THE RELATIONSHIP BETWEEN PSYCHOLOGICAL CAPITAL AND EMPLOYEE WELLNESS IN ORGANISATIONS IN THE MANUFACTURING INDUSTRY IN THE WESTERN CAPE

By

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ABSTRACT

Psychological capital (PsyCap), the four dimensions of PsyCap and Perceived Wellness are viewed as positive constructs. Research indicated these positive constructs has a beneficial or positive effect on the organisation's financial performance. Furthermore, health and wellness awareness is lacking especially in the production-driven manufacturing industry where the profit motive is of paramount importance. The research study used a cross-sectional design, measuring Psychological capital and Perceived wellness using questionnaires in the form of the Psychological Capital Questionnaire (PCQ) and the Perceived Wellness Survey (PWS), respectively. These questionnaires are self-report measures, which were distributed to a sample of employees from the manufacturing industry (n = 160) in the Western Cape. Various studies both locally and abroad confirmed that the respective measures are both valid and reliable, However, the applicability in South African organisations requires further exploration.

The present study aimed to determine what effect the factors of psychological capital had on the wellness of employees. The relationship between psychological capital and its effect on employees' wellness was assessed using Pearson correlation, Analysis of variance and Multiple regression analysis. Based on the findings, there was no significant relationship found between psychological capital and the wellness amongst the sample employees in the manufacturing industry. This is however contradictory to what studies found researching similar constructs.
DECLARATION

I declare that the thesis *The relationship between psychological capital and employee wellness in organisations in the manufacturing industry in the Western Cape* is my own work, and that it has not been submitted for any degree or examination in any other university and that all the resources I have used or quoted have been cited and acknowledged by complete references.

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Shihaam Solomon
DEDICATION

To my parents, Gafiesa and Riedewaan and my sisters, Sameehah and Akeefah, without your support, encouragement and unconditional love, I would not be able to reach this milestone in my life. Your endless patience kept me grounded and continuous motivation helped me through this process. This is for my four angles.
In the name of Allah, the most gracious, most merciful, sustainer of all creation, without The Almighty, nothing would be possible, certainly without my faith this journey would not be possible.

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CHAPTER ONE

INTRODUCTION AND PROBLEM STATEMENT

1.1 Introduction

Bessinger (2006) states that the face of the workplace has changed radically over the last ten years due to the presence of technology. Moreover, the workforce has grown more diverse and empowered. The increase in competition and globalisation has created a new reality of employment that is significantly different compared to the past. Helping employees maintain their health and wellness is both a moral and financial business matter (Bessinger, 2006).

Furthermore, Kreitner, Kinicki, and Beulens (1999) states work not only provides an income, recognition or other positive outcomes, it can also be a source of conflict, overload, burnout and tension due to a greater quantity of work to be completed in less time and with fewer related resources. Also, the triad, quantity-speed-flexibility might contribute to organisational well-being, but this could be harmful to the employee’s physical and psychological health (Kreitner et al., 1999).

Numerous practices have been proposed as a means of recruiting and retaining talent, these include job design, pay and benefits, opportunity for growth and work-life balance initiatives (Luthans, Youssef & Avolio, 2007).

Matlhape (2003) claims there are two phenomena having a profound effect on management and industry in the 21st century. The first is the increased rate and depth of competition locally, regionally and globally including the consequent increased focus on achieving organisational competitiveness (Matlhape, 2003). Secondly, is increasing appreciation of the importance of employees in assisting the company to gain a competitive advantage over its competitors (Matlhape, 2003). According to Moeller-Roy (2005), an increasing number of businesses are beginning to appreciate the intrinsic value of healthy, happy employees thereby viewing this as human capital. Consequently, in the organisational context, health has been viewed as an asset that can be managed to ensure survival and growth.
1.2 Background of the study
Safety, health and the working environment are of the utmost importance to all companies involved in mining, industry, manufacturing and maintenance (Patel, 2013). More emphasis is placed on the significance of the environment and it is the responsibility of industry to restore and ensure balance (Fields & Louw, 2012). Research shows, health and wellness is often neglected in the manufacturing industry, especially in South Africa (Sieberhagen & Pienaar, 2011). Moreover, without healthy employees productivity and creativity will be absent and thereby disturbing the equilibrium to achieve objectives (Patel, 2013).

Maeli (1999) mentions in many organisations, there are employees who display, among others, decreasing productivity, increasing absenteeism, growing lateness, violence as well as alcohol and drug use in the workplace. Moreover, the cause of these behaviours is often not investigated, resulting in losses for both employer and employee (Maeli, 1999). Additionally, employee wellness presents an opportunity to manage such problems in a way that will result in the retention of talented employees and the improvement of employer-employee relationships (Matlhape, 2003).

1.3 Motivation of the research
According to Sieberhagen and Piënaar (2011), organisations are currently becoming more aware of issues related to the wellness of their employees. There is increased public interest in integrating wellness activities with employers’ responsibilities. This move towards healthy workplaces and empowered employees mirrors trends between positive psychological states and organisational well-being (Maslach, Schaufeli & Leiter, 2001).

Recently there has been a growing trend among organisations to realise the importance of the human factor in the work arena (Snyder & Lopez, 2002). Various disciplines highlight the importance of living a good quality life and attending to the wellness of people. According to research, organisations predominantly apply a negative approach to human resource management by focusing only on health promotion, wealth creation and high performance as the main predictors of business success (Cameron, Dutton & Quinn, 2003).

Moreover, these organisations are perceived to be only motivated by greed and a singular focus on winning (Cameron, 2003). Furthermore, individual's working in these types of organisations is known to be distrustful, anxious, and even fearful (Els & De La Rey, 2006).
Individuals working in these conditions often resort to industrial action, lawsuits and contract breaking (Keyes & Harter, 2003).

Luthans (2002) claims applying positively motivated measures in the workplace, could subsequently lead to an increase in employee performance. Moreover, formal workplace wellness programmes in South Africa only began to emerge in the 1980s (Patel, 2013). According to Patel (2013), WorkWell, a research unit for the economic and management sciences at the North-West University in Potchefstroom, the Chamber of Mines was first to institute a workplace wellness programme after it carried out a feasibility study in the mining industry in 1983 (Patel, 2013). Accordingly, these programmes were not popular with other South African companies as the plausibility of implementing these programmes did not resonate with company executives. A comprehensive workplace wellness programme could play a positive role in the promotion of employee health and wellness. Therefore, Naidoo and Jano (2003) suggest organisations should approach problems in a structured way, focusing both on the employee as well as the organisation.

According to Patel (2013), fewer than half of South Africa’s top 100 organisations had instituted wellness programmes by the early 2000s to assist in ensuring an environment promoting a productivity. Researchers from North-West University pointed out the potential for wellness programmes to equip employees with the skills to adjust to rapidly changing contexts has been particularly underutilised (Patel, 2013). Thus, the issue of workplace health and wellness should consequently be prioritised for the decisions makers in business. Companies investing time and resources in an "employee wellness culture", through their wellness programmes with a proactive focus can expect a return on investment including lower absenteeism, healthier employees, fewer accidents and lower staff turnover (Patel, 2013).

1.4 Problem statement

A movement is growing in organisational behaviour and management that calls for emphasising the positive aspects within the organisational environment (Kinder, Hughes, & Cooper, 2008). Moreover, the wellness of employees is of strategic importance for any business that wants to achieve leadership in the global business world (Bessinger, 2006). According to Sieberhagen and Pienaar (2011), organisations are at present becoming more conscious of issues pertaining to the wellness of their employees.
Moreover, there is increased public interest in integrating wellness activities with employers’ responsibilities (Hillier, Fewell, Cann & Shephard, 2005, cited in Sieberhagen & Pienaar, 2011). Furthermore, this movement towards healthy workplaces and empowered employees reflects trends between positive psychological states and organisational well-being (Sieberhagen & Pienaar, 2011).

The environment in which individuals function is becoming increasingly demanding, the changes in this environment continue to pose challenges (Bessinger, 2006). Moreover, the employment relationship with employers has changed, altering the kind of work performed by people, working hours and productivity at work (Bessinger, 2006). Furthermore, amidst these changes more of the economically active population is striving to work smarter, not harder. Thus, in response most employers are prompted to revisit their employment schemes.

In addition globalisation has brought about additional unpredictability resulting with many employers moving towards greater flexibility by expanding or downsizing their workforce to correspond with shifting production and services demands (Bessinger, 2006). These changes in technology have resulted in a loss of control over working hours, in job losses and in an increasing sense of job insecurity. According to Rothmann (2003) many organisations have implemented practices that attempt to reduce costs and increase productivity which often leads to a mentality that favours profitability over the welfare of people.

Witmer and Sweeney (1992) state the concept of wellness can be categorised as individuals’ holistic approach towards improving the quality of their life, health and psychological strengths in proactive and positive ways as a member of society and as an employee. Moreover, Els and De La Rey (2006) describe wellness as not only the absence of illness but having optimal physical health as well as psychological and social well-being.

Therefore, studying the relationship between psychological capital and employee wellness will assist to address the problem of low levels of wellness within organisations. Avey and Luthans (2007) defines psychological capital as an individual's positive psychological state of development and is identified by having confidence (self efficacy) to take on and put in the required effort to succeed at demanding tasks; making a positive attribution (optimism) about succeeding now and in the future; persevering towards goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and when inundated by problems and hardship,
sustaining and bouncing back and even beyond (resilience) to achieve success. Utilising these psychological strengths pro-actively may promote wellness at the individual level.

The research question of the present study is thus to determine what effect the factors of psychological capital have on the wellness of employees.

1.5 Objectives of the study
The objectives of the study are:

- To evaluate the relationship between the four factors that encompasses psychological capital and its effects on perceived employee wellness.
- To provide recommendations to individuals and organisations on how to increase their levels of psychological capital with the aim of improving their overall wellness.

1.6 Hypotheses
A hypothesis refers to a tentative assumption about the association between two or more objects that needs to be studied (Welman & Kruger, 2001). According to Sekaran and Bougie (2010), a hypothesis is a rationally estimated relationship between two or more variables stated in the form of a testable statement. It is anticipated solutions that can be found to correct the problem, by testing the hypothesis and verifying the estimated relationships (Sekaran & Bougie, 2010).

To achieve the objectives for this study, the following hypotheses were formulated:

**H1**: There is a statistically significant relationship between the four factors of psychological capital and perceived employee wellness.

**H2**: There is a statistically significant relationship between psychological capital and perceived employee wellness.

**H3**: Hope, optimism, self- efficacy and resilience will significantly contribute to the variance in perceived employee wellness.
1.7 Definition and Terms

1.7.1 Psychological Capital: Psychological capital is a central part of Positive Organisational Behaviour (Luthans & Youssef, 2004). PsyCap encompasses, hope, optimism, resilience and self-efficacy (Luthans, Luthans & Luthans, 2004). Psychological capital emphasises the positive strengths of individuals and the impact it has on employees’ growth and performance (Luthans, Avolio, Walumbwa & Li, 2005).

1.7.2 Hope: Snyder (2002) explains hope as a multidimensional construct that consists of an individual’s ‘willpower’ and ‘way-power’. Willpower is an individual’s determination to achieve goals and ‘way-power’ is one’s capacity to form alternative pathways and contingency plans in order to attain a goal in the face of difficulty (Snyder, Irving & Anderson, 1991).

1.7.3 Optimism: Optimism is viewed as being a realistic, flexible and dynamic construct that can be learned and developed (Peterson, 2000). Optimism is defined by persistence and pervasiveness; two key dimensions of how people explain events (Carver & Scheier, 2002). People with an optimistic outlook see setbacks as challenges and opportunities that can eventually lead to success (Luthans et al., 2005). These individuals persevere in the face of obstacles (Stajkovic & Luthans, 1998). In the work environment, an optimistic employee is better able to assess external, temporary and situational circumstances (Youssef & Luthans, 2007).

1.7.4 Resilience: Simons and Buitendach (2013) describe resilience as individual's ability to influence their environment successfully in order to protect them from the negative consequences of unpleasant events. Luthans (2002) extended this definition to include individual's ability to ‘bounce back’ from difficulty. In this regard, resilient people move on in life after having had a stressful experience or event such as personal adversity, conflict and/or failure.

1.7.5 Self-Efficacy: Stajkovic and Luthans (1998) describe self-efficacy as an individual’s conviction regarding their ability to mobilise the motivation, cognitive resources and courses of action necessary to accomplish a specific task within a given context. An individual’s perception and interpretation of events will influence and determine how they will address difficult challenges, as well as how they will experience stress.
symptoms (Bandura, 2000). Those with high levels of efficacy will perceive challenges as surmountable, given sufficient competencies and effort (Avey, Luthans & Jensen, 2009).

1.7.6 Wellness: Although, there is a lack of consensus in the literature as to the exact definition of wellness, the literature do state that the definition should entail, “a conscious and deliberate approach to an advanced state of physical, psychological, and spiritual health” (Ardell, 1958, p. 38), as well as “a multidimensional state of being describing the existence of positive health in an individual as exemplified by quality of life and a sense of well-being” (Corbin & Pangrazi, 2001, p. 3). For the purpose of this research, it was decided to use the wellness definition found in Adams et al. (1997) describing wellness as a person's state of well-being that contributes to an improved quality of life.

1.8 Outline of the Chapters

Chapter two provides a comprehensive discussion regarding positive organisational behaviour, the factors that encompass psychological capital and the effect that they have on employee wellness in organisations in the manufacturing industry. Furthermore, the research highlights the lack of awareness around employee health and wellness as a key contributor to their productivity and overall job performance.

Chapter three presents an overview of the research methodology employed, to carry out the research study. Specifically, the research problem, the objectives of the study, the chosen sample, and the methods of data gathering, the psychometric properties of the selected measuring instruments as well as the statistical techniques employed.

Chapter four discusses the results arising from the empirical analysis of the data gathered.

Chapter five addresses the most significant results extrapolated from the findings obtained in the study. The conclusions drawn are based on the data collected and compared to existing literature available. Furthermore, the recommendations are substantiated by the research findings gathered in this study. Additionally, recommendations are made for future research.
1.9 Conclusion
This chapter discusses the background to the research study, what prompted the interest in the topic, the problem statement; the objectives for this research endeavour, the hypotheses set out and aligned with the objectives for the research study as well the limitations that shaped the outcome of the study.

Chapter two outlines the literature review undertaken to substantiate this research endeavour.
CHAPTER TWO: LITERATURE SURVEY

2.1 INTRODUCTION
Businesses around the globe are in constant struggle to keep up with demands of the marketplace, striving to attain and maintain a competitive advantage in a continuously changing world of work. Companies are faced with challenges such as how their organisation and their employees can equip themselves to achieve a distinct competitive advantage in a global marketplace. Luthans, et al. (2007) claim the answer to these challenges lies in the investment and development of psychological capital in organisations. Moreover, numerous research endeavours have been dedicated towards the challenges facing today's organisations (Luthans et al., 2007). Despite the constant practice of downsizing and massive layoffs, fighting and winning the so-called ‘war for talent’ still remains a major challenge with which organisations are confronted (Axelrod, Handfield-Jones & Welsh, 2001; Handfield-Jones & Axelrod, 2001; Pfeffer, 2001). Furthermore, Luthans, et al. (2007) argue that finding modern ways of capitalizing on and developing human, social and especially the psychological capacities of human resources to sustain competitive advantage should be the main priority in the so-called ‘war for talent’.

According to Du Plessis and Barkhuizen (2012), the current global economic turmoil has contributed to various problems in the workplace, including social issues such as unemployment, job insecurity, hopelessness and general pessimism. In order to turn this situation around, a positive mindset in organisations is needed. Nelson and Cooper (2007) concur with this view, stating in the past, the working world has always been viewed through a negative lens; to move away from this negative view, organisational behaviour needs to be look at in a more positive light. Moreover, previously, psychologists were more focused on the negative aspects of the working world at the expense of the positive (Nelson & Cooper, 2007). Whilst looking for a way to heal mental illness and dysfunctional behaviour, both academic and practicing psychologists did not focus on developing and helping healthy, productive people to achieve even higher levels of functioning (Lewis, 2011).

The field of psychology had largely ignored the elements that contributed to flourishing, instead focusing on what made individuals fail (Lewis, 2011). The jump start for positive psychology came in 1998 when Seligman challenged the field to better understand what was right with people instead of solely concentrating on what was wrong with people (Seligman
Positive psychology refers to a discipline of positive subjective experience, introduced by Seligman and his colleagues (Seligman & Csikszentmihalyi, 2000). According to Lewis (2011), Seligman first introduced positive psychology in 1999, proposing that this new sphere could be centred around three main areas of study, namely, positive emotions, positive traits and positive institutions and finally, being those where people prosper. The beginning of the 21st century marked the revitalised notion of a wellness lifestyle trend, which resulted in a balanced and harmonious existence sought after among South Africans, especially in the word of work (Du Plessis & Barkhuizen, 2012).

The concept of Positive Organisational Behaviour (POB) compliments the trend of a wellness lifestyle employees are striving towards. This is evident by employees' need for a workplace where the organisational culture supports and encourages ethics, values and beliefs. Moreover, the focus has changed into seeking POB elements where employees can relate as members of humanity, and not be viewed as machines (Van der Merwe, 2005). Strümpfer (2005) concur with the need for a shift towards a positive approach in the workplace, stating that focusing on the strengths of human beings would likely lead to a more comprehensive idea as to how individuals can deal with complex and challenging situations in the workplace.

Seligman and Csikszentmihalyi (2000) promoted the positive focus in psychology which lead to a shift in how psychology was studied and implemented which lead to the work done by Luthans and his peers (Luthans et al., 2006; Luthans et al., 2007). Their work has inspired a more constructive approach to studying behaviour in the organisation and was later termed Positive Organisational Behaviour (POB). According to Luthans (2002), positive organisational behaviour denoted a more constructive way to studying the positive elements in the workplace and can be viewed as the first phase in narrowing the gap between popular literature and scientific knowledge. This paradigm alone presents a change for those researching social sciences and human resource practitioners who are viewed as the custodian of issues pertaining to society and organisational change. Du Plessis and Barkhuizen (2012) claim the advancement of positive organisational behaviour has proven to have a meaningful effect on the performance of employees as well as having a significant impact on organisation's bottom line.

According to Du Plessis and Barkhuizen (2012), the consequences of the positive organisational stance are especially pertinent in organisations in South Africa, where the
development of equality, multicultural relationships and competencies are emphasised. Few empirical scientific studies have assessed or explored POB or psychological capital, and/or its significance in the current South African context. Furthermore, Luthans, Van Wyk and Walumba (2004) promoted a constructive approach to organisational leadership in organisations in South Africa, which is driven by the psychological capacity of hope.

South Africa has endured many changes post 1994 ranging from political, economical as well as social (Du Plessis & Barkhuizen, 2012). Furthermore, there are solutions to many of the problems from an economic and political standpoint but a solution from a societal perspective and implementing the principles of positive psychology and wellness in the workplace has been lacking thus far (Luthans et al., 2004).

Sieberhagen and Pienaar (2011) state there is no collectively agreed upon definition of employee wellness, as it is vaguely defined in the literature. Witmer and Sweeney (1992) suggest wellness can be understood as a total person's approach towards improving the quality of his or her life, health and psychological community both as an individual and as an employee. Wellness can be described as a person's state of well-being that contributes to an improved quality of life (Corbin et al., 2000). Furthermore, is should be acknowledged wellness can be characterised by optimal physical health as well as psychological and social well being and not by the mere absence of illness (Els & De la Rey, 2006). Moreover, researching wellness requires an understanding that wellness forms part of a holistic integrated system and that it is not only a subpart of a system (Strümpfer, 2002). Therefore, a better understanding of wellness, its theoretical and conceptual base and its application in organisations is required. Thus, the purpose of this research study was to investigate the relationship between psychological capital and the perceived wellness of employees.

2.2 PSYCHOLOGICAL CAPITAL

2.2.1 Positive Organisational Behaviour

Luthans established the positive approach to organisational behaviour by outlining positive organisational behaviour (POB), choosing to focus on building human strengths at work rather than only managing weaknesses (Lewis, 2011). Moreover, the positive psychology movement has emerged as a result of the lack of prominence placed on positive strengths of humans. According to Luthans, Norman, Avolio and Avey (2008), positive organisational
behaviour and its derivatives, psychological capital, can be extrapolated from the premise and investigation into positive psychology implemented in an organisation. Moreover, Luthans recommended that POB researchers study psychological states that could be validly measured, and that are flexible in terms of interventions in organisations to improve work performance (Lewis, 2011). Luthans proposed that states such as hope, confidence and resiliency meet these criteria (Lewis, 2011).

The concept of positive organisational behaviour is described by Luthans, Lebsack and Lebsack (2008, p. 220) as "the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today's workplace".

The following criteria were set including constructs in this definition of positive organisational behaviour namely; "(i) grounded in theory and research; (ii) valid measurement; (iii) relatively unique to the field of organisational behaviour; (iv) state-like and hence open to development and change as opposed to fixed trait; and (v) have a positive impact on work-related individual level performance and satisfaction" (Luthans, Avolio, Avey & Norman, 2007, p. 542). For the purpose of this study, the positive psychological construct meets the inclusion criteria - psychological capital or PsyCap.

Psychological capital as a collective construct has been defined as "an individual's positive psychological state of development and is characterised by: (1) Having confidence (Self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) having a positive attribution (Optimism) about succeeding now and in future; (3) persevering towards 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 (Resiliency) to attain success (Luthans et al. 2007, p. 542).

According to Avey, Luthans and Mhatre (2008), even though other positive constructs such as wisdom, well-being, emotional intelligence, courage and even spirituality were considered as potential PsyCap, Efficacy, Optimism, Hope and Resilience have been attributed as most suitable in meeting the defined PsyCap inclusion criteria of being state-like and displaying an impact on performance. The four constructs recognized for this study have been selected as most suitable to meet the POB inclusion criteria and has also hypothetically and empirically proven to encompass the core construct of psychological capital. In addition, Luthans et al.
(2008) claim when combined, the POB state of Confidence, Optimism, Hope and Resilience form the higher order construct factor for positive Psychological Capital.

2.2.2 Psychological Capital

The construct of Psychological Capital is proposed as a higher-order construct, it is also viewed as being state-like. Moreover, state-like implies the construct can be developed and is open to growth. Therefore, the construct of psychological capital can have the inclination to vary and progress (Luthans et al., 2007). The higher-order core construct of PsyCap embodies the cohesion among the four factor dimensions, namely Hope, Resilience, Optimism and Efficacy and has both theoretical and empirical support (Luthans et al., 2008).

Research suggests that higher-order PsyCap, the combined factors of the four separate capacities, is a better predictor of performance, satisfaction and absenteeism than the individual component capacities (Youssef & Luthans, 2010). In other words, these four capabilities add up to more than the sum of its parts.

According to Lewis (2011), PsyCap has been found to relate to desirable organisational performance in a number of ways. Measures of PsyCap have been found to predict performance, satisfaction and absenteeism and is related to organisational commitment and an intention to remain in an organisation (Youssef & Luthans, 2010). The development of PsyCap adds value to organisational assets such as financial capital and human capital (Lewis, 2011).
2.2.2.1 Hope as a Psychological Construct

With the extensive theory and research of positive psychologist C. Rick Snyder, Hope can be defined as a “positive motivational state that is based on an alternatively derived sense of successful (i) goal-orientated energy and (ii) planning to meet goals” (Snyder et al., 1991, p.287).

According to Peterson and Luthans (2003), in psychology, Hope was used as an expectation of achieving objectives. However, there are many misconceptions regarding what constitutes Hope and what factors form hopeful individuals, groups and organisations. Moreover, more often than not Hope is often confused with hopeful thinking, unsupported positive outlook, even a delusion (Luthans et al, 2007).

The research conducted by Snyder (2002) substantiates the notion that Hope is a cognitive state in which an individual is capable of forming practical but challenging goals thereafter striving to achieve these goals through self motivation with the idea that control lies within themselves (Luthans et al., 2007). Moreover, Snyder (2002) and his peers refer to this notion as ‘agency’ or ‘willpower’.

According to Luthans et al. (2004), throughout the ‘pathway’ or ‘willpower’ element of Hope, individuals can create different paths that lead to their desired goals if the initial
pathway is obstructed. Furthermore, the pathways aspect differentiates PsyCap Hope from the common use of the term and the rest of the PsyCap states (Luthans et al., 2007).

Luthans et al. (2007) further claim hope encompasses the pathways that not only identifies aims but also different ways of achieving set goals. Moreover, contingency planning is used by those with high levels of hope as they are often mindful of difficulties in reaching goals and thus proactively identify numerous pathways to achieving goals formulated.

In 2002 Snyder conducted a study which supports the notion where Hope is abstractly convergent but also unique from other positive constructs and has proven to have discriminant validity with regards to similar positive constructs (Luthans et al., 2007).

In a study carried out by Adams and his peers in 2002 the findings indicated employees with high levels of hope were likely to be more successful compared to those with lower levels of hope. Furthermore, in a 2003 study conducted by Peterson and Luthans, the researchers found a fast-food store manager's level of Hope was linked with the financial performance of the unit and the retention of employees and job satisfaction (Luthans et al., 2007). Moreover, Luthans and his peers conducted a study where the levels of Hope in Chinese factories' employees were also found to be correlated to their supervisory-related performance and merit salary increases (Luthans, 2003). Luthans (2003) claim there is some evidence based on studies stating that the Hope levels of production workers in a small Midwestern factory were linked to their job satisfaction and organisational commitment. Furthermore, a large cross-sectional study found Hope was correlated to the satisfaction, organisational commitment and work happiness of employees (Youssef & Luthans, 2002).

Luthans et al. (2007) suggest a realistic approach for developing Hope in individuals by setting challenging ‘stretch’ goals, emergency planning and revisiting goals when needed to avoid creating false hope.

### 2.2.2.1 Developing Hope in Employees

There is a paucity of research dedicated to investigating the impact of Hope in the working environment. According to Luthans et al. (2007), Hope can be developed in two ways; through people’s sense of agency or willpower, by increasing their determination to achieve
their goals; and to develop pathways, the willpower that enables individuals to proactively design alternative paths and contingency plans to achieve their goals when they face obstacles and blockages.

Moreover, several successful approaches have been effective in developing and fostering Hope, including the following proposed by Luthans et al. (2007):

(i) **Goal-setting** - similar to the theory of hope, performance improvements occur because individuals are more committed to goals over which they are in control of. Often goals set by the individual, require their involvement or which has been appointed to them yet explained in a practical way have a tendency to produce better performance than of ambiguous and assigned goals.

(ii) **Stretch Goals** - these goals are challenging enough to create enthusiasm but also perceived to be within reach. These are the type of goals that necessitate investigation and realistic expectations of success, given extra effort.

(iii) **Stepping** - with this method, challenging, long-term goals are broken down into more realistic and practical targets. Furthermore, as systematic progress is made towards the bigger goals, agency and pathways are enhanced, consequently building a more sustainable base for pursuing very difficult goals more successfully.

(iv) **Involvement** - decision-making from the bottom-up, communication, opportunities for participation, employee empowerment, engagement, delegation and increased autonomy are all involvement techniques that can be used to improve performance and result in increasing employee satisfaction, commitment, and other desirable attitudinal outcomes, such as psychological engagement and recognition.

(v) **Reward System** - rewarding employees who make a significant contribution to achieving goals, initiating goal setting, shows internalised control and self-regulation behaviour (agency), and creatively pursuing different pathways to attaining set goals.

(vi) **Resources** - optimal allocation of resources is essential in sustaining hope and achieving goals. Often the support from an organisation is vital in helping employees find alternative pathways to achieving goals. In addition managerial support and commitment are indispensable resources.
(vii) Training - involved, participative and interactive training tools are most effective in fostering hope in individuals. They are inclined towards enhancing the competencies and developing onto strengths which can be altered to different settings. Hope-related training, combined with acquired skills can be empowering for individuals, however, it can also expose them to self exploration and self-evaluation.

Youssef and Luthans (2007) have effectively taught the Hope variable to a sample of managers of a large engineering company. Moreover, this training involved the developing of Hope by requesting the participants to set goals and “stepping” sub-goals. Furthermore, participants then had to create reasonable pathways emphasizing desired outcomes as opposed to avoiding undesirable outcomes. Participants were then asked to formulate contingency plans for overcoming potential problem. According to Youssef and Luthans (2007), the conclusion of these training interventions was very positive in that the levels of hope have increased amongst the participants.

2.2.2.2 Resilience as a Psychological Construct
Resilience, viewed through positive psychology can be described as the positive management and adjustment when faced with difficulty (Luthans et al., 2007). Furthermore, the concept of resilience when implemented in the workplace is explained as the positive psychological capacity to recover from hardship, difficulty, indecisiveness, disappointment, as well as even positive change, prosperity and more autonomy. Moreover, resilience permits not only reactive recovery but also proactive learning through overcoming challenges. This implies resilience encompasses negative as well as positive setbacks but potentially devastating effects (Youssef & Luthans, 2007).

Luthans and associates (2004) claim individuals who are highly resilient have an underlying confidence that is fuelled by their strong belief in their morals and beliefs, namely that life has purpose and individuals can adapt to change. Furthermore, extensive research in the area of clinical and positive psychology found individuals with high levels of resiliency have an inclination to be more effective in different experiences in life, those include, being able to adapt and adjust as well as prosper in the face of life altering situations (Youssef & Luthans, 2007). According to Youssef and Luthans (2007), research substantiates the claim that resiliency can be developed though strategies such as asset-focused, risk-focus and process-focussed strategies.
A research study found employee's levels of resiliency was associated with their job satisfaction, commitment and happiness (Luthans et al., 2007). Furthermore, other studies concluded resilience is measurable and relevant and linked to the performance of employees (Youssef & Luthans, 2007).

Even though there is a lack of agreed upon grouping of qualities required to activate resilience, there is enough verification to support the existence of a dynamic psychological ability to adapt and manage adversity (Luthans, Vogelsang & Lester, 2006). Furthermore, a meta-theory of resiliency identified three waves of inquiry and analysis; (i) identifying resilient traits of individuals and support systems that forecast social and personal success; (ii) understanding the process of coping with stressors, hardship, change, or opportunity ensuing in the identification, reinforcement, and improvement of protective factors; and (iii) identifying the motivational forces within individuals and groups and the creation of experiences that advance the activation and use of these forces (Luthans et al., 2007).

A proactive human resource development approach has been proposed by Masten in 2001, derived from the work in the clinical field as well as from positive psychology, these include risk, asset and process strategies (Masten & Reed, 2002). A brief description of these three strategies are discussed below.

**2.2.2.2.1 Risk-focused Human Resource Development (HRD) strategy** - the purpose of the strategy is to proactively and aggressively avoid situations and decrease the risk that may lead to unpleasant dealings. It may not always be possible to predict situations that might lead to adversity in the workplace, however, a strong organisational culture can discourage adverse effects on employees.

**2.2.2.2 Asset-focused HRD strategy** - human capital, namely, knowledge, skills and abilities and social networks that offer support or social capital are all regarded as assets. An asset-focused HRD strategy for resiliency would boost the employability of individuals by means of funding employees' educational expenses, sponsoring developmental workshops and cross training, and rewarding those who are striving to improve their lives. A strategy of this nature would encourage employee involvement and foster a sense of ownership in the organisation. In addition, Luthans et al. (2006) suggest a particular HRD guideline for a successful resiliency developing strategy lies in the investment of human and social capital of individuals.
2.2.2.2.3 Process-focused HRD strategy - Psychological Capital

Hope, Confidence and Optimism can be developed independently and in the process increasing the resiliency levels of individuals. Furthermore, Masten and Reed (2002) claim employees who have confidence in performing their job well (in other words, they have high efficacy) will also likely have higher Resilience. These risk, asset and process focused HRD strategies are detailed application steps that can be implemented in anticipation of negative events. Moreover, similar to Hope and Optimism, the development of resiliency is not restricted to simply highlighting the positive or reducing the negative (Luthans et al., 2007). It takes a step further by proactively taking measured risks utilising different asset that are able to turn risk factors into opportunities for progression and enhancement.

According to Luthans et al.(2007), process-focused strategies highlight this dynamic interaction between assets and risks, in which the effective handling of adversities and setbacks can result in bouncing back, even beyond one’s original level of performance, into unexpected realms of learning and growth.

2.2.2.3 Optimism as a Psychological Construct

Having an optimistic outlook attributes positive events to an individual's own permanent and pervasive causes and negative events to external, temporary and situation-specific ones (Seligman, 1998). In contrast, a pessimistic attitude attributes positive events to outside forces due to situation-specific reasons, while negative occurrences are due to personal weakness and inadequacies (Seligman, 1998).

PsyCap Optimism can be viewed as a dependable and amendable type of Optimism, taking into account the positive as well as the negative events, their causes and consequences, before taking credit for successes or distancing and externalizing failures (Luthans et al., 2007). Moreover, in the present organisational environment, responsibility and accountability have become a necessity, while at the same time outside factors may cause an individual not to have control over decision making in their life (Luthans et al., 2007). A person who is said to be optimistic is one who has an expectation of positive and pleasing events in the future, whereas a pessimistic person has continuously negative thoughts and unpleasant experiences.

Optimism as a dimension of PsyCap can be linked to a positive outcome encompassing positive emotions and inspiration and requires a realistic outlook. According to Avey, Smith,
Palmer (2010), Optimism has the inclination to assess the past or past occurring events in contrast to focusing only on the future.

Youssef and Luthans (2007) describe optimism as an attribution approach that details positive occurrences in the context of personal, permanent and pervasive causes, while negative occurrences are viewed in terms of external, temporary and situation-specific events. According to Luthans et al. (2007), sensible, flexible hopefulness is relevant to positive organisational behaviour which can be learned and developed through a conventional approach such as leniency for the past, having a positive reception for the present and opportunity seeking for the future.

Moreover it was emphasised that three types of realistic optimism are required for success leniency for the past, appreciation for the present and opportunity seeking for the future (Luthans et al., 2008). Luthans, Lebsack and Lebsack (2004) highlighted the significance of flexible Optimism, which requires a person to face reality with a positive view and not dwell too much on the negative aspects.

Luthans et al. (2004) claim optimistic individuals are easily motivated to work harder, are more content and have higher levels of morale, have higher levels of perseverance when faced with adversity, view personal obstacles as temporary, and often leads to feelings of rejuvenation mentally and physically. These descriptions suggest pathways and agency-like views are embedded in the premise of optimism. Similar to Hope, Optimism can be viewed as a cognitive process.

Some evidence suggests optimism can be positively related to affective measures of employee attitudes such as increased job satisfaction and organisational commitment (Luthans et al., 2008). Furthermore, Luthans et al. (2004) found personal Resilience (described in the study as a combination of self-esteem, optimism and perceived control) as linked with higher levels of change acceptance and that lower levels of change acceptance were linked with less job satisfaction, more work irritation and stronger intentions to quit. Another study found a major contributor to the job satisfaction of nurses as positive affectivity (Luthans et al., 2007). Moreover, the correlation between Optimism and job satisfaction and organisational commitment appears to be mostly significant as a result of past research which highlighted the positive impact affective states have on the performance and turnover of nursing staff (Luthans et al., 2004).
2.2.2.4 Self-Efficacy as a Psychological Construct

Bandura and Walters (1963) first introduced the concept of Self-efficacy. Moreover, Self-efficacy mainly concerns the confidence levels of people, the knowledge that one has the ability to carry out a job or task (Lewis, 2011). Furthermore, Self-efficacy is predominantly based on the Bandura's (1986, 1997) social cognitive theory, applied to the working environment and can be described as “an individual's conviction or confidence about his or her abilities to mobilize the motivation, cognitive resources, and course of action necessary to successfully execute a specific task within a given context” (Stajkovic & Luthans, 1998, p. 66).

According to Stajkovic and Luthans (1998), individuals with high levels of confidence trust in their abilities, thus are comfortable with selecting difficult tasks, dedicating the required time and resources to reach their goals and persist towards their aims even when faced with adversity.

Self-efficacy can be described as "a person's conviction (or confidence) about their abilities to mobilize the motivation, cognitive resources or courses of action needed to successfully execute a specific task within a given context" (Avey, et al., 2010, p. 20). Wilsom (1995) claims the need for achievement is reconciled with the belief of Self-efficacy. Moreover, Avey et al. (2010) suggest individuals with a high need for achievement will be motivated to take on goals when there is a reasonable chance of success. Furthermore, the high self-efficacy belief successful individuals have will increase the expectation of success for difficult goals (Avey et al., 2010).

Avey et al. (2010) claim the more self belief an individual has, the more likely the individual will be successful in an organisation. The ability to visualise, plan, examine and self-regulate permit confident individuals to proactively formulate demanding goals, adjust their approach control their learning processes in predicting success (Bandura & Locke, 2003).

Bandura (1997; 2000) found Self-efficacy was strongly correlated to work-related performance and can be easily developed in the working environment. According to Devonport and Lane (2006), Self-efficacy is cognitive in nature, open to influences from four major sources; accomplishments, vicarious experiences, verbal persuasion and the control of negative emotions.
Bandura (1977) emphasises the belief in one's ability as Self-efficacy with four basic sources; i) mastery experiences or performance accomplishment; ii) vicarious experience or social modelling (live and mediated); iii) verbal persuasion or encouraging (must be a trusted source) and; iv) emotional arousal or managing ones physiological self.

Moreover, Bandura (1997) suggests the impact of enhanced levels of Self-efficacy belief by mastery experience results in increased optimism, cognition, motivation, emotional, and decision-making capabilities. Furthermore, individuals who are regarded as highly efficient have a higher affective belief in their ability to manage and seek new adventures and challenges (Bandura, 1989). According to Aguilar and Yuan (2010), restaurant managers with lower levels of Self-efficacy appear confused and appalled.

Luthans and Peterson (2002) claim the construct of Self-efficacy can play a vital part in helping to describe and predict effectiveness in the workplace. Self-efficacy is open to development from human resources management interventions to improve productivity. Furthermore, Luthans and Peterson (2002) suggested three approaches to develop the Self-efficacy levels of managers in industry. Firstly, there is guided mastery, which encompasses useful modelling to learn a competency or skill, followed by transferring the training back to the workplace to ensure self-directed managerial success. Secondly, is cognitive mastery modelling, this involves learning cognitive or thinking abilities and how to implement and monitor the decision-making. Lastly, the development of self-regulatory competencies, connects self-referent procedures as self-monitoring, self-efficacy appraisal, personal goal setting and utilisation of self-motivational theories.

According to Luthans et al. (2007), there are numerous ways of successfully developing Self-efficacy. These authors claim the most useful technique for developing Self-efficacy would be to permit the developing manager or employee to experience success and mastery of the skills in question (Luthans et al., 2007). Furthermore, achieving success and slowly adding to task difficulty in active methods of training, on-the-job or simulated training techniques can facilitate mastery experiences, which have been proven to increase Self-efficacy (Bandura, 2000).

Luthans et al. (2007) suggest vicarious learning is recommended as a tool to improve the Self-efficacy levels of employees. Often this technique is relevant in situations where the mastery of experiences is difficult, risky or too costly. Vicarious learning makes use of an individual's ability to observe, thus learning takes place when mentors are observed.
experiencing success in tasks that are similar to those that the developing manager or employee is expected to perform (Luthans et al., 2007).

Bandura (1997) suggests additional methods to developing Self-efficacy encompass social persuasion and physiological stimulation. In order for efficacy development to be vicarious even when individuals experience success directly, their views and attribution need to internalise this success (Luthans et al., 2007).

2.2.3 Psychological Capital as a higher order factor
Each of the four positive constructs discussed, have been proven to show theoretical independence and empirically based discriminant validity. The four factors also show a mutual underlying link among the constructs which links them together, thus a high order core factor, namely psychological capital (Luthans et al., 2007). The proposed higher-order factor is supported by both theoretical as well as preliminary studies. According to Luthans et al. (2008), PsyCap can be viewed as ‘who you are’ and ‘what you can become in terms of positive development’ and is different from human capital (‘what you know’), social capital (‘who you know’) and financial capital (‘what you have’).

The concept of psychological capital was discussed and its impact on the employee in the workplace. Furthermore, a discussion of wellness follows and its potential impact on the individual and their environment.

2.3 WELLNESS
The notion of employee wellness has no general definition and there is some ambiguity as to what the definition should encompass (Sieberhagen & Pienaar, 2011). Moreover, Ardell (1958, p. 38) characterise wellness as 'a conscious and deliberate approach to an advanced state of physical, psychological, and spiritual health'. Furthermore, the concept of wellness is defined as 'a multidimensional state of being describing the existence of positive health in an individual as exemplified by quality of life and sense of well-being' (Corbin & Pangrazi, 2001, p. 3). Additionally, Corbin et al. (2002) explain wellness as an individual's state of well-being contributing to a better quality of life. The lack of agreed upon definition of wellness; proves to be a major concern for organisations in pursuit of helping their employees to manage their health and wellness more optimally (Sieberhagen & Pienaar, 2011).
Psychologists in their attempt to define wellness first need to comprehend the notion of illness as the opposing side on the behavioural continuum. Literature dating back to the First World War indicates psychologists have consistently focused on a pathological model dedicated to healing and bringing about the perception of normality (Myers, 1992; Seligman, 2002; Strümpfer, 2002). Traditional medical treatment of diseases in individuals usually involved a healing or therapeutic approach, thus healing illness and restoring the body to normal functioning.

According to Zimpfer (1992), patients had to either undergo surgery or take prescribed medication. Moreover, during the course of treatment the patient is unreceptive and the common perception is that others will cure the illness. The main outcome of this area of clinical psychology is aimed at the business of medicine and pathology, known as illness ideology (Maddux, 2002). Moreover, this model places emphasis on abnormality as opposed to normality, thus avoiding optimisation, maladjustment rather than adjustment as well as illness as opposed to health, not including wellness. This approach shows individuals who seek help as passive victims of intra-psychic and biological forces beyond their direct control, thus these clients need to be ‘cured’ by experts (Antonovsky, 1987; Stümpfer, 1995). Therefore, counselling is aimed at identifying (diagnosing) a disorder (disease) inside a person (patient) and on a prescription of an intervention (treatment) that will eliminate (cure) the internal disorder (disease) (Strümpfer, 2002).

Ramley (1991) found the medical ideology of illness as a viable psychological model to be unacceptable. Moreover, this researcher contradicts the argument by indicating the vast amount of possibilities available to positive psychologists. Furthermore, psychologist should neither only remediate nor prevent problems but rather cherish problems as opportunities for development and growth (Ramley, 1991).

Antonovsky (1987) studied the concept of human health moving away from the pathogenic paradigm. Mysers (1992) contributes to the argument where the development of human potential centres around the notion that counselling efforts should encompass measures of the prevention of illness along-side the development of wellness. This view supports the positive psychology movement in building on an individual's strengths and the aim of developing individuals, families and society at large in modern society (Seligman, 2002; Wissing & Van Eden, 1997, Strümpfer, 2002).
Adler (1954) referred to individual psychology as being significant of holism in trying to understand an individual. According to Adler (1954), there should be reciprocal actions of the mind and the body as both contributes towards the development of people in the pursuit of wellness (Adler, 1954).

Research conducted by Maslow (1970) found that healthy individuals had a general tendency towards self-actualisation, growth and the pursuit of excellence. Furthermore, Frankl (1988) found that seeking meaning and purpose in life is vital in the attainment of an optimal state. Even though many researchers have knowledge to a certain extent regarding optimal function of individuals they still grapple with defining wellness as it is known today.

Various literature shows that the term wellness and the promotion of health are used interchangeably with reference to good health, a well balanced life and optimal well-being. The Corporate World Health Organisation (CWHO, 1948) describes health as a state of complete physical, mental and social well-being and not merely as the absence of disease. Archer, Probert and Gage (1987) also define wellness as an extension of health, as a process and state towards optimising human functioning involving the body, mind and spirit. The battle to differentiate between health and wellness is vital in the conceptualisations of the construct. The previously mentioned definitions of wellness excluded other areas of application. A few other researchers are of the opinion other aspects of an individual’s life form part of holistic wellness such as, inter alia, spirituality, occupational and coping (Myer & Sweeney, 2004). While Dunn (1961) had officially defined the concept of wellness, numerous other researchers have conceptualised and contributed to this concept. Other definitions of wellness can be outlined as the continuous and deliberate process in which individuals are actively involved in enhancing their overall well-being; intellectually, physically, socially, emotionally, occupationally and spiritually (Ardell, 1985; Hatfield & Hatfield, 1992). Myers, Sweeney and Witmer (2001) further expanded the definition of wellness by claiming wellness is an orientation in life towards optimal health and well-being where the mind, body and spirit incorporated by the individuals to live life to the fullest.

Furthermore, wellness practices are embedded in prevention of illness alongside actively promoting wellness (Myers et al., 2001). This view contrasts the conventional medical model, as it is proactive as opposed to reactive, comprehensive and accessible as opposed to limited to a selective few. Furthermore, it does not have a strictly defined cluster of ideas and skills that everyone must embrace in exactly the same manner (Hatfield & Hatfield, 1992). Various
disciplines added to the theoretical concepts describing the holistic approach to enhancing the quality of life emphasising the wellness approach (Adams, et al., 1997; Myers and Sweeney, 2004). Features of a wellness approach can be described as follows (Adams et al., 1997):

- A wellness approach concerns the mental, spiritual and physical aspects of those who seek help.
- Treatment is customised to each individual's unique needs.
- Health and wellness is a positive state and not only the absence of illness.
- Every individual is accountable for their own health and wellness thus requires the tools in order to do so.
- Therapeutic methods are used to enhance an individual's ability for self-healing.
- Quality of life is to be appreciated, nurtured and developed.

2.3.1 Work Wellness

According to Huiskamp (2004), the concept of positive psychology and the organisational application, namely, positive organisational behaviour emphasise the health and wellness aspect of the illness-health-wellness continuum. This theory centres on the positive organisational outcomes and individual traits as positive organisational behaviours that give rise to moral organisations (Keyes & Haidt, 2003).

Huiskamp (2004) maintains the development of optimal health and wellness is dependent on the organisation realising and supporting the right of individuals to manage their own quality of life at work. According to Witmer and Sweeney (1992), employees who are in good health can be expected to be more productive, creative, co-operative, competent and committed with, lower absenteeism and less notice for sick leave. Numerous interventions employed in the past only integrated mechanisms to help employees to move from illness to health representing only the negative deviant of the health-illness continuum. However, the positive aspect of developing wellness and optimum behaviour, has been neglected thus far. Further research is required focusing on the positive spectrum of the continuum (Seligman, 2000; Seligman & Csikszentmihalyi, 2000).

Cameron (2003) defines the area of positive organisational behaviour as the best of the human condition, the excellence and essence of humankind and the highest aspirations of
human beings at work. According to Luthans (2002), positive organisational behaviour can be viewed as the study and application of positive humans traits and psychological capacities that are quantifiable and open to development. Therefore, wellness forms part of the Positive Organisational Psychology approach.

Work wellness can also be described as personal growth, purpose in life, having positive relations with others, environmental mastery and positive contributions at work (Harter, Schmidt & Keyes, 2003). Witmer and Sweeney (1992) concur with this wellness view, by expressing spirituality, intellectual, psychological, social and emotional domains as important dimensions of perceived wellness which could be implemented in the workplace.

Various studies on work well found that positive organisational behaviour and a well balanced life to be an essential component to the wellness of individuals (Cameron, Dutton & Quinn, 2003; Luthans, 2002; Moller & Rothmann, 2004; Witmer & Sweeney, 1992). The significance of work-wellness studies is thus highlighted and a holistic integrated approach is unfortunately lacking. Existing work-wellness programmes described from the literature further explain this limitation.

2.4. WELLNESS MODELS

The Individual Self: An Evidence Based Model of Wellness was developed based on Adler's individual theory. The system's theory and the salutogenic direction served as a philosophical basis for the development of the Perceived Wellness Model (Adams et al., 1997).

2.4.1 Perceived Wellness Model (PWM)

Adams et al. (1997) state that the Perceived Wellness Model is a multidimensional, salutogenic construct. According to Dolbier, Soderstrom, and Steinhardt (2001), this original model seeks to incorporate the balancing of various life activities in its assessment of well-being. Therefore, it is imperative to examine the Perceived Wellness Model including the corresponding Perceived Wellness Survey (PWS). Therefore, the PWS was used as a measuring instrument to assess the concept of wellness in this study.
According to Adams et al. (1997) the Perceived Wellness Model was originally proposed as a multi-dimensional measure of perceived health. Moreover, with the incorporation of numerous other components of perceived wellness and simultaneously accounting for the magnitude of each and the balance among them, it qualifies as a conceptualisation and operationalisation of wellness (Dolbier et al., 2001). This model and accompanying measures was based on the individual's own perception of wellness (Adams, Bezner, Dradds, Zambarano & Steinhardt, 2000). The PWM and the PWS differs to that of the majority of wellness measures who typically addresses clinical, physiological or behavioural signs of disease. The emphasis on perceptions is important because:

- Reliable data shows that subjective perceptions are valid and shows an indication of future health.
- Perceptions are used as a shift where information are condensed before interpreted.
- It precedes physical responses and behaviours and is recognised at the core of several health theories and models.
- Perceptions act as an internal resource and driving force.

The top of the model (figure 2.2) represents wellness because it stretches to capacity, as opposed to the narrow confined bottom which constitutes illness (Adams et al., 2000). Moreover, with this model individuals who are well by definition are described as more physically healthy, with a bigger sense of life purpose, having a positive expectation of the future irrespective of the circumstances, having close relationships with family and friends, satisfied with who they are as well as being intellectually and emotionally stimulating.

Adams et al., (1998) claim illness in contrast is a perception of detachment, low self-esteem, ill physical health, pessimism, external frustration and a lack of intellectual stimulation. There are numerous variations in the dimensions, with varying states of balance among the illness and wellness poles of the model. Therefore, Adams et al. (1998) suggest movement between wellness and illness poles of the continuum, along the vertical scale as well as balance-seeking movement in the horizontal scale.
Adams et al. (1997) described the various dimensions which integrates a holistic human approach to wellness as:

2.4.1.1 **Spirituality** - which is described as having a positive aim in life; those who lead a spiritually rich life live according to their own set of values. They show dedication to a cause, they are highly ethical in their conduct with others and viewing the world with a sense of meaning. Furthermore, studies measured by the existential well-being scale have demonstrated negative correlations with self-esteem, togetherness, social skills, coping beliefs and connectedness.

2.4.1.2 **Physical resilience** can be viewed as a positive observation and expectation of physical health. Individuals with physical wellness have more useful abilities for activities where health is a prerequisite. As a result they make healthier choices regarding their health, as well as have a positive physical self-image.

Moreover, those individuals who perceived their health as poor have a risk of mortality three times greater than individuals with good perceived health (Adams et al., 2007). Furthermore, perceived good health showed a positive correlation with high levels of physical activity and negatively related with musculoskeletal symptoms and diseases.
2.4.1.3 **Social connectedness** can be defined as an individual's perception of a support structure consisting of family and friends and the perception of being viewed as a supportive person. Moreover, a person who values social harmony and equality shows positive behavioural attributes such as tolerance, forgiveness, gratitude and generosity towards others and feels a sense of worth and adequacy about roles within the family and in society. Furthermore, social support has been positively correlated with physically and psychological well-being and overall life satisfaction but negatively correlated with distress symptoms and psychopathology.

2.4.1.4 **Intellectual stimulation** can be explained as being internally energised by an adequate amount of intellectual stimulation. Individuals feel more engaged with communication processes in their work activities, they appreciate competent and efficient cognitive functioning and are more satisfied and experience less stress in their work.

2.4.1.5 **Emotional centeredness** indicates the perception of secure self-identity and a positive sense of self-regard. Moreover, these individuals display the capability to perform without being encouraged or acknowledged by others. Individuals with a sense of self-identity tend to develop a higher self-regard and were able to interpret information discreetly.

The Perceived Wellness Model is multi-dimensional in nature, thus the perception of wellness differs between dimensions and is connected by their affective nature, constituting a system of wellness. In relation to the Perceived Wellness Model, the Perceived Wellness Survey (PWS) intends to operationalise the comprehensive six dimensions of perceived wellness (Adams et al., 1997). The Perceived Wellness Model as well as the Perceived Wellness Survey can be utilised in studies investigating Wellness. Moreover, this model and subsequent measure meets the criteria and standards which contributes to the value of research dedicated to wellness as it is commonly used.

2.4.2 **The Indivisible Self: an Evidence-Based Model of Wellness**

Sweeney and Witmer (1991) and Witmer and Sweeney (1992) created the original Wellness Wheel which was based on Adler's Individual Psychology theory. Moreover, based on extensive analysis of the literature across multi-disciplines, the Sweeney and Witmer (1991, 1992) found numerous characteristics which are positively related to a healthy living, an improved quality of life and longevity (Adler, 1954). Aspects that contributed to healthy
living are scheduled work, friendships and a sense of love as the three main life tasks also two added tasks namely, the self and spirituality (Mosak & Dreikurs, 1967). Furthermore, the individual is surrounded by life forces which has an effect on personal wellness namely, family, religion, education, business, industry, media, government and community. This model was later expanded which is now used and recognised as The Individual Self: an Evidence Based Model of Wellness (Mosak & Dreikurs, 1967).

According to Myers and Sweeney (2005), the Individuals Self: an Evidence Based Model of Wellness (IS-WEL) and the 5-Factor Wellness Inventory were developed as a modified version of the Wellness Evaluation of Lifestyle Inventory. Therefore, the updated model of wellness (IS-WEL) was formulated to measure aspects of wellness as a basis for assisting individuals in making better choices in terms of healthy living.

The IS-WEL model is based on the verification of a single higher-order wellness factor, five second-order factors and 17 third-order factors encompassing the initial part of wellness. The five-second order factors encompass (Myers & Sweeney, 2005):

- Creative Self (intelligence, control, emotions, work, positive humour).
- Coping Self (leisure, stress management, self-worth, realistic beliefs).
- Social Self(friendship, love).
- Physical Self (nutrition, exercise).
- Essential Self (spirituality, gender identity, culture identity, self-care).

This model and its application is also primarily ecological and includes factors such as:

- Local Safety (family, neighbourhood, community).
- Institutional - policies and laws (education, religion, government, business/industry).
- Global events (politics, culture, global events, environment, media).
- Chronometrical life span (perpetual, positive, purposeful).
A framework clarifying research which wellness appears to be both a higher order and apparently individual factor and is recognised as sub-factors initially proposed by Sweeney and Witmer (1991). The interaction between these higher-order wellness factors with the seventeen sub-factors are explained as an evidence-based model (Myers & Sweeney, 2004).

The higher-order wellness factor: Adler (1954) claims holism (the indivisible self) and determination is essential to comprehensively understanding human behaviour. Moreover, emphasis should be placed on the whole as opposed to individual parts, the activity between the sum and its parts and the significance of the social context (Ansbacher & Ansbacher, 1967). Consequently, the higher-order wellness factor signifies the total wellness of the individual system.

2.4.2.1 **The Essential Self** consists of spirituality, self-care, gender identity and culture identify. Mansager (2000) suggests spirituality not necessarily religion, can benefit longevity and quality of life and is seen as vital to holism and wellness concepts. Furthermore, the theory integrates an individual's existential sense of meaning, aim and optimism in life. This construct is substantiated by Frankl's (1988) theory which emphasises importance of searching for meaning in one's life.

2.4.2.1 **The Creative Self** is viewed as a grouping of traits individuals develop in creating their own niche for oneself in social engagements (Adler, 1954; Ansbacher & Ansbacher, 1967). The creative self encompasses thoughts, emotions, control, work and positive humour.
As research and clinical experience indicate what an individual thinks affects the emotions as well as the body. Likewise, individuals’ emotional experiences tend to influence their cognitive responses to similar experiences.

Myers and Sweeney (2004; 2005) describe control as perceived ability to influence events in an individual’s life. Positive humour is recognised as the functioning of physical and mental ability, enhancing one's capacity to think logically, the perception of responses that impact positively on the immune system (Bennett, 1998). Positive expectations influence emotions, behaviour and the anticipated outcomes of individuals. Furthermore, the concept and meaning of work, was confirmed to be an indivisible factor to build individual wellness. Furthermore, it is viewed as an important factor that can increase or decrease an individual's ability to live life to the fullest. Individuals derive different meanings from the concept of work. Moreover, individuals work because they want to earn a substantial income. They work because they want to sustain a career or to live a life of greater meaning (Seligman, 2002).

2.4.2.2 The Coping self consists of realistic beliefs, stress management, self-worth and leisure. Realistic belief and perceived control of reality substantiate the notion that an individual can operate in the moment as events happen. Irrational beliefs, however, can often lead to frustrations and disappointment. Self-worth can be developed through effective coping mechanisms to overcome challenges in life. Consequently, self-efficacy is enhanced through experiences of success.

Stress management shows an individual's capacity to optimally cope with stress in life using positive constructive coping mechanisms. Leisure activities provide coping strategies and are vital in the quest for wellness and the development thereof.

2.4.2.3 The Social self encompasses two aspects, namely friendship and love. The notion of friendship and love can be considered on a continuum and as a result is often not as clear in practice. Moreover, sexual intimacy is often thought to be a distinction between love and friendship but no such distinction seems appropriate as physical attraction and true love can often have little in common. What appears to be apparent is friendships and intimate relationships improve the quality and longevity of one's life. Ulione (1996) states that isolation, alienation and separation from others are commonly associated with poor health conditions and greater susceptibility to early death. Various studies reported that social support remains one of the strongest predictors of positive mental health over a lifespan (Ulione, 1996). The foundation of this support is the family, with healthier families providing
the most positive source of social wellness; the families can be either biological or families of choice.

2.4.2.4 The Physical self consists of two components, namely, exercise and nutrition which are commonly promoted and often over-emphasised overshadowing other factors instrumental to holistic wellness.

A study by Bernaducci and Owens (1996) shows that individuals who follow a well balanced nutritious diet and engage in physical exercise live longer. The importance of contextual variables in understanding human behaviour has been well established by the research efforts of Gladding (2002) as well as Nichols and Schwartz (2001). A complete understanding of the individual cannot be made without incorporating a concern for environmental factors.

Myers and Sweeney (2004) concur to other theories claiming that the aspects of the IS-WEL model engage with and substantiates all the factors and constructs adds to the holistic functioning of individuals. Moreover, these interactions may be positive or negative in nature, determining the wellness of individuals and or the combination of negative forces that seek to suppress the importance of each individual's life.

In addition, the IS-WEL model is helpful in assisting counsellors to conceptualise the functioning of individuals and developing applicable interventions based on the needs of the individual. The significance of this wellness model is a positive, holistic orientation by which strengths in any of the components can be mobilised to enhance functioning in other areas. The integrated and holistic structure of the IS-WEL can be used to develop a work-wellness model.

2.5 APPROACHES TO IMPROVING WELLNESS

Work-wellness programmes often differ in their aim. Good health and wellness programmes can offer anything from exchange of information and promoting awareness to more holistic approaches that are embedded in the organisation's policies (Ginn & Henry, 2003). Wellness does not equate to physical health, the concept of physical health excludes many significant aspects of wellness, further emphasises the need for a holistic work-wellness models. Work-wellness models that are more integrated would likely provide more assistance in the pursuit of holistic work-wellness. Models of this nature develop theory dedicated to building holistic work-wellness programmes for the workplace.
According to Komaki, Barwick and Scott (1978), not only holistic wellness programmes integrate treatment and deference of illness, but also centre on the endorsement of human strengths and wellness.

2.5.1 Employee Assistance Programmes (EAP)

Initially pioneered in the eighties, employee assistance programmes (EAPs) offered confidential counselling to employees, who required assistance in managing difficult stressors in their lives. According to the Corporate Leadership Council (2000), the need for EAPs still exists and research indicates these programmes form part of the organisation's wellness continuum.

Employee assistance programmes can be defined as work-based programmes with the aim of identifying those employees who have personal issues that are often affecting their lives and work performance negatively and are encouraged to seek counselling in managing their stressors in their lives (Nel, 2004). Moreover, these programmes consist of assessments, diagnosis, treatment, prevention and referrals for non-work related issues (Corporate Leadership Council, 2002). The focus of EAPs is on health care, illness, substance abuse, stress and burnout as well as social economic ills.

According to Atkinson (2005), the average annual cost for EAP services varies between $2 to $20 dollars on average per employee. Organisations in the United States spend large amounts of money on sickness costs (Corporate Leadership Council, 2002). Moreover, it is estimated sick leave costs up to $ 3 billion yearly, and premature death is estimated to cost $ 19 billion in productivity. Furthermore, in South Africa the Cape Metropolis Government suffers a loss on average R150 million yearly as a result of increased absenteeism on a Friday and Mondays. In addition, job-related problems amounted for only 35% of unplanned absences due to illness; somewhat more than personal responsibility which constitutes (34%), family issues (20%) and personal health problems (11%) in that particular study (Reese, 2001).

According to Atkinson (2005), in comparison to other employees, illegal drug users in the United States of America (USA) require three times more sick leave and are five times more likely to file worker compensation claims. Moreover, stress and trauma constitute 80% of workers compensation claims, 15% of injured workers generate 85% towards these claims
(Atkinson, 2005). In addition, up to 65% of grievances are associated with psychological problems or mental stress in the work environment (Atkinson, 2005).

EAPs are vital in managing injuries that occur on the job which could lead to death benefit claims. According to Reese (2001), during 1991-2001 an average of 426 fatalities were experienced by employees. Organisations who want to improve their safety management systems need to continuously monitor three spheres, namely, the individual or employee, employee behaviour and conduct and the working environment (Geller, 1998).

Furthermore, all the factors constituting these three spheres are interactive, self-motivated and reciprocal (Findley, 2003). Cooper (1999) concurs with the notion that the behaviour of employees should be integrated into preventative programmes employed in organisations as injuries lead to hazardous practices. According to Macdonald (2002), in a study by the behavioural science technology, between 80% and 95% of all industrial accidents are due to hazardous behaviour.

Behavioural based safety programme implemented at Sishen Iron Mine, yielded a significant improvement in the safety culture (Moller & Rothmann, 2004). Geller (1996, 1998) proposed a four step behavioural-based process in order to achieve workplace safety:

- Defining the desired behaviour to be enhanced or reduced.
- Monitoring the behaviour and capturing the data in a management system.
- Mediating to alter the behaviour into the desired state.
- Assessing the effect the intervention process by continuously monitoring and capturing the behaviour.

The behaviour-based programme at the mine initially involved defining the problem, the design and implementation of an intervention to solve the problem identified. According to Moller and Rothmann (2004), the programme yielded ways to reduce the behaviour causing the problem as well as ways to improve it. In addition, the findings of the study, proved decreased drug and alcohol use 7%, increased training satisfaction 9%, safety improvement a 13% as well as identifying risk and correction showed a positive shift 3% (Moller & Rothmann, 2004).
2.5.2 Health and Wellness Programmes

The concept of health has various applications for many researchers and thus is often also confused with the study of wellness.

According to Mackintosh (1996), health can be viewed as a multifaceted concept such as health for survival, emotional health, mental health and environmental health and a healthy body and mind. Moreover, it can be summarised as a multidimensional integrated concept, perceived by individuals in different ways suggesting not just the absence of illness. Health programmes address the promotion of a healthy state on all domains. Health Programmes therefore prevent illness and promote health as a means to an end; meaning integrated or total health.

Health cannot be separated from the concept of wellness, as wellness encompasses all aspects of human life, despite some researchers who often only concentrate on physical health. Moreover, wellness programmes broaden this view by including optimised growth and improvement in every aspect of human life. Rima (2004) describe wellness programmes as a means of encouraging a healthy lifestyle to prevent illness. Furthermore, these wellness programmes are focused on encouraging employees to take better care in all facets of their lives.

The first phase in implementing a holistic health and wellness programme is to formulate a strategic plan in order to identify company goals and formulate applicable criteria to measure progress (Bunker, 2005). Furthermore, Moller and Rothmann (2004) utilised leading and lagging as predictors as a strategy to administer a programme for health. According to Campbell, Covers and Rogers (2001), DaimlerChrysler reported a yearly saving of $7 million as part of their strategy to reduce organisational costs. Consequently, health and wellness programmes should be integrated into the strategic management of the organisation (Campbel et al., 2001).

Reese (2001) claims the strategic value of implementing health and wellness programmes in organisations are apparent. Healthy organisations are often characterised by low employee turnover, low absenteeism, high levels of productivity, high employee satisfaction, improved job satisfaction, reduced health care claims, improved recruitment yields and minimal union grievances (Nel, 2004).
Collins (2004) reported lower stress levels enhanced well-being, self-image and self-esteem, improved fitness, higher levels of stamina, decreases in weight gain in organisations utilising wellness programmes.

According to the Corporate Leadership Council (2002), by implementing wellness programmes organisations can save more than $200 billion annually in compensation claims, absenteeism, health insurance and medical cost. The return on investment can amount to $13 billion for every dollar spent on work-wellness programmes (Lightfoot, 2004). Additionally, the Corporate Leadership Council (2002) found a return of up to $7 for each dollar spent on wellness programmes in organisations in Canada.

Hope (2004) claims absenteeism and employee turnover is a result of poor health and morale in the workplace. Moreover, in-house wellness facilities were found to reduce absenteeism, improve employee retention, decrease hiring and training costs and improve employee performance on the job (Hope, 2004). Walker (2004) found a 17% increase in the retention levels of employees due to implementing a wellness programme.

Philips (2002) conveys the need for wellness programmes by claiming that only 6% of companies are aware of wellness and are implementing activities to promote wellness organisations. Wellness programmes can be formulated to suit the needs of the particular organisation. Furthermore, health programmes that are well researched will benefit employee health and wellness and help the organisation reach their goals (Phillips, 2002).

The Corporate Leadership Council (2002) reported that wellness programmes have a positive impact on the morale of employees, their job satisfaction and productivity levels also decreasing absenteeism and turnover of employee. According to Walker (2004), wellness programmes lead to a reduction in costs due to less sick leave, decreased worker compensation, fewer hospital admissions and a reduced loss of working days due to disability.

2.6 INDIVIDUAL DISPOSITIONS AND PSYCHOLOGICAL STATES AND THEIR IMPACT ON PERCEIVED WELLNESS

Individual characteristics that are a part of work-wellness modelling can be viewed as particular traits and individual outcomes. According to Strümpfer (1990, 1995), a sense of coherence, self-efficacy, locus of control and positive emotions (optimism and hope) founded
in the fortigenic theory were studied and analysed. Judge, Toresen and Pucik (1996) examined findings from five different studies and established that self-esteem, self-efficacy, locus of control and positive affectivity encumbered a general factor of wellness. Thus, all these individual dispositions had an effect on the wellness of employees in an organisation. Moreover, these topics signify a strong statistical correlation among numerous dispositional factors and their statistical connection to wellness thus should be taken into considerations when designing a holistic work-wellness model.

The salutogenic model, created by Antonovsky in 1979, describes why individuals when faced with a stressor, can often display erratic behaviour outcomes. According to Antonovsky (1979), the aspect that determines the management of tension was the key question researched and claims the concept of sense of coherence could offer the answers to this issue.

2.6.1 Sense of coherence was originated and explained by Antonovsky (1987) as a universal point of reference that convey the degree to which one has an exuberant sense of self-confidence. Furthermore, according to Antonovsky (1987), an individual with a high degree of sense of coherence utilises a broad range of coping strategies in a flexible approach. Moreover, the individual has a comprehensive understanding of constant stressors and are able to manage accordingly. Research studies substantiate the claim those with a high sense of coherence are able to manage stress and burnout more effectively (Basson, & Rothmann, 2001).

Rothmann, Steyn, and Mostert (2005) claim that employees who have a weak sense of coherence would likely find it difficult to arrangement their world in an orderly and consistent manner. Consequently, they would be inclined to experience life events as unmanageable. Also, they would believe that they lack the resources to meet the demands and that their life does not make sense on an emotional level (Antonovsky, 1987). Therefore, it is understandable that they would experience situations as stressful. Rothmann et al. (2005), reported that sense of coherence mediated the effects of job stress on work wellness and explained 26% of the variance in work wellness experienced by employees.

An experimental study revealed that a sense of coherence is associated to a person's job satisfaction (Strömpfer, 2009). In a meta-analysis results showed a correlation of 0.50 between sense of coherence and job satisfaction with employees of at least seven varying organisations in South Africa (Rothmann, 2000). Further research concurs with these results.

According to Redelinghuys and Rothmann (2004), a high sense of coherence, active coping and work engagement were negatively and passive coping positively related to burnout. Furthermore, a sense of coherence and coping can be used to predict burnout (illness) and work engagement (wellness). The association between related dispositions was researched in the context of flourishing individuals at work thus clarify its involvement in the work-wellness models.

Much like the concept of sense of coherence, self-efficacy is the belief that individuals possess the ability to carry out their work to the required standard (Gist & Mitchell, 1992). Moreover, Bandura (1977) described self-efficacy as a situational or a task-centred idea. Self-efficacy is emphasised as a key psychological mechanism for positivity (Bandura, 1977). Sherrer and Maddux (1982) disputed this by claiming previous experiences with success and failure in different settings will lead to individuals having a common set of expectations they will take with them into new situations thus impacting their ability to manage new situations in a realistic manner.

Furthermore, experimental studies consistently found self-efficacy had a noteworthy impact on the performance of individuals, their motivation, emotional reactions and perseverance on the job (Gist & Mitchell, 1992). In addition, in a study undertaken by Tomas, Moore and Scott (1996) they established that self-efficacy reconciled the correlation between personality and performance in self-management work teams. These researchers inferred that those with high scores of self-efficacy often have a propensity to be resilient and thus are more likely to be well (Thomas, et al., 1996).

2.6.2 Locus of Control refers to the degree to which individuals think their actions have a direct impact on the events that follow (Garson & Stanwyck, 1997). The idea of locus of control was pioneered by Rotter (1966) and refers to individuals who perceive they have control of their lives, thus having an internal locus of control. Furthermore, those who think of the things that happen in their lives as a consequence of luck or faith have an external locus of control. A research study of senior police officials reported a negative relationship between external locus of control and job satisfaction. No positive correlation was found between internal locus of control and job satisfaction (Rothmann & Agathagelou, 2000). However, a positive correlation was found between internal locus of control and job satisfaction in a
financial institution (Pretorius & Rothmann, 2001). Moreover, Naude and Rothmann (2000) found a negative correlation between external locus of control and job satisfaction in a study with agricultural representatives. In summary, it appears that whether or not a relationship exist between locus of control and job satisfaction is specific to a particular industry or sector.

Various research studies reported that internal locus of control perform better than external locus of control in work activities that require initiative, responsibility, autonomy and problem solving (Abdel-Halim, 1980; Rizzo, House & Lirtzman, 1970). Findings of Els (1999) show locus of control could be developed in the workplace. This research found participants developed higher levels of internal locus of control and autonomy directly after a training intervention. In the same study of Els (1999) higher scores of self-acceptance and acceptance of others were reported as supporting data of wellness.

According to a study conducted by Judge, Locke, Durham and Kluger (1998), locus of control measurements were highly correlated with self-efficacy as a wellness construct. Likewise, Pretorius and Rothmann (2001) reported a positive relationship between sense of coherence, self-efficacy and locus of control. Moreover, the concept of locus of control is highly suitable to the formulation of wellness models in the workplace.

2.6.3 Positive emotional state was first introduced by Seligman (1998) who made a contribution to positive organisational behaviour and individual wellness. Moreover, these emotional states depict how individuals optimise functioning by recognizing strength and weaknesses and environmental resources along with the stressors (Wright & Lopez, 2002). The aim is to encourage positive treatments and wellness based on an individual's current strengths. Therefore, the encouragement of positive emotional states develops the current strength of individuals. According to Frederickson (1998), encouragement of positive emotions develops the attention span of individuals, their way of thinking, their behaviour as well as contributing to building physical, intellectual and social resources. Furthermore, positive emotions which supports emotional wellness in the working environment integrates hope, optimism, happiness, generosity, courage, joy and contentment with overall wellness (Luthans, 2002).

2.6.4 Hope as a positive emotion can be described as a goal-directed mindset where individuals realises they are capable of creating pathways to a desired objective and posses the necessary inspiration to use those pathways effectively. Snyder and his peers claim hope has affective as well as cognitive properties. This makes reference to the persistence towards
past, present and future goals (Snyder et al., 1991). As a result of previous successes in managing stressors and achieving desired objectives, those with high levels of hope generally have positive emotions along with self-belief associated with wellness (Lopez & Snyder, 2003).

2.6.5 Optimism can be described as the extent to which individuals have a positive expectation of their future (Scheirer & Carver, 1987). Moreover, optimism is the belief that future events will turn out in a positive manner. Other researchers define optimism as psychological resistance that can be utilised to conceptualise individual difference associated with more positive results (Ebert, Tucker & Roth, 2002). These positive results being in the form of coping with major life stressors, adjusting to major life transitions and buffering responses to more minor stressors.

Experimental research reported that those persuaded into a positive state reported higher self-perceptions such as efficacy (Baron, 1990; Schuettler & Kiviniemi, 2006), have optimistic expectations (Brown, 1984), and set higher goals for themselves (Baron, 1990; Hom & Arbuckle, 1988). Conceptualising positive psychological capacities, for example, efficacy and optimism as resources one can utilise, appears to be an important theoretical explanation as to how positive capacities impacts an individual's wellness (Avey, et al., 2010).

Numerous psychological resources have been researched in their dispositional rather than as in their state-like form, for example dispositional optimism (see Carver & Scheier, 2001). Furthermore, it is apparent that many psychological resources are connected, which suggests that if an individual is high in one resource, they are often high in others. In other words, resources appear to act in concert (Cozzarelli, 1993).

According to Sieberhagen and Rothmann (2004), feature such as optimism, spirituality and social support are known to influence well-being of individuals. Fry (1995) found proof that optimism significantly moderates the relationship between daily hassles and self-esteem maintenance, burnout and physical illness. Scheier and Carver (2003) claim individuals range from either very optimistic to very pessimistic, with the majority gravitating towards the centre of the scale. Furthermore, optimism has been mostly associated with active, persistent, health-orientated coping, while pessimism is more expected to be correlated with emotional distress, health concerns and negative coping (Harju & Bolen, 1998). Scheier and Carver (1992) reported optimists become significantly less stressed, depressed and lonely over time compared to their pessimistic counterparts in their adaption to tertiary education. Given the
discussion of wellness and all the construct encompass, the concept will be measured in correlation with the concept of psychological capital and its derivatives of hope, optimism, resilience and self-efficacy.

2.7. CONCLUSION

This chapter focused on the main variables of the current study, namely psychological capital (hope, optimism, resilience and self-efficacy) and as well as the concept of employee wellness in an organisation, with specific references made to past research and studies done on these constructs.

The following chapter will highlight the research methodology employed in the current research study as well as the various measuring instruments utilised as a means of data collection.
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION
The focus of this chapter deals with the manner in which the research problem was investigated by discussing the sampling methods employed, data gathering instruments and the statistical techniques that were utilized to test the hypotheses formulated for the present study. The research problem for the present study is stated as: “What effect do the factors of psychological capital have on the wellness of employees?”

The sample for the present study was drawn from a selection of employees within the manufacturing industry in the Western Cape. The measuring instruments included a questionnaire comprising of three sections; namely a biographical questionnaire, the Psychological Capital Questionnaire, as well as the Perceived Wellness Survey. These instruments were utilized to gather the data for the present study.

Consent was obtained from the various managers of the respective companies where the data was collected, where the Human Resource manager provided assistance with the collection of data to ensure an optimal return rate of the questionnaires distributed. Participants were ensured of their anonymity and confidentiality as they were not requested to provide their names.

3.2 OBJECTIVES OF THE STUDY
The following was the objectives for this present research study:

- The purpose of this study was to evaluate the relationship between the four factors that encompass Psychological Capital and its effects on employee wellness.
- The study also aimed to provide recommendations to individuals and organisations on how to help increase their levels of psychological capital and improve the overall wellness of employees.
3.3 RESEARCH APPROACH
In this study a quantitative research design was employed. A quantitative data collection provides numeric estimates and the opportunity for relatively uncomplicated data analysis (ACAPS, 2012). Moreover, quantitative data is fairly easy to accumulate, while qualitative data requires a labour intensive analysis process. By using a quantitative design the reliability of the study can be increased, when appropriate methods and critical analysis are employed. Furthermore, quantitative data can be verified and compared between different contexts and objectively verified.

3.3.1 Population
A population encompasses the total group of individuals, events, or things of interest to a particular study (Sekaran & Bougie, 2010). According to Welman and Kruger (2001), the population is the study object which could be individuals, groups, organisations, human products and events or the conditions to which they are exposed. Furthermore, Sekaran and Bougie (2010) states an element is a single member of a specific population. The population for this study consisted of employees in the manufacturing industry from two organisations where the study was conducted.

3.3.2 Sample
The size of the population usually makes it impractical and uneconomical to involve all the members of a population in a research project (Welman & Kruger, 2001). Consequently, the data obtained from a sample of the population in question will have to be used (Welman & Kruger, 2001). Moreover, a sample can be referred to as subsection of the population of interest (Sekaran & Bougie, 2010). Samples consist of selected components of the population to be tested Sekaran and Bougie (2010). Sekaran and Bougie (2010) states by analysing the sample, inferences can be drawn, that could be generalisable to the population in question.

In this study the sample drawn for analysis are employees from two organisations in the manufacturing industry in the Western Cape with a population of 260; a sample size of 160 employees were collected. According to Sekaran and Bougie (2010), a sample size of 160 is representative of a population size of 260, thus the inferences drawn from the data can be generalised to the population in question.
3.3.3 Sampling Procedure

For this study, a non-probability sampling design was employed. Moreover, this implies the sample had no known probability of being chosen as test subjects (Sekaran & Bougie, 2010). Furthermore, Sekaran and Bougie (2010) states in non-probability sampling, subsets have no prearranged chance of being drawn for analysis (Sekaran & Bougie, 2010). In this study a convenience sampling design was utilized. According to Sekaran and Bougie (2010), convenience sampling entails collecting information from elements of the population who are conveniently available to offer it. Findings obtained using convenient sampling do offer limited generalisability, however, it may be the only feasible option when gathering information is time-bound, as was the case of the present study.

3.4 METHOD OF DATA COLLECTION

For the purpose of collecting data, questionnaires were distributed. Given the data required for this study 160 questionnaires were collected from employees in the manufacturing industry in the Western Cape.

Hague (1993) postulates that questionnaires serve their purpose in gathering relevant information on a phenomenon based on the intended population. According to Sekaran and Bougie (2010), questionnaires is an efficient data collection mechanism when the researcher knows exactly what is required and how to measure the dependent and independent variables of interest.

In this research study a biographical questionnaire was developed to measure the necessary biographical data. Furthermore, a standardised participant invitation letter was developed accompanying the questionnaires measuring the respective constructs.

The two questionnaires employed in the study are:

3.4.1 Psychological Capital Questionnaire (PCQ)

To measure psychological capital a 24-item Psychological Capital (PsyCap) questionnaire (PCQ) was used (Youssef & Luthans, 2007). The questionnaire includes six items for each dimension of PsyCap, namely hope, resilience, efficacy, and optimism. The four dimensions
were measured on a 6-point Likert-type scale. Examples of the type of questions include: Hope: “If I should find myself in a jam at work, I could think of many ways to get out of it”.

3.4.1.1 Reliability of the PCQ
Foxcroft and Roodt (2001) explain reliability as being the accuracy and consistency with which the intended measures are assessed. There are various methods in measuring the reliability of a measuring instrument, namely, Test-retest Method, Split-half reliability, Cronbach’s alpha (Aron & Aron 1999, cited in Paulse 2005), alternate form and Kuder-Richardson Theory (Van Zyl & van der Walt, 1994, Paulse 2005).

Cronbach alpha coefficients (α) were used as a reliability estimate and were found to be acceptable according to the guideline of α ≥ 0.70 (Nunnally & Bernstein, 1994). Based on Cronbach alpha coefficients, all four constructs have been reported to be greater than 0.70, with the overall PsyCap instrument having a reliability of 0.95 (Youssef & Luthans, 2007). Furthermore, good internal consistency for the respective subscales (hope: 0.72, 0.75, 0.80, 0.76; optimism: 0.74, 0.69, 0.76, 0.79; self-efficacy: 0.75, 0.84, 0.85, 0.75; and resilience: 0.71, 0.71, 0.66, 0.72) on the four samples utilised in a study were reported (Luthans, Avolio, Avey, & Norman, 2007). Similar to the reliabilities found in the construct validation study of the PCQ-24 (Luthans, Avolio, et al., 2007), the reliability found by Avey et al. (2010) was α = 0.93 (hope α = 0.87, efficacy α = 0.87, resilience α = 0.72, optimism α = 0.78).

Each of the four subscales of PsyCap was drawn from established scales that had been published previously and had been tested and used in recent workplace studies (Avey, Luthans & Youssef, 2010). The Cronbach alphas reported in their study were: hope 0.87; optimism 0.78; resilience 0.72; and self-efficacy 0.87. Acceptable reliability coefficients have been reported in South African samples for the four dimensions with the alpha coefficients ranging from 0.67 to 0.83 (Herbert, 2011).

In a South African setting, Simons and Buitendach (2013) found high levels of internal consistency and reliability for the measuring instrument, Psychological Capital Questionnaire (PCQ) and its subscales, hope, optimism, self-efficacy and resilience. In additional, a reliability coefficient of 0.69 was obtained in the South African sample (De Waal & Pienaar, 2013).
3.4.1.2 Validity of the PCQ

According to Foxcroft and Roodt (2001, p.17), “the validity of a measure concerns what the test measures and how well it does so”. According to Davidshofer and Murphy (2005), validity has two spheres namely, it confirms whether a test measures what it is supposed to measure and secondly, it verifies how valid the decisions made are, on the basis of the test results. Validity can be established in a number of ways, one of which is face validity. Face validity is measured in non-psychometric terms, which concerns what a test appears to measure (Foxcraft & Roodt, 2009). In the study the questionnaire that was used appears to measure what it intends to measure (Simons & Buitendach, 2013). Face validity could be seen as a necessary characteristic for any assessment measure. Luthans et al. (2007) posit a confirmatory factor analysis (CFA) were conducted and shown a strong factor-analytic fit of the Psychological Capital instrument to other samples.

3.4.2 The Perceived Wellness Survey (PWS)

The Perceived Wellness Survey was used in this study to evaluate employee wellness in a manufacturing company in the Western Cape.

The Perceived Wellness Survey (PWS) (Adams et al., 1997) is a salutogenically oriented, multidimensional measure of perceived wellness perceptions in the physical, spiritual, psychological, social, emotional and intellectual dimensions. Moreover, each dimension is represented by six items that are scored from 1 (very strongly disagree) to 6 (very strongly agree) (Adams, Bezner, Gardner & Woodruff, 1998). This scale measures overall well-being on six dimensions, physical, social, emotional, intellectual, psychological, and spiritual, with six questions devoted to each dimension. Higher scores indicated greater total wellness overall and in each of the subscales.

3.4.2.1 Reliability for the PWS

The original study of the Perceived Wellness Survey (PWS) showed evidence of the total scale internal consistency in separating samples (α = 0.88 to 0.93), suggesting that the PWS is a reliable measure of perceived wellness (Adams, et al., 1997); internal consistency reliability coefficient was 0.92.
The PWS instrument has shown to be reliable in previous research (Adams et al, 2000). The items in the PWS were shown to have high internal reliability overall ($\alpha = 0.91$) and consistency in the subscales (Adams et al., 2000). Furthermore, temporal stability estimates varied between $r = 0.73$ to $r = 0.81$ in the student sample, this indicates that the PWS is a realistic stable measuring instrument (Harari & Waehler, 2005).

In four pilot studies, the PWS demonstrated evidence of internal consistency ($\alpha = 0.89$ to 0.91) (Rothmann & Ekkerd, 2007). Research by Adams, Bezner and Steinhardt (1997) has shown the PWS scale posses adequate reliability ($\alpha = 0.88 - 0.93$). The Perceived Wellness Survey appears to be reliable, however, further research is needed (Adams et al., 1997).

3.4.2.2 Validity for the PWS
Research by Adams et al. (1997) has shown that the PWS scale possesses several types of validity. Furthermore, the construct equivalence of the PWS was also determined (Rothmann & Ekkerd, 2007). Moreover, principal-axis factor analysis supports the underlying perceptual nature of the PWS scale and an estimate of face validity was statistically significant ($p = 0.05$), suggesting that the PWS is a valid measure of perceived wellness (Adams, et al., 1997). In the subsequent year, in a study assessing the construct validity of the PWS yielded a result that supports the notion that the highest and lowest perceived wellness groups were significantly dissimilar (Adams et al., 1998). The PWS appears to be valid however, further research is needed, especially in a South African context (Adams et al., 1997).

3.4.3 Rationale for use of selected measuring instruments
The instrument employed in this study measuring psychological capital has a high reliability coefficient of (0.95) thus it can be appropriate to measure the specified construct of psychological capital.

The Perceived Wellness Survey has been found to be reliable and valid; thus the findings of this study would be valid. These questionnaires have previously been utilised in a number of South African studies (Görgens-Ekermans, & Herbert, 2013; Dewaal, & Pienaar, 2013; Simons, & Buitendach, 2013), which also confirms the validity and reliability of the measures.
3.5 DATA ANALYSIS TECHNIQUES

The data was gathered and captured and analysed using the Statistical Packages for Social Sciences (SPSS). While the measures of central tendency and variability were used to examine the spread of the data, inferential statistics were computed to obtain a better understanding of the data gathered. The mean, standard deviation and error variance, along with the skewness and kurtosis were calculated for each of the variables. The most salient characteristics of the sample are represented graphically based on frequencies and percentages. The following inferential statistics were used in this study.

3.5.1 Relationships: Pearson Correlation

Pearson Correlation is appropriate when an intended research study comprises of numerous variables (Sekaran & Bougie, 2010). Further than knowing the means and standard deviations of the dependent and independent variables, often researchers would want to know how a specific variable is related to another variable (Sekaran & Bougie, 2010). To be more specific, researchers would want to see the nature, direction, and importance of the bivariate relationships of the variables used in their particular study (Sekaran & Bougie, 2010). Hence, the researcher analysed the data through the use ofPearsoncorrelation. The reason for choosing the Pearson Correlation is to establish the relationship between psychological capital and employee wellness in an organisation.

The correlation is derived by evaluating the variations in one variable as another variable also fluctuates (Sekaran & Bougie, 2010). A correlation coefficient that specifies the strength and direction of the relationship can be calculated by applying a formula that considers two sets of figures (Sekaran & Bougie, 2010). The causal relationship between the variables may be undetermined; however, the researchers will be able to determine if the variables are related with each other (Sekaran & Bougie, 2010). The researcher would not know which variable causes which to fluctuate, but knows the variables are associated with each other (Sekaran & Bougie, 2010). Thus, the researcher would be in a position to either accept or reject the stated hypothesis, as the hypothesis postulates a significant positive or negative relationship between the variables (Sekaran & Bougie, 2010). A bivariate correlation analysis which indicates the strength of relationship (r) between the two variables can be generated for variables measured on an interval or ratio scale (Sekaran & Bougie, 2010).
3.5.2 Multiple Regression Analysis

When the independent variables are jointly regressed against the dependent variable in an effort to explain the inherent variance the individual correlations are collapsed into what is called a multiple correlation (Sekaran & Bougie, 2010). Furthermore, Sekaran and Bougie (2010) claims where more than one predictor is jointly regressed against the criterion variable, this is known as the multiple regression analysis.

Multiple regression analysis is undertaken to examine the simultaneous effects of several independent variables on a dependent variable that is interval-scaled (Sekaran & Bougie, 2010). In other words, multiple regression analysis aids in understanding how much of the variance in the dependent variables is explained by a set of predictors. For this study, a regression analysis was computed to explain the variance in employee wellness experienced in an organisation due to hope, optimism, self-efficacy and resilience.

3.6 CONCLUSION

In summary the research approach, the methods of data collection and the statistical techniques that were employed to answer the research questions of the present study were presented.

The next chapter focuses on the results obtained in the analysis with specific reference to the testing of the hypotheses of the present study.
CHAPTER 4

RESULTS

4.1 INTRODUCTION
This chapter outlines the results found in the present research study. To provide a better understanding of the analysis, the descriptive analysis are first discussed, thereafter the inferential statistics will follow. Summaries of the descriptive measures are provided which were used to calculate the data with regards to the variables included in this study as collected by the two measuring instruments used. Consequently, the themes of the data gathered are evident and thus a comprehensive understanding can be obtained.

The statistical programme used for the analysis and presentation of the data in this research study is the Statistical Package for the Social Sciences (SPSS) version 22. Subsequently, the analysis of the constructs pertinent to the study, namely, psychological capital and perceived employee wellness, are provided with the help of inferential statistical measures. In addition, conclusions are drawn based on the findings obtained in this study.

4.2 DESCRIPTIVE STATISTICS
This section delineates the descriptive statistics based on the variables included in the biographical questionnaire. The demographic variables under discussion are age, gender, tenure, marital status, number of dependents, race, educational qualification, job title, job classification and department within the company. Descriptive statistics, using frequencies and percentages, are then, graphically presented based on the characteristics of the research sample (n =160).

4.2.1 Biographical Information
The results of the analysis of the biographical questions are presented in graphical format, with brief descriptions of the respondents with regards to personal data highlighting their age, gender, tenure, marital status, number of dependents, race, educational qualification, job title, job classification and department within the organisation.
Figure 4.1 shows the majority of respondents 32.5% (n = 52) is in the age group of 20-29 years while 31.9% (n = 51) is in the 30-39 age group. A further 21.3% (n = 34) is between the age of 40-49. The second smallest percentage of respondents is in the age category of 50-59 years old with a percentage of 8.8% (n = 14). The least number of respondents made up the category of under 20 years and between 60-69 years old with 2.5% (n = 4), respectively.
Figure 4.2 indicate the majority of the respondents represent 81.3 percent of the sample were male (n = 130) while the remaining respondents (18.1 %) were female (n = 29). The manufacturing industry predominantly employs males, given the nature and characteristics of most of the work activities carried out in this industry.

Figure 4.3: Tenure
Figure 4.3 shows the majority of the respondents 23.8% (n = 38) were employed in the organisation between 3-5 years, while those employed for 6-10 years represented 18.1% (n = 29). A further 16.3 percentage of the sample was with the organisation for less than a year (n = 26). Respondents with tenure of 1-2 years consisted of 15.6 % (n = 25), while those who have been with the organisation for 11-15 years contributed to 9.4 % (n = 15) of the sample. Those employees who have been with the organisation for 21-25 years constituted 6.3% (n = 10). The second lowest percentage of respondents 4.4 (n = 7) were with the organisation for more than 30 years while the lowest percentage of respondents 1.9 (n = 3) have a tenure between 26-30 years.

Figure 4.4 illustrates the majority of respondents reported they are married which constitutes 50.6 % (n = 81), while 41.9% said they are single (n = 67). A further 3.8% (n = 6) are divorced and 1.95% (n = 6) are separated only 1 reported she is widowed 0.6%.
Figure 4.5 depicts the majority of the respondents have between 1-2 dependents 37.5% (n = 60), while 33.8 % (n = 54) have 3-4 dependents. A further 20% (n = 32) have no dependents. A percentage of 7.5% (n = 12) have more than more 5 dependents and only 1.3% (n = 2) have 4 dependents.
Figure 4.6 shows the largest portion of the sample is reported to be Coloured 58.8% (n = 94), while 38.1% are Black (n = 61). The remaining respondents consisted of Whites and Indians 1.3% (n = 2), respectively.

Figure 4.7: Educational Level

EducationalLevel

Frequency
Figure 4.7 shows the majority of the respondents' highest educational qualification is National Certificate constituting 43.8% (n = 70) while those with grade 11 or lower represent a further 37.5% (n = 60). Respondents with a National Diploma contributed to 13.1% (n = 21) of the sample. Those with a bachelor's degree consisted of 3.1% (n = 5) and only 2.5% (n = 4) have a Post-Graduate degree.

Figure 4.8 depicts the majority of the respondents are general workers constituting 21.3% (n = 34) of the sample, while 17.5% (n = 28) are production assistants, 13.8% drivers (n = 22). A further 11.9% comprised of operations assistants (n = 19), while supervisors/managers constituted 8.1% (n = 13) of the sample. Stock controllers and operators entailed 6.9% (n = 11) and 6.2% (n = 10) respectively. Quality officers and security respectively were 5% (n = 8) while only 1.9% (n = 3) were HR officers.
Figure 4.9 displays the largest portion of the respondents is classified as operational workers 55.6% (n = 89) while 18.8% are classified under the ‘other’ category (n = 30). A further 12.5% (n = 20) of respondents are categorised as administrative and managerial contributing 7.5% (n = 12). The technical job category only constitutes 3.8% of the sample (n = 6).
Figure 4.10 shows the production department constituted the majority of the respondents with 33.8% (n = 54), while the distribution department had 28.1% (n = 45) respondents, 11.9% of were administrative personnel (n = 19). The quality and stock department both had 8.8% (n = 14) individuals while the laboratory had the second lowest number of 4.4% (n = 7) and the remaining were from the HR department with 1.9% (n = 3).

4.2.2 Measures of Central tendency and Dispersion
This section outlines the descriptive statistics calculated on the basis of the variables included in the questionnaires.
Table 4.1 Means, Standard deviation, Skewness and Kurtosis for the (PCQ)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
<td>Statistic</td>
<td>Statistic</td>
<td>Statistic</td>
<td>Statistic</td>
<td>Std. Error</td>
<td>Statistic</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>156</td>
<td>1.00</td>
<td>6.00</td>
<td>4.87</td>
<td>.85</td>
<td>-1.34</td>
<td>.19</td>
</tr>
<tr>
<td>Hope</td>
<td>153</td>
<td>1.67</td>
<td>6.00</td>
<td>4.78</td>
<td>.87</td>
<td>-0.78</td>
<td>.19</td>
</tr>
<tr>
<td>Resilience</td>
<td>155</td>
<td>1.17</td>
<td>6.00</td>
<td>4.59</td>
<td>.83</td>
<td>-0.93</td>
<td>.19</td>
</tr>
<tr>
<td>Optimism</td>
<td>149</td>
<td>2.33</td>
<td>6.00</td>
<td>4.29</td>
<td>.74</td>
<td>-0.20</td>
<td>.19</td>
</tr>
<tr>
<td>PsyCap</td>
<td>141</td>
<td>1.96</td>
<td>5.88</td>
<td>4.65</td>
<td>.67</td>
<td>-0.94</td>
<td>.20</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>141</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results in table 4.1 shows employees in the manufacturing industry sample mostly agreed to strongly agree they have high levels of confidence (self-efficacy) to take on and put in the required effort to succeed at challenging tasks (M = 4.87, SD = 0.86). They have an inclination to make a positive attribution (optimism) about succeeding now and in the future (M = 4.28, SD = 0.74). Furthermore, they are likely to persevere towards goals and when needed redirecting paths to goals (hope) in order to succeed (M = 4.78, SD = 0.87). In addition, they are also likely when inundated by problems and hardship to sustain and bounce back and even beyond (resilience) to be successful (M = 4.59, SD = 0.83).

The distribution of the data was also explored with the skewness and kurtosis statistics. Regarding skewness, all the dimensions of psychological capital together with total psychological capital falls between -0.2 and -1.3, all being negative values. This indicates the scores for psychological capital and its dimensions are negatively skewed. This means respondents scored higher on questions. Consequently, the data gathered can be considered normally distributed, as most of the scores (except for self-efficacy) fall between the -1 and 1 parameter. Looking at the kurtosis, table 4.1 shows the data had a peaked distribution based
on the kurtosis scores. The PsyCap dimensions with peaked distributions were self-efficacy (2.98), resilience (2.21) and total psychological capital (2.32).

Table 4.2  Mean, Standard deviation, Skewness and Kurtosis for the PWS

<table>
<thead>
<tr>
<th>Dimension</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Statistic</td>
<td>Statistic</td>
<td>Statistic</td>
<td>Statistic</td>
<td>Statistic</td>
<td>Statistic</td>
</tr>
<tr>
<td>Perceived Wellness</td>
<td>119</td>
<td>1.06</td>
<td>5.00</td>
<td>3.20</td>
<td>.748</td>
<td>.310</td>
<td>.222</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>119</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results in Table 4.2 indicates respondents scored relatively low average levels of perceived wellness (M = 3.20; SD = 0.74), bearing in mind that Perceived Wellness was scored on a Likert scale ranging from 1 to 6. Therefore employees perceive their level of wellness to be below average. Furthermore, looking at how the data was distributed, the skewness scores for perceived wellness are 0.31. This indicates perceived wellness is positively skewed, which means respondents tended to score lower on questions. The kurtosis score for the total perceived wellness scale were -0.17. This indicates there were no peaks in the distribution of data based on the kurtosis scores.

Table 4.3

Reliability of the (PCQ), the sub-scales of PCQ and the (PWS)

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Number of Items</th>
<th>N</th>
<th>Cronbach</th>
</tr>
</thead>
<tbody>
<tr>
<td>PsyCap</td>
<td>24</td>
<td>141</td>
<td>0.85</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>6</td>
<td>156</td>
<td>0.73</td>
</tr>
<tr>
<td>Hope</td>
<td>6</td>
<td>153</td>
<td>0.73</td>
</tr>
<tr>
<td>Resilience</td>
<td>6</td>
<td>155</td>
<td>0.58</td>
</tr>
<tr>
<td>Optimism</td>
<td>6</td>
<td>149</td>
<td>0.37</td>
</tr>
<tr>
<td>PWS</td>
<td>36</td>
<td>119</td>
<td>0.91</td>
</tr>
</tbody>
</table>
To compute the reliability of the data collection instruments employed in this study, Cronbach's alpha were used. This provides an indication of the stability, consistency and error free interpretation. Table 4.3 indicates the PsyCap questionnaire obtained a high Cronbach alpha coefficient of 0.85, the PWS yielded a very high Cronbach alpha coefficient of 0.91, therefore these measures can be regarded as acceptable as the coefficients were greater than 0.7 (Nunnally & Bernstein, 1994). In addition, the sub-scales of Hope (0.73) and Self-Efficacy (0.73) were found to be reliable; however, the sub-scales of Resilience (0.58) and Optimism (0.37) failed to meet the minimum acceptable alpha coefficient of 0.7 to be viewed as reliable indicators.

4.3 INFERENTIAL STATISTICS

The following section details the results obtained for the inferential statistics to determine the relationship between psychological capital and perceived wellness among employees in the manufacturing industry.

4.3.1 Pearson Correlations

Table 4.4 Pearson correlation between the four factors of psychological capital, and perceived wellness

<table>
<thead>
<tr>
<th></th>
<th>Perceived Wellness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Self- Efficacy</td>
<td>156</td>
</tr>
<tr>
<td>Hope</td>
<td>150</td>
</tr>
<tr>
<td>Resilience</td>
<td>152</td>
</tr>
<tr>
<td>Optimism</td>
<td>148</td>
</tr>
<tr>
<td>Total PsyCap</td>
<td>107</td>
</tr>
</tbody>
</table>

p > 0.01

Table 4.4 shows, amongst others, the relationship between self-efficacy and perceived wellness among employees in the Manufacturing Industry sample. The results shows there is no statistically significant relationship between the self efficacy of employees and their perceived wellness \( r = 0.113, p > 0.01 \).
Table 4.4 further indicates the relationship between hope and perceived wellness amongst workers in the manufacturing sector sample. Moreover, the results shows there is no statistically significant relationship between the level of hope and perceived wellness ($r = 0.06, p > 0.01$).

Table 4.4 also illustrates the relationship between resilience and perceived wellness of employees in the manufacturing industry. The results indicate there is no statistically significant relationship between employees' level of resilience and their perceived wellness ($r = 0.026, p > 0.01$).

Table 4.4 shows the relationship between optimism and perceived wellness of workers in the manufacturing sector. The results shows there is no significant relationship between optimism levels of employees and their perceived wellness ($r = 0.063, p > 0.05$). Consequently, hypothesis 1 is rejected which state there is a significant relationship between the dimensions of PsyCap and perceived wellness of workers in the manufacturing industry.

Table 4.4 indicates the relationship between total psychological capital and perceived wellness of employees in the manufacturing industry. The results shows there is no statistically significant relationship between the total psychological capital of employees and their perceived level of wellness ($r = 0.048, p < 0.05$). Therefore, hypothesis 2 is rejected, claiming there is a statistically significant relationship between the psychological capital of employees and their perceived wellness.

### 4.3.2 Multiple Regression Analysis

According to Leedy and Ormrod (2001), regression analysis is used to identify the significance of the relationship between the dependent and independent variable. The present study seeks to identify if the four dimensions of PsyCap have an impact on perceived wellness, which is the dependent variable and the four factors of PsyCap being the independent variables.
Table 4.5 Model summary of the total sample (Perceived Wellness as dependent variable)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.134a</td>
<td>.018</td>
<td>-.021</td>
<td>.73808</td>
</tr>
</tbody>
</table>

Predictors: (Constant), Optimism, Resilience, Self-efficacy and Hope

Multiple regression analysis was performed where the dependent variable was Perceived Wellness and the independent variables were the four factors of PsyCap, self-efficacy, hope, resilience and optimism. These variables explained 1.8% of the variance in the Perceived Wellness of employees in the manufacturing sample.

Table 4.6 ANOVA results for the sample (Perceived Wellness as the dependent variable)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>1.010</td>
<td>4</td>
<td>.252</td>
<td>.463</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>55.566</td>
<td>102</td>
<td>.545</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>56.576</td>
<td>106</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to table 4.6, the level of statistical significance (0.762) is more than 0.05. The 1.8% of variance can therefore be regarded as not statistically significant.
Table 4.7 Beta coefficients for the sample (Perceived Wellness is the dependent variable)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>2.922</td>
<td>.500</td>
<td>5.843</td>
</tr>
<tr>
<td></td>
<td>Self Efficacy</td>
<td>.105</td>
<td>.117</td>
<td>.126</td>
</tr>
<tr>
<td></td>
<td>Hope</td>
<td>-.063</td>
<td>.132</td>
<td>-.076</td>
</tr>
<tr>
<td></td>
<td>Resilience</td>
<td>-.082</td>
<td>.111</td>
<td>-.094</td>
</tr>
<tr>
<td></td>
<td>Optimism</td>
<td>.109</td>
<td>.127</td>
<td>.110</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Perceived Wellness

The Beta scores indicate (table 4.7) the dimensions of PsyCap scores range from -0.076 to 0.126, with self-efficacy being the highest significant contributor to the variance in Perceived Wellness. However, none of the dimensions of PsyCap significantly contributes to the variance in Perceived Wellness of employees ($F = 0.46 < 1.00$). Therefore, hypothesis 3 is rejected, stating that hope, optimism, self-efficacy and resilience will statistically contribute to the variance in the perceived wellness of employees.

4.4 CONCLUSION

This chapter provided an overview of the findings relating to the hypotheses of the present study obtained based on empirical analysis of the data. The data gathered from the questionnaires were statistically analysed by means of the Statistical Package for the Social Science (SPSS). Statistical analysis included both descriptive and inferential statistics (Pearson Product Moment Correlation Coefficient and Multiple Regression Analysis).

Chapter five presents a discussion of the findings obtained and contextualises the research findings based on previous research on psychological capital and perceived wellness among employees in the manufacturing industry. Final conclusions are drawn and recommendations are made.
CHAPTER 5

DISCUSSION OF RESULTS, CONCLUSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

This chapter discusses the major findings of the research study and makes reference to relevant research to substantiate the findings for the current study. Moreover, the discussion details demographic information regarding the sample, results obtained from the measures of central tendency and dispersion related to the questionnaires utilised, Pearson correlation between the variables as well as a Multiple Regression Analysis.

The research question was: What effect do the factors of psychological capital have on the wellness of employees?

The objectives of the study were:

- To evaluate the relationship between the four factors that encompasses psychological capital and its effects on perceived employee wellness.
- To provide recommendations to individuals and organisations on how to help employees increase their level of psychological capital and manage their own wellness.

5.2 DISCUSSION OF RESULTS

5.2.1 Demographic information about the sample

The sample constituted 160 employees from two organisations within the manufacturing industry in the Western Cape. Majority of respondents were aged between 20-29 years old (n = 52 or 32.5%), while the greater number of respondents were male (81.3% or n = 130). The gender disparity found in the present study is not surprising given the fact that males are predominately employed in the manufacturing industry due to the nature of job activities. Furthermore, most of the respondents worked for the organisation between 3-5 years, with the largest number of respondents being married (n = 81 or 50.6 %). The majority of respondents had between 1-2 dependents n = 60 or 37.5%. The largest portion of respondents
were Coloured people (n = 94 or 58.8 %) with majority of respondents having highest educational qualification being a National Certificate (n = 70 or 43.8%). Most of the respondents in the sample were categorised as general workers (n = 34 or 21.3%). The largest portion of respondents were classified as operational workers consisting of 55.6% or n = 89, with the majority of respondents coming from the production department (n = 54 or 33.8%).

5.2.2 Descriptive statistics for the PCQ and PWS

Employees in the manufacturing industry sample mostly agreed to strongly agree that they have high levels of confidence (self-efficacy) to take on and put in the required effort to succeed at challenging tasks (M = 4.87, SD = 0.86). They have an inclination to make a positive attribution (optimism) about succeeding now and in the future (M = 4.28, SD = 0.74). Furthermore, they are likely to persevere towards goals and when needed redirecting paths to goals (hope) in order to succeed (M = 4.78, SD = 0.87). In addition, they are also likely when inundated by problems and hardship to sustain and bounce back and even beyond (resilience) to be successful (M = 4.59, SD = 0.83).

Based on the findings of the present study, employees in the manufacturing industry sample scored relatively high levels of PsyCap as well as in the dimensions of PsyCap, indicating that they have high levels of PsyCap. Furthermore, the responses were negatively skewed, suggesting further that majority of respondents viewed themselves as having high levels of PsyCap levels. This view is to be expected in a production driven industry such as manufacturing, having high levels of Self-efficacy, Hope, Optimism and Resilience. Individuals with high levels of PsyCap are more adaptable to deal with the demands of their jobs, feel more proficient (Luthans, et al., 2007) and will utilise their capabilities to manage stress (Avey, et al., 2009). Avey, Reichard, Luthans and Mhatre (2011) suggested that individuals higher in PsyCap may be performing at higher levels over extensive periods. The reason for this is that individuals high in confidence will put greater effort into their goals. These are all vital elements in a demanding production-orientated industry such as the manufacturing sector.

A possible reason for the negative skewness in the responses on the PsyCap scores could be linked to the notion of social desirability, where respondents could likely predict that their responses should be reflective of high scores in these areas. However, to minimise the effect
social desirability could have on responses, participants were assured of confidentiality and anonymity.

Respondents scored relatively low average levels of perceived wellness \( (M = 3.20; \ SD = 0.74) \), bearing in mind Perceived Wellness scores on a Likert scale ranging from 1-6. Therefore, employees from a sample in the manufacturing industry perceive their level of wellness to be below average. This perception employees have of their level of wellness is typically not uncommon in the manufacturing industry where the study was conducted. As health and wellness initiatives are particularly lacking in this sector (Patel, 2013).

5.2.3 Inferential Statistics
Inferential statistics enable researchers to make inferences from the data gathered by analysing, the relationship between two variables, differences in a variable among different groups and how several independent variables might explain the variance in a dependent variable. The inferential statistics employed in this study were Pearson correlation, Analysis of variance as well as Multiple regression analysis (Sekaran & Bougie, 2010).

5.2.3.1 Pearson Correlation between the four factors of Psychological Capital and Perceived Employee Wellness

Hypothesis H1:

There is a statistically significant relationship between the four factors of psychological capital and perceived employee wellness.

The results indicated there is no statistically significant relationship between the four factors of psychological capital and the perceived wellness of employees. This finding of the present study is contradicted by other empirical research. Chauhan (2013) suggest wellness is positively and significantly correlated to all four states of positive psychological capital (self-efficacy, hope, optimism and resilience) of employees in total and in both gender groups. In a related study assessing the relationship between psychological capital and well-being Cole, Daly and Mak (2009) investigated the relationship between work, wellbeing and psychological capital. The findings of their study suggest a person's psychological capital
influences the impact of unemployment on wellbeing and facilitates re-employment (Cole, et al., 2009).

**Self-Efficacy and Perceived wellness:** The relationship between self-efficacy and perceived wellness among employees in the Manufacturing Industry sample indicates there is no statistically significant relationship between self-efficacy of employees and their perceived wellness \( r = 0.113, p > 0.01 \). Therefore, the hypothesis is rejected, which states there is a statistically significant relationship between the self-efficacy of employees in the manufacturing industry and their perceived wellness.

The correlations between wellness and efficacy found in a study in India showed wellness and efficacy are positively correlated \( r = 0.68, p > 0.01 \) in the total sample (Chauhan, 2013). Moreover, looking at the gender group this correlation was found to be positively significant in both female \( r = 0.70, p > 0.01 \) and male \( r = 0.63, p > 0.01 \) groups respectively (Chauhan, 2013). The results showed employees with high levels of efficacy are having more wellness feelings than inefficacious employees in the organization. Self-efficacy, which is the belief in one’s ability to complete specific tasks, influences the tasks employees choose to learn and the goals they set for themselves (Avey, et al., 2010). Self-efficacy offers employees’ useful cognitive process and a willingness to take on challenges and apply effort in the pursuit of a successful result even though the person expects a positive return on that investment.

Results from a study found self-efficacy significantly contributed to overall wellness, subjective well-being and gainful employment (Chauhan, 2013). Moreover, it means employees with high level of self-efficacy posses wellness in terms of high subjective well-being and finds themselves gainfully employed. Furthermore, a study by Judge, Locke, Durham and Kluger (1998) found locus of control measurements were highly correlated with self-efficacy as a construct of wellness. Likewise, Pretorius and Rothmann (2001) found a positive relationship between sense of coherence, self-efficacy and locus of control. In addition, the study found self-efficacy to be vital to the formulation of wellness models in the world of work.

**Hope and Perceived wellness:** The relationship between hope and perceived wellness amongst workers in the manufacturing sector sample shows there is no statistically significant relationship between the level of hope and perceived wellness \( r = 0.06, p > 0.01 \). Hence, the hypothesis is rejected, stating there is a relationship between hope and perceived wellness.
of permanent employees in the manufacturing sector. Chauhan (2013) found wellness and hope is positively associated ($r = 0.68$, $p > 0.01$) in the total sample used in the study. Moreover, hope is both the existence of a wish to complete goals with the motivation and the ability to form a plan of action to achieve the objectives (Bandura, 1997). Hopeful employees have high levels of wellness, satisfaction and feeling of satisfaction as a result of their work.

A study reported hope is a significant contributor to overall wellness, job satisfaction, subjective well-being and gainful employment (Chauhan, 2013). Furthermore, hopeful employees have more wellness feelings; possess high levels of job satisfaction, subjective well-being and gainful employment. Moreover, as a result of previous success in dealing with stressors and reaching desired goals, individuals with high levels of hope often have positive feelings as well as self-belief that can be associated with wellness (Lopez & Snyder, 2003).

**Resilience and Perceived wellness:** The relationship between resilience and perceived wellness of employees in the manufacturing industry indicates there is no statistically significant relationship between employees’ level of resilience and their perceived wellness ($r = 0.026$, $p > 0.01$). Thus, the hypothesis is rejected, claiming there is a significant relationship between the resiliency levels of employees and their perceived wellness. According to Chauhan (2013), wellness and resilience are positively correlated ($0.48$, $p > 0.01$). Resilience is likely to be positively related to wellness because employees perceive added role activities like peer mentoring as an effort to build or extend the performance themselves (Chauhan, 2013).

Furthermore, resilience was found to be a significant contributor to subjective well-being in a study undertaken in India (Chauhan, 2013) consequently, those employees who possess resilience have a high level of wellness. Furthermore, a meta-analysis explored correlational studies, as well as using longitudinal and experimental designs clearly showed that positive, happy people had better physical and mental health outcomes and behaviour (Lyubomirsky, King, & Diener, 2005). Furthermore, in an update of the literature, Lyubomirsky (2008, p. 25) concluded happier, more positive people are “more resilient in the face of hardship, have stronger immune systems, and are physically healthier, happy people even live longer.”

**Optimism and Perceived wellness:** The relationship between optimism and perceived wellness of workers in the manufacturing sector shows there is no significant relationship between optimism levels of employees and their perceived wellness ($r = 0.063$, $p > 0.05$). Consequently, the hypothesis is rejected, which state there is a significant relationship between optimism and perceived wellness of
workers in the manufacturing industry. Chauhan (2013) states optimistic individuals are likely to be more future-orientated whereby the optimist is more likely to expect future events will have a positive result, irrespective of their current circumstances. In the study by Chauhan (2013) correlations between wellness and optimism revealed wellness and optimism are positively correlated \( r = 0.59, p > 0.01 \). Similarly, hope and optimism is also viewed as a constructive cognition for the future which helps an employee to believe negative outcome are due to forces beyond their control. Furthermore, optimistic employees have more wellness feelings in the forms of higher satisfaction and wellness in the work context (Chauhan, 2013). Employees with high optimism for the future view difficult task as a challenge to be mastered as opposed to a threat to be avoided.

Outcomes of a study by Chauhan (2013) denoted optimism significantly contributed to overall wellness, level of job satisfaction, subjective well-being and gainful employment. In other words, optimistic employees have more wellness feelings, posses high levels of job satisfaction, subjective well-being and gainful employment. Moreover, optimism showed positive relation with overall wellness, job satisfaction and gainful employment.

Perceived wellness and the development of a valid questionnaire for its assessment has been the focus for Adams and colleagues (Adams et al., 1998). One of the studies examined perceived wellness, spiritual wellness and psychological wellness using the Perceived Wellness Survey (PWS) in a college population and found life purpose, optimism and sense of coherence were significantly related to perceived wellness (Adams et al., 2000). Furthermore, a study utilizing the PWS to examine perceived wellness and its connection to quantity of physical activity among hospital employees found higher overall, physical and psychological wellness scores were significantly related to higher leisure time physical activity participation (Bezner, Adams, & Whistler, 1999). According to Sieberhagen and Rothmann (2004), characteristics such as optimism, spirituality and social support are known to influence well-being of individuals. Fry (1995) found proof that optimism significantly moderates the correlation between daily hassles and self-esteem maintenance, burnout and physical illness.

Scheier and Carver (2003) claims individuals range from being either very optimistic to very pessimistic, with the majority gravitating towards the centre of the scale. Optimism has been predominantly associated with active, persistent, health-orientated coping while pessimism is more likely to be correlated with emotional distress, health concerns and negative coping
(Harju & Bolen, 1998). Moreover, Optimists cope more effectively with their problems than their counterpart, pessimists. There is substantial evidence that optimists use different coping strategies to cope than pessimists do and these coping differences contributes to the positive association between optimism, better adjustment and wellness (Chauhan, 2013).

Scheier and Carver (1992) reported optimists become significantly less stressed, depressed and lonely over time compared to their pessimistic counterparts in their adaption to tertiary education. In addition, a research study found there is a significant effect of mindfulness as an intervention on employees' self-efficacy, hope, resilience and optimism (Chauhan, 2013). It showed mindfulness has significantly increased the employees' self-efficacy, hope, resilience and optimism. Nielsen and Daniels (2012) speculated that when leaders found themselves challenged above their average levels of challenge, they reported better well-being and wellness levels. According to the findings of the study by Schoeman (2012), increased levels of job satisfaction could lead to higher levels of well-being and sense of achievement and optimism. This finding suggests that employees who perceive that they are challenged beyond their normal levels, experience higher levels of job satisfaction, well-being and overall wellness.

5.2.3.2 Pearson correlation between Total Psychological Capital and Perceived Employee Wellness

Hypothesis H2:

There is a statistically significant relationship between psychological capital and perceived employee wellness.

The relationship between total psychological capital and total perceived wellness of employees in the manufacturing industry shows there is no statistically significant relationship between the psychological capital of employees and their perceived level of wellness \( r = 0.048, p < 0.05 \). Therefore, the hypothesis is rejected, claiming there is a statistically significant relationship between the psychological capital of employees and their perceived wellness.

Correlations found in a study by Chauhan (2013) between wellness and psychological capital showed wellness and psychological capital is positively correlated \( r = 0.71, p > 0.01 \). Moreover, the study found in the total sample, the wellness of employees to be significantly
and positively correlated on different factors of psychological capital (Efficacy, Hope, Resilience and Optimism) (Chauhan, 2013).

Also, employees' positive psychological capital was positively and significantly associated with wellness in the workplace (Chauhan, 2013). Furthermore, this study found that psychological states have a tendency to predict wellness and their indicators. Moreover, positive psychological capital was found to be positively and significantly correlated with wellness indicators such as job satisfaction, subjective well-being and gainful employment (Chauhan, 2013). Therefore, high levels of positive psychological capital would likely lead to an increase in job satisfaction, subjective well-being and feelings of gainful employment. Also, positive psychological capital was found to be positively and significantly correlated with overall wellness in total and both gender (male and female) groups (Chauhan, 2013). It means employees who are more positive tend to possess high levels of wellness. In addition, employees with positive psychological capital is a value added concept to workplace wellness as employees with positive psychological capacities are more likely to have positive states, wellbeing, effective interpersonal relationship, work happiness, commitment and impression management (Chauhan, 2013).

Avey et al. (2011) have found that the results of their meta analysis on PsyCap indicated that significant positive relationships existed between PsyCap and desirable employee attitudes such as job satisfaction, organizational commitment, psychological well-being and employee wellness. Furthermore, Avey, Wernsing and Luthans (2008) and Larson and Luthans (2006) have also confirmed that psychological capital was related to positive emotions that in turn were related to their attitudes towards job satisfaction and psychological well-being. PsyCap has also been reported to positively correlate to desirable attitudes such as job satisfaction and employee well-being and overall wellness (Avey et al., 2011).

### 5.2.3.3 Multiple Regression Analysis: Hope, Optimism, Self-efficacy and Resiliency and Perceived Wellness

**Hypothesis H3:**

Hope, Optimism, Self- efficacy and Resilience will significantly contribute to the variance in perceived employee wellness.
Regression analysis was performed where the dependent variable was Perceived Wellness and the independent variables were the four factors of PsyCap, self-efficacy, hope, resilience and optimism. These variables, explained 1.8% of the variance in the Perceived Wellness of employees in the manufacturing sample. Moreover, the results indicates hope, optimism, self-efficacy and resilience does not contribute to a significant proportion of the variance in the perceived wellness of employees (F = 0.46 < 1.00), therefore, the hypothesis is rejected, stating hope, optimism, self-efficacy and resilience will statistically contribute to the variance in the perceived wellness of employees.

The Beta scores indicates that the dimensions of PsyCap scores ranged from -0.076 to 0.126, with self-efficacy being the highest significant contributor to the variance in Perceived Wellness. However, none of the dimensions of PsyCap significantly contributes to the variance in Perceived Wellness of employees.

Avey, Luthans, Smith and Palmer (2010) studied the impact of positive psychological capital on employees' well-being over time. The results indicated positive psychological capital, as a representative of positive, work-related psychological resources is positively related to well-being and added small, but significant variance over time (Avey et al., 2010). A study revealed variations in the levels of the relationship between PsyCap and Workplace Wellbeing, the highest common variance (51%) being the relationship between Job Satisfaction and Sense of Achievement and optimism (Schoeman, 2012). The lowest common variance (5%) was the relationship between organisational respect for the employee and Confidence (Schoeman, 2012).

Chauhan (2013) provided evidence where positive resources such as employees' positive psychological capital may lead to the desirable outcome of their well-being over time. Tomas, Moore and Scott (1996) established self-efficacy reconciled the correlation between personality and performance in self-management work teams. Furthermore, these researchers inferred those with high scores of self-efficacy often have a tendency to be resilient and as a result they are more likely to be well (Thomas, et al., 1996). Positive emotions which support emotional wellness in the working environment integrate hope, optimism, happiness, generosity, courage, joy and contentment (Luthans, 2002).
5.3 CONCLUSIONS

The following section details the conclusions drawn based on the findings of the present study:

H1: THE FOUR FACTORS OF PSYCAP AND PERCEIVED WELLNESS

The results showed there is no statistically significant relationship between the four factors that constitute psychological capital and the perceived wellness among a sample of employees from the manufacturing industry in the Western Cape. However, various other studies found contrary results. For example, findings of another study found wellness is positively and significantly correlated to all four factors of positive psychological capital, namely, self-efficacy, hope, optimism and resilience (Chauhan, 2013). Moreover, it was found in the total sample, wellness of employees significantly and positively correlated on different factors of psychological capital, i.e. efficacy, hope, resilience and optimism (Chauhan, 2013). A study found there is a significant positive correlation amongst all the dimensions of psychological capital and subjective well-being.

The results found in the present study are quite surprising given that numerous other studies verified the positively significant relationship between the factors of psychological capital and perceived wellness of employees. Reasons for the disparity could likely be employees in the manufacturing industry do not fully understand the psychological capacities they possess and how it contributes to their behaviour and conduct in the workplace. Often in production-orientated industries such as the manufacturing industry, emphasis is placed on producing as much as possible at the lowest cost to the company, without much consideration for the health and wellness of employees. Consequently, employees' perception of their wellness would be negatively affect as a result of the lack of wellness aware in their organisations. Furthermore, the educational level in the manufacturing industry is often characteristically low, thus the understanding of questions posed could have impacted how participants responded, which ultimately affected the results of the present study.

H2: TOTAL PSYCHOLOGICAL CAPITAL AND PERCEIVED WELLNESS

The present study found no correlation between the total psychological capital of employees and their level of perceived wellness. Contrary to this finding, correlations between wellness and psychological capital showed wellness and psychological capital is positively associated
Furthermore, it was found psychological states have a tendency to predict wellness as well as wellness indicators. Moreover, positive psychological capital was found to be positively and significantly related to wellness indicators such as job satisfaction, subjective well-being and gainful employment (Chauhan, 2013).

In addition, positive psychological capital was found to be positively and significantly correlated with overall wellness therefore, employees who are more positive tend to possess high levels of wellness (Chauhan, 2013). Even though various other studies found a positive association between psychological capital and employees' perceived wellness, this was not the case in the present study. Reason could be due to the lack of applicability of the psychological capital questionnaire in the South African context, due to the lack of research in the area of psychological capital in South African organisations. Also, employees may lack the understanding of what constitutes their psychological capital, thus affecting their ability to utilise these psychological resources optimally especially in the working environment.

Furthermore, given that health and wellness initiatives are severely lacking in the manufacturing industry, employees are often unaware of the responsibility organisations have towards fostering and promoting wellness in the organisation. The management within the organisations needs to realise how essential wellness promotion in the organisation is and the positive effect it will have on their employees and the organisation's bottom-line. Psychological capital when applied accurately can offer employees an opportunity to use their skills and different work responsibilities effectively and efficiently resulting in improved performance and healthy work environment. It is important to note altering the working conditions may add to the stress levels of employees if their organisation fail to adequately support the employees in their endeavours.

**H3: Hope, Optimism, Self-efficacy and Resiliency and their contribution to the variance in Perceived Wellness**

Regression analysis was performed where the dependent variable was Perceived Wellness and the independent variables were the four factors of PsyCap, self-efficacy, hope, resilience and optimism. Based on the findings, 1.8% of the variance in the Perceived Wellness of employees in the manufacturing sample were found, however, the variance cannot be regarded as significant as it is greater than 0.05. Furthermore, the results indicates hope,
optimism, self-efficacy and resilience does not contribute to a significant proportion of the variance found in the perceived wellness of employees. Additionally, the present study found the Beta scores indicates self-efficacy was the highest significant contributor to the variance found in the perceived wellness of employees, however, none of the dimensions of PsyCap significantly contributed to the variance on Perceived Wellness.

According to a study by Avey et al., (2010), who investigated the impact of positive psychological capital on employees' well-being over time, found positive psychological capital as a representative of positive, work-related psychological resources, is positively related to well-being and added small, but significant variance over time. A study revealed variations in the levels of the relationship between PsyCap and Workplace Wellbeing, the highest common variance (51%) being the relationship between Job Satisfaction and Sense of Achievement and optimism (Schoeman, 2012). The lowest common variance (5%) was the relationship between organisational respect for the employee and Confidence (Schoeman, 2012). A possible explanation for the low level of significance of the variables between PsyCap and Well-being could possibly be that the employees have been unable to successfully develop their own PsyCap because of the nature of their work environment which is predominantly guided by manufacturing processes.

In the present study a longitudinal research design was not utilised. Such an approach may shed light on whether the development of PsyCap within the organisation has a resultant impact on employees perceived level of wellness.

5.4 LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH
The sampling design for this study made use of non-probability sampling specifically convenient sampling design, which is presumed to be the least generalisable method of sampling (Sekaran, & Bougie, 2010). Stratified random sampling however, provides greater reliability and ensures greater rigour, yielding findings that are more precise and generalisable (Sekaran, & Bougie, 2010).

Quantitative data gathering method was employed by not utilising qualitative methods, such as interviews may have stifled the findings of this research study. Qualitative methods can provide more in-depth understanding of the relationship between psychological capital and employee wellness in organisations (Sekaran & Bougie, 2010).
Respondents might have had working responsibilities at the time the questionnaires were administered, which could have impacted on their willingness and ability to participate. Many employees may have been absent that could decrease the response rate as indicated by Sekaran and Bougie (2010) according to the population size.

Only organisations in the manufacturing industry formed part of the study, thus making it difficult to compare findings to organisations in other industries, further limiting the generalisability of the research findings. Future research could include participants from other industries to increase the applicability and generalisability of the research findings to other sectors.

Respondents may have provided answers they thought would be more suitable, thus distorting the data and ultimately the research findings. Other factors besides psychological capital impacting employee wellness were not focussed on, which limits the findings of this study.

Self-report measures were used as data gathering instruments which are subject to response bias and limits the responses of participants. Participants in this study might have provided responses which are socially desirable and not a true reflection of their views. Future research can make use of interviews as follow-ups to substantiate responses provided by participants.

A recommendation for future research is to consider using t-tests and ANOVA to analyse whether significant differences are present in the variables based on biographical factors. In a study conducted in India, the t-test explained there are significant gender differences in positive psychological capital and its two states, namely, self-efficacy and hope (Chauhan, 2013). It means males and females possess differences on these variables. Female employees were found to be more hopeful and confident. The majority of the respondents in this study were male, given the nature of the work activities carried out in the manufacturing industry, therefore it is recommend future research take into consideration the probability of gender bias.

For the Psychological Capital Questionnaire (PCQ) used in this research study, limited published studies were conducted in South Africa (Du Plessis & Barkhuizen, 2011; Simons, & Buitendach, 2013; Görgens-Ekermans, & Herbert, 2013) therefore, further research is required to ensure the reliability and validity of research findings in a South African context.
The Perceived Wellness Survey also utilised in this study, appears to be reasonably valid and reliable, however, further research is needed (Adams et al., 1997).

The perceived wellness survey has various sub-scales and dimensions which were not the focus in this study, future research endeavours could, however, assess the relationship between the four factors of psychological capital with the six sub-scales of perceived wellness.

Cross sectional research has its inherent limitation in only identifying relationships between variables at one point in time. Therefore, future longitudinal research to assess changes in these variables over time is recommended.

Data was only collected from organisations in the Western Cape. The study may be replicated on subjects from different geographical regions, to arrive at a more comprehensive understanding of concerned phenomena for broader conclusions, generalizations and external validity. The findings may be shared with organisations, private and public sector employees, human resource managers and organisational behaviour psychologists so they can appreciate the role of positive psychology in different organisations and settings.

Environmental factors may have a strong influence on the relationship of employees' wellness variables. More research should be directed towards the interactional effects of environmental and employees' wellness factors.

5.5 IMPLICATIONS

Every research endeavour contributes to the existing body of knowledge and aims to provide a more comprehensive understanding regarding the topic in question. Furthermore, it provides guidance and development for future investigations. Implications of the present study:

Review of related literature indicates the positive psychological capital construct encompassing efficacy, hope, resilience and optimism requires more comprehensive insight and further research endeavours. Moreover, the relationship between psychological capital and employee wellness is seldom examined. There are limited qualitative and quantitative studies assessing the relationship between positive psychological capital states with wellness variables. The present study made an attempt to provide some clarity regarding the
relationship between positive psychological capital and the wellness of employees in an organisational context. An attempt was made to validate the correlation between psychological capital and the wellness of employees in the workplace. However, no correlation was found between the construct of psychological capital and the perceived wellness of a sample of employees from the manufacturing industry in the Western Cape.

5.6 RECOMMENDATIONS FOR THE INDIVIDUAL

According to Youssef and Luthans (2007), there are short training interventions aimed at building positive psychological resource capacities. These interventions entail developing hope, encouraging individuals to set objectives and ‘stepping’ sub-goals, form realistic pathways that places emphasis on desired outcomes as oppose to undesirable results as well as formulating contingency plans when obstacles arise. Moreover, as participants become more involved and aware in these activities, a positive descriptive style also begin to form, as negative events were expected and plan for avoiding or coping with they were shaped.

Furthermore, to develop hope and optimism individuals can engage in facilitated positive self-talks, also encouraging them to take control of their lives and how they respond to adversity goes a long way to inspiring hope and optimism in people. These activities and exercises also stimulate the development of the individual's resilience through building their resources such as confidence and social support, formulating their risk management strategies in the form of contingency planning, and most importantly, facilitating cognitive, emotional and behavioural adjustment processes. These resilience processes were improved through expanding and altering the individual's perception of influence in the application to current examples of setbacks experienced at work (Youssef & Luthans, 2007).

To develop hopeful leaders, Peterson and Luthans (2003) highlighted three particular guidelines:

- To ease the agency aspects of hope, use participative techniques and empowerment to set specific stretch goals.
- To facilitate the pathways aspects of hope requires logical crisis plans and actions plans for achieving objectives.
- For overall development in hope, borrow from successful techniques such as the “stepping” method to break down intricate, long-term strategies and goals into
manageable sub-steps; develop through cases, practical exercises, and modelling the skill of ‘re-goaling’ to identify the ineffectiveness of perseverance in the face of complete obstacles; and through cases and exercises practice the skill of mental rehearsals that will then transfer to important activities on the job.

By developing the various aspects encompassing the psychological capital of employees, their level of wellness will likely also improve, as various studies found a positive relationship between psychological capital of employees and its effect on their wellness. If individuals gain more insight into how they can develop their resources such as their hope, self-efficacy, resiliency and optimism they can take active steps towards empowering themselves and improving their health and overall level of wellness.

5.7 RECOMMENDATIONS FOR THE ORGANISATION

Psychological Capital Interventions (PCI): Psychological capital is a state-like construct that is open to development, making it distinctive from other positive constructs found in the research area of positive organisational behaviour. The model of Psychological Capital Interventions was introduced by Luthans, Avey, Avolio, Norman and Combs (2006). Moreover, these authors successfully applied the PCI on a sample of management students and practicing managers and reported the PCI significantly increased the psychological capital of the participants. Furthermore, research revealed employees' psychological capital can be developed through short web based training interventions (Luthans, Avey, & Patera, 2008). Therefore, it is evident psychological capital can be measured and open to development.

A few studies were reviewed to determine the usefulness of these interventions. Luthans et al., (2006) investigated the impact of micro-intervention on Psychological Capital development. They used a cross-sectional sample consisting of managers from various types of organisations who voluntary participated in a two hour Psychological Capital Intervention. The study found the participants' pre to post measured Psychological Capital significantly increased. Luthans et al., (2006) found from hope, optimism, efficacy and resiliency development psychological capital can be enhance through interventions having financial impact and high return on investment. They found the Hackman and Oldham job characteristics model or the Luthans and Kreitner Model Interventions over time yielding a positive effect on performance of employees. Even though still preliminary results thus far
indicated a brief and focused intervention (PCI) would likely increase participant’s Psychological Capital. The percentage increase in Psychological Capital found in these studies may not appear significant; however, utility analysis revealed that this could result in competitiveness.

Luthans, Avey, Avolio and Peterson (2010) investigated the development and impact on performance of positive psychological capital. There is a lack of research regarding the development of positive psychological capital based on training interventions and the effect it has on the performance of employees. To bridge the performance gaps, Luthans et al., (2010) carried out a pilot test of the Psychological Capital Intervention (PCI) model with random control group method. These authors also carried out a follow-up study with a cross section of practicing managers to determine whether the training guidelines for the PCI resulted in improved performance of employees.

The findings provided empirical evidence suggesting that short training interventions such as the PCI can be used as a tool to develop psychological capital as well as improve the work performance of employees. The next step in research was to show Psychological Capital Intervention is successful in improving the performance of employees, of which Luthans et al. (2010) did. Their study provided preliminary evidence that Psychological Capital Intervention was not only successful in the development of Psychological Capital, but also in performance improvement.

Hodges (2010) took it a step further and examined the potential contagion effect of the psychological capital development program attended by the manager, on their subordinates' psychological capital, engagement and performance. Results indicated subordinates' psychological capital had significantly improved, after their managers' in the treatment group underwent the psychological capital development program confirming the contagion effect. However, results did not support a contagion effect of improvement in subordinates' engagement and performance. Therefore, organisations who want their employees to perform better and display more positive behaviours can make use of the Psychological Capital Intervention. However, there are some intervention methods which helps to increase the psychological capital of employees in the workplace.

Also, there should be wellness programs designed to improve negative emotions in the workplace. Furthermore, wellness programs could be a source to develop, employee well-being, hope, optimism, efficacy and resilience and overall wellness of employees. These
programs could decrease burnout, stress, anxiety, ill-being, absenteeism and psychological problems (Chauhan, 2013).

In addition, human resource development strategies aimed at enhancing the dimensions of employees’ psychological capital namely, self-efficacy, optimism, hope and resilience, may reduce their perceptions of the symptoms of stress, as well as limit subsequent turnover (Avey et al. 2009). Recommendations emanating from the research by Deery (2008) includes the need for legislation on maximum, as well as minimum working hours, good role models at the workplace, flexible working hours and arrangements, sound recruitment and training opportunities and company family friendly work policies. Future research can also further investigate the mechanisms through which PsyCap contributes to employee well-being and overall wellness.

5.8 CONCLUSION

It is assumed an employee who is well is a healthy employee. Wellness has widely accepted meanings and is conceptualized as a varying construct depending on the context. Wellness should be the focus when considering the human being (employee) as a balanced entity, striving towards optimum well-being. There is a need in the field of organisational psychology, human resource management, sociology and those researching and applying wellness in the workplace to have common conceptualization for wellness that includes these concepts from a holistic approach (Chauhan, 2013). Practical applications of positive psychological capital entails helping employees and organisations identify their strengths and use them to increase and sustain their respective wellness levels. Psychological capital when applied accurately can offer employees an opportunity to use their skills and different work responsibilities effectively and efficiently resulting in improved performance and healthy work environments. It is important to note that altering the working conditions may add to the stress levels of employees if their organisations fail to adequately support the employees in their endeavours.

The main objective for this research study was to determine if there is a relationship between psychological capital and employee wellness in organisations in the manufacturing industry. The literature survey conducted formed the theoretical base for this research endeavour. The empirical findings from the present study indicates there is no significant relationship between the psychological capital of employees and their perceived wellness, however, various other studies found results contrary to the findings in the present study.
REFERENCE LIST


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Unpublished master’s thesis, University of the Western Cape, Bellville, Cape Town, South Africa.


http://dx.doi.org/10.4102/sajhrm.v10i3.427


APPENDIX A: LETTER TO PARTICIPANTS

Dear participant

I hereby invite you to participate in a research study which is in partial fulfillment of the requirements for my Master's Commerce Degree in Industrial Psychology at the University of the Western Cape. The study seeks to examine The Relationship between Psychological Capital and Employee Wellness in an organization in the Western Cape. Taking part in this study is entirely voluntary and participants will remain anonymous.

I wish to confirm that:

• The HOD has given permission for this research to be carried out.
• The information to be obtained from the data will be treated strictly confidentially.
• The participants have their right to privacy; therefore the responses will only be used for research purposes.
• No personal or intrusive information will be requested from participants.
• There will be no negative impact on the career or job of any participant participating in this study.
• Completing the questionnaires will take approximately 20 minutes of your time.

When completing the questionnaires please be completely honest as there is no right or wrong answers.

• By signing the Consent Form you are giving informed consent to partake in this research.

If you have any queries concerning the nature of the research or is unclear about any question please contact me at shihaamsolomon01@gmail.com

Finally, I thank you for taking the time to assist with my research endeavour. It really is much appreciated.

Yours sincerely

Shihaam Solomon

B Comm Honours Degree

Professor Elza Thomson

Supervisor
APPENDIX B: INFORMED CONSENT FORM

I, ........................................ volunteer to participate in a research project conducted by Shihaam Solomon in partial fulfillment of her M Commerce Degree.

I understand that the research is designed to gather information on Psychological Capital and Employee Wellness in an organisation.

My participation in this project is voluntary and I understand that I may withdraw and discontinue participation at any time.

I understand that I will remain anonymous as no identifying information is required.

I have read and understood the explanation provided to me. I voluntarily agree to participate in this study.

____________________________     ________________________  
Participant signature         Date:
APENDIX C: BIOGRAPHICAL QUESTIONNAIRE

The following biographical information is requested in order for meaningful analysis and comparisons of group results can be made.

1. What is your age group?
   - Under 20 years old
   - 20-29 years old
   - 30-39 years old
   - 40-49 years old
   - 50-59 years old
   - 60-69 years old

2. What is your gender?
   - Male
   - Female

3. Length of service at present company?
   - Under 1 year
   - 1-2 years
   - 3-5 years
   - 6-10 years
   - 11-15 years
   - 16-20 years
   - 21-25 years
   - 26-30 years
   - 31 years & over

4. What is your marital status?
   - Single
   - Married
   - Divorced
   - Separated
   - Widowed
5. Number of dependents?
   - None
   - 1-2
   - 3-4
   - 5 and up

6. What is your race? *For statistical purposes
   - White
   - Coloured
   - Black
   - Indian
   - Asian

7. Your highest educational qualification?
   - Grade 11 or lower (standard 9 or lower)
   - Grade 12 (Matric, standard 10)
   - Post-Matric Diploma or certificate
   - Baccalaureate Degree(s)
   - Post-Graduate Degree(s)

8. What is your job title?

   .................................................................

9. What is your job classification?
   - Administrative
   - Managerial
   - Operational
   - Technical
   - Other

10. Division/department within the company?

   .................................................................
APPENDIX D: PSYCHOLOGICAL CAPITAL QUESTIONNAIR

Below are statements that describe how you may think about yourself right now. Use the following scale to indicate your level of agreement or disagreement with each statement.

(1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = somewhat agree, 5 = agree, 6 = strongly agree)

<table>
<thead>
<tr>
<th></th>
<th>Statement</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I feel confident analysing a long-term problem to find a solution.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>2</td>
<td>I feel confident representing my work area in meetings with management.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>3</td>
<td>I feel confident contributing to discussions about the company strategy.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>4</td>
<td>I feel confident helping to set targets/goals in my work area.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>5</td>
<td>I feel confident contacting people outside the company (e.g. Suppliers, customers) to discuss problems.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>6</td>
<td>I feel confident presenting information to a group of colleagues.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>7</td>
<td>If I should find myself in a jam at work, I think of many ways to get out of it.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>8</td>
<td>At the present time, I am energetically pursuing my work goals.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>9</td>
<td>There are lots of ways around any problem.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>10</td>
<td>Right now I see myself as being pretty successful at work.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>11</td>
<td>I can think of many ways to reach my current work goals.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>12</td>
<td>At this time, I am meeting the work goals that I have set for myself.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>13</td>
<td>When I have a setback at work, I have trouble recovering from it, moving on.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>14</td>
<td>I usually manage difficulties one way or another at work.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>15</td>
<td>I can be “on my own,” so to speak, at work if I have to.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>16</td>
<td>I usually take stressful things at work in stride.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>17</td>
<td>I can get through difficult times at work because I’ve experienced difficulty before.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>18</td>
<td>I feel I can handle many things at a time at this job.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>19</td>
<td>When things are uncertain for me at work, I usually expect the best.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>20</td>
<td>If something can go wrong for me work-wise, it will.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>21</td>
<td>I always look on the bright side of things regarding my job.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>22</td>
<td>I’m optimistic about what will happen to me in the future as it pertains to work.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>23</td>
<td>In this job, things never work out the way I want them to.</td>
<td>1 2 3 4 5 6</td>
</tr>
<tr>
<td>24</td>
<td>I approach this job as if “every cloud has a silver lining.”</td>
<td>1 2 3 4 5 6</td>
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APPENDIX E: PERCEIVED WELLNESS SURVEY (PWS)

The following statements are designed to provide information about your wellness perceptions. Please carefully and thoughtfully consider each statement, then select the one response option with which you most agree.

1 - Very Strongly Agree, 2 - Strongly Agree, 3 - Agree, 4 - Very Strongly Disagree, 5 - Strongly Disagree, 6 - Disagree

1. I am always optimistic about my future.  
2. There have been times when I felt inferior to most of the people I knew.  
3. Members of my family come to me for support.  
4. My physical health has restricted my activities in the past.  
5. I believe there is a real purpose for my life.  
6. I will always seek activities that challenge me to think and reason.  
7. I rarely count on good things happening to me.  
8. In general, I feel confident about my abilities.  
9. Sometimes I wonder if my family will really be there for me when I am in need.  
10. My body seems to resist physical illness very well.  
11. Life does not hold much future promise for me.  
12. I avoid activities which require me to concentrate.  
15. My friends know they can always confide in me and ask me for advice.  
16. My physical health is excellent.  
17. Sometimes I don’t understand what life is all about.  
18. Generally, I feel pleased with the amount of intellectual stimulation I receive in my daily life.  
19. In the past, I have expected the best.  
20. I am uncertain about my ability to do things well in the future.  
21. My family has been available to support me in the past.  
22. Compared to people I know, my past physical health has been excellent.  
23. I feel a sense of mission about my future.  
24. The amount of information that I process in a typical day is just about right for me (i.e., not too much and not too little).  
25. In the past, I hardly ever expected things to go my way.  
26. I will always be secure with who I am.  
27. In the past, I have not always had friends with whom I could
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<tr>
<td>28.</td>
<td>I expect to always be physically healthy.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>29.</td>
<td>I have felt in the past that my life was meaningless.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>30.</td>
<td>In the past, I have generally found intellectual challenges to be vital to my overall well-being.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>31.</td>
<td>Things will not work out the way I want them to in the future.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>32.</td>
<td>In the past, I have felt sure of myself among strangers.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>33.</td>
<td>My friends will be there for me when I need help.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>34.</td>
<td>I expect my physical health to get worse.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>35.</td>
<td>It seems that my life has always had purpose.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>36.</td>
<td>My life has often seemed void of positive mental stimulation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>