis results revealed that self-efficacy and work engagement were both significant predictors of organizational (affective) commitment. According to the researchers, this finding implied the need for self-efficacy and work engagement training of executives in a bid to cultivate organizational commitment.

A study by Ibrahim and Al Falasi (2014) amongst 50 employees who represented three managerial levels of the government in United Arab Emirates showed affective commitment to be the most important influencer of employee engagement compared to continuance

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commitment. The study concluded that when employees experience affective commitment, they would be more engaged to their organization.

5.4. LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

The current study was based on one food processing plant in the Western Cape Province. The study was quite specific in terms of industry and location, which places an impediment on the generalizability of research findings to other industries and provinces. According to Polit and Beck (2010), generalizability relates to drawing broad conclusions and making an inference about the unobserved, based on the observed. Future research can investigate the variables in more than one organization, in other provinces as well as in industries other than food processing to better understand the variables in different contexts and promote generalizability of findings.

Although quantitative research methods have their merits, including objective comparison of data, they also have demerits such as not factoring in the research context (Rahman, 2016). Atieno (2009) is of the view that human behaviour is significantly impacted on by the setting in which it occurs, hence, the importance of incorporating all the contextual variables surrounding the research. The research data was obtained using only quantitative methods in the form of questionnaires, which may have limited the strength of the research findings as a single method was used in isolation to gather data.

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All questionnaires used were of a self-reporting nature. Hence, respondents may have misrepresented themselves while responding to the questions. A form of misrepresentation is the desire to be viewed favourably by others, namely social desirability, which may have resulted in over-reporting good behaviour or under reporting undesirable behaviour. According to Hair, Babin, Money and Samuel (2003), self-reported questionnaires may result in a loss of researcher support, hence, a mixed method design which is a combination of both qualitative and quantitative research methods can be applied to strengthen research data. Triangulation, which is a mixed method technique, involves evaluating the consistency of findings obtained from different data collection methods such as interviews and surveys, thereby improving chances of controlling threats to the inferences drawn from the research data (Harwell, 2011).

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The Organisational Commitment Questionnaire presented problems when confirmatory factor analysis was conducted. The factor loadings for continuance and normative commitment were inadequate (very low) hence the decision to investigate only the affective sub-dimension of organizational commitment. The assumption could be that research participants may not have understood the items on the continuance and normative commitment subscales. Future research can look at improving the reliability of the continuance and normative sub-scale.

The research used a non-probability sampling technique in the form of convenience sampling to gather data. The drawback is that the results obtained are not generalizable (Sekaran, 2001). Other forms of sampling, such as stratified random sampling can be employed and future research may categorise sources of data hierarchically to have an understanding of the variables at different profiles. From the sample profile displayed in Table 3.1, one can see that the sample was not equally representative of all groups. Future research can ensure a larger and representative sample to improve external validity.

The study aimed to gain more insight into the relationship between psychological capital, work engagement and organizational commitment. Human behaviour is acknowledged by Bailey (2006) to be complex and as such three variables cannot exhaustively explain this complexity. In this regard, future research could explore relationships amongst varying variables, such as job satisfaction, intention to quit, organizational citizenship behaviour, organizational support, amongst others.

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5.5. RECOMMENDATIONS FOR THE ORGANIZATION

The study aimed to investigate the relationship between psychological capital, work engagement and organizational commitment. According to Luthans et al. (2006), in order to develop psychological capital in an organization, micro-interventions could be invested in. These would entail pathways to bring about the four capacities of psychological capital. Although selective components of psychological capital could be chosen for development, Luthans et al.'s (2006) opinion is that the development of all four factors has a synergistic effect and is therefore recommended. Luthans et al. (2006) also added that psychological capital as a whole has been found to be the core construct that predicts performance and satisfaction better than when compared to its separate components.

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Although calculations of financial returns from investing in micro-interventions of psychological capital may have limitations, Luthans et al. (2006) recognised the positive utility brought about by the investment. Organizations that develop their employees' psychological capital stand to benefit from improved performance. Clamp-Smith, Vogelgesang and Avey (2009) recognised that organizations that promote collective psychological capital could potentially increase team performance.

Harnessing employees' personal resources which are linked to resilience can have positive implications for work engagement. Judge et al. (2004) asserted that positive self-evaluations (personal resources) predicted desirable outcomes such as motivation, performance and satisfaction. Judge et al. (2004) noted that an increase in personal resources was associated with an increase in goal self-concordance, which had implications for persuasion of goals, thereby adding to higher performance and satisfaction. Organizations can increase job resources, which have the potential to generate work engagement.

Employees who have great psychological capital are valuable to an organization (Sweet, 2012). To this end, organizations can provide coaching and mentoring facilities to their employees in an effort to promote psychological capital (Du Plessis, 2014). Employees can be periodically evaluated for psychological capital and provided with strength-based feedback to build their positive capabilities.

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In terms of work engagement, organizations that provide an enabling environment through supportive organizational culture tend to have high performing employees. Organizations can focus on aligning individual goals of their workforce to the goals of the organization. Where there are well defined goals that are specific, measurable, attainable, realistic and timeous, efforts tend to complement goals. In order to achieve this, organizations can assist employees set meaningful goals so as to direct behaviour and create intentional work behaviours such as work engagement and organizational commitment (Davids, 2011). Organization's talent management strategies play a pivotal role in attracting, developing and retaining employees. Organizations can employ various human resources development practices to up-skill their workforce, thereby promoting organizational commitment (Hughes & Rog, 2008). Organizations can ensure increased congruency between employees' needs and expectations and those of the organization so as to promote identification with the organization, which

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translates to organizational commitment. Beck and Wilson (2000) stipulate that affective commitment in particular, resulted from employees' identification and internalization.

5.6 CONCLUSION

The study found a significant relationship between psychological capital and work engagement. Research results showed significant, negative relationships between psychological capital and affective commitment and between work engagement and affective commitment. Work engagement was found to have a greater impact on affective commitment than psychological capital. Limitations of this study and suggestions for future research have been highlighted in this chapter. Furthermore, recommendations for the organization have also been put forth.

To a large extent, the success of an organization depends on its most important resource, human capital (Burma, 2014). The development of individuals' talents and strengths is the forefront of positive psychology. Organizations that enhance their workforces' capabilities stand to gain a competitive edge and operate sustainably, amongst other gains of investing in human potential (Luthans & Youssef, 2007). If organisations invest in employees' psychological capital, employees are likely to become more engaged and show more commitment which would ultimately result in a happier and therefore more productive employee.

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