PSYCHOLOGICAL CAPITAL; SUBJECTIVE WELLBEING; BURNOUT AND JOB SATISFACTION AMONGST EDUCATORS IN THE UMLAZI REGION

BY: ANDREA ANNE HANSEN

SUPERVISOR: PROF. J.H BUITENDACH

Submitted in partial fulfilment of the requirements for the degree of Master of Social Science (Industrial Psychology) in the School of Psychology in the Faculty of Applied Human Sciences at the University of KwaZulu-Natal, November 2012.
DECLARATION

I declare that this dissertation is my own work. All borrowed ideas, citations and references have been duly acknowledged. This dissertation is being submitted for the partial fulfilment of the Master of Social Science (Industrial Psychology) degree at the University of KwaZulu-Natal. It has not been submitted before for any other degree or examination at any other university.

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

Andrea A Hansen                       Date
ACKNOWLEDGEMENTS

I would firstly like to thank God for providing me with strength throughout my studies, especially in this final year at university. I thank God for giving me the strength to complete my dissertation.

I would like to thank Professor Joey Buitendach, for being my supervisor for my dissertation and providing me with help and structure throughout the process. I would have not have been able to complete this dissertation without your guidance and support. I would also like to thank her for believing in me and believing that I was capable of entering the Masters year and providing me with the opportunity to do so.

I would like to thank Dr Thandi Magojo, for her support through this year. I am grateful for your constant check-ups on my progress and making yourself available whenever I needed advice or guidance.

I would like to thank my parents for their consistent support and prayers throughout this year. Without your support, encouragement and love I would not have been able to get through this year.

To all my friends and loved ones, thank you for all your calls and visits to make sure I was coping. I am grateful for all your support and encouragement through this year.
ABSTRACT

The current study aimed to explore the positive aspects of Psychological Capital (PsyCap) and attempted to explain how the psychological resources inherent in PsyCap can aid against the negative effects of Burnout in educators in the Umlazi Region of Kwa-Zulu Natal. The general objective of this research study was to explore the relationship between PsyCap, Subjective Wellbeing, Burnout and Job Satisfaction. The study used a quantitative research design and was conducted using the Positive Psychology framework. This study made use of the Conservation of Resources Theory as its theoretical framework. Convenience samples (n=103) were taken of educators across four educational institutions in the Umlazi Region. The Psychological Capital Questionnaire; Satisfaction with Life Scale; Oldenburg Burnout Inventory; and Minnesota Job Satisfaction Questionnaire (short form) were administered to the participants. The results confirmed that there were statistically and practically significant relationships between PsyCap, Subjective Wellbeing, Burnout and Job Satisfaction. The results revealed that Subjective Wellbeing was a statistically significant predictor of PsyCap. It also indicated that PsyCap and Subjective Wellbeing were both statistically significant predictors of Burnout. The results confirmed that the relationship between Subjective Wellbeing and Burnout was mediated by Psychological Capital (PsyCap).

Key Words: Psychological Capital (PsyCap), Subjective Wellbeing, Burnout, Job Satisfaction.
# TABLE OF CONTENTS

## Chapter 1: Introduction

1.1. Introduction ......................................................... Pg: 1
1.2. Background to study ............................................... Pg: 1
1.3. Problem Statement ................................................. Pg: 3
1.4. Research Objectives ............................................... Pg: 4
1.5. Research Questions ............................................... Pg: 5
1.6. Summary .......................................................... Pg: 5
1.7. Structure of the Research Study ................................. Pg: 6

## Chapter 2: Review of Literature

2.1. Introduction ........................................................ Pg: 7
2.2. Positive Psychology .............................................. Pg: 8
2.3. Psychological Capital .............................................. Pg: 10
2.4. Subjective Wellbeing ............................................. Pg: 14
2.5. Burnout .............................................................. Pg: 16
2.6. Job Satisfaction ................................................... Pg: 20
2.7. Theoretical Framework ........................................... Pg: 24
2.8. Summary ............................................................ Pg: 26

## Chapter 3: Research Methodology

3.1. Introduction ........................................................ Pg: 27
3.2. Research Design ................................................... Pg: 27
3.3. Sampling ............................................................. Pg: 28
3.4. Data Collection ..................................................... Pg: 30
3.5. Measuring Instruments .......................................... Pg: 30
3.6. Research Procedure Pg: 33
3.7. Data Analysis Method Pg: 34
3.8. Ethical Considerations Pg: 35
3.9. Summary Pg: 36

Chapter 4: Results
4.1. Introduction Pg: 37
4.2. Confirmatory Factor Analysis Pg: 37
4.3. Descriptive Statistics Pg: 42
4.4. Pearson Correlation Analysis Pg: 44
4.5. Regression Analysis Pg: 47
4.6. Summary Pg: 50

Chapter 5: Discussion
5.1. Introduction Pg: 52
5.2. Discussion Pg: 52
5.3. Summary Pg: 58

Chapter 6: Conclusion, Limitations and Recommendations
6.1. Introduction Pg: 59
6.2. Conclusions Pg: 59
6.2.1. Conclusion in accordance with the specific literature objectives of the study Pg: 59
6.2.2. Conclusion in accordance with the empirical results of the study Pg: 61
6.3. Limitations Pg: 63
6.4. Recommendations Pg: 64
6.5. Summary Pg: 65
7. References.  
8. Appendices  

8.1. Appendix A: Participant Letter of Permission  
8.2. Appendix B (i): Letter of Permission from School A  
8.3. Appendix B (ii): Letter of Permission from School B  
8.4. Appendix B (iii): Letter of Permission from School C  
8.5. Appendix B (iv): Letter of Permission from School D  
8.6. Appendix C: Biographical Questionnaire  
8.7. Appendix D: Psychological Capital Questionnaire  
8.8. Appendix E: Satisfaction with Life Scale  
8.9. Appendix F: Oldenburg Burnout Inventory  
8.10. Appendix G: Minnesota Job Satisfaction  
8.11. Appendix H: Ethical Clearance  
8.12. Appendix I: Form 22 – Plagiarism Declaration
LIST OF TABLES

Table 1: Characteristics of Participants  Pg: 29

Table 2: Pattern Matrix of PCQ  Pg: 38

Table 3: Pattern Matrix of OLBI  Pg: 40

Table 4: Pattern Matrix of MSQ  Pg: 41

Table 5: Descriptive Statistics  Pg: 42

Table 6: Pearson Correlations  Pg: 44

Table 7: Simple Linear Regression (Subjective Wellbeing & PsyCap)  Pg: 47

Table 8: Simple Linear Regression (PsyCap, Subjective Wellbeing, & Burnout)  Pg: 48

Table 9: Mediated Regression Analysis  Pg: 49
CHAPTER 1

INTRODUCTION

1.1. Introduction

This chapter provides a background to the present research study. This first chapter also outlines the research objectives and research questions this study aimed to achieve. An overview of the chapters included in this research study is provided and the chapter is concluded with a summary.

1.2. Background to study

Educators are tasked with an imperative role in society as they play an instrumental role in providing valuable information to the future leaders of their countries (Cronin, 1991). Teachers often occupy a role far beyond that of a mere educator to their students, teachers often aim to understand the plethora of factors affecting the learning abilities of their students, and thereby promote a positive and enriching environment for optimal learning of their students (Govender & Legum, 2011). An evident problem in the educational system of South Africa is the amount of daily challenges endured by educators as they are tasked with the job of developing the minds of the youth to encourage and develop authentic leaders.

The challenges and demands teachers face in South Africa are unique, overwhelming and increasing constantly due to the vast socio-economic disparities teachers find themselves in (Higgs, 1995). Teachers are often faced with circumstances for which they are unprepared for; many teachers in South Africa lack the skills to promote an effective and relevant learning environment for their students (Hammett & Staeheli, 2009). Accessibility to
adequate resources is another issue faced by many educators in South Africa, this affects the motivation and enthusiasm teachers possess for their jobs and it directly affects the quality of education students receive (Hammett & Staeheli, 2009).

Educators in South Africa face unique and challenging tasks, as teachers aim to provide their students with effective and relevant learning environments (Higgs, 1995). South African educators have been subject to the introduction of a new system of curriculum, i.e. outcome based education (OBE), which has placed a significant amount of stress on teachers as they have had to not only come to grips with the new curriculum but also have to be able to effectively teach it to the youth (Ladbrook, 2009). Teachers have also needed to become advocates for ‘transformative intellectuals’, meaning that they need to guide their students to accept a democratic society by accepting differences and promoting diversity after a long era of apartheid, which can be challenging for teachers that have not had any type of diversity training (Higgs, 1995).

Despite the many demands endured by teachers, educators often play a positive role in their students’ lives. Teachers often concern themselves with trying to fix the problems their students encounter, while neglecting the need to focus on developing their own strengths and qualities (Hammett & Staeheli, 2009). Enhancing the positive attributes and strengths of educators not only will have a positive impact on their performance, commitment and satisfaction, but it will also lead to an increase in satisfaction of their students and enable them to achieve higher academic results (Luthans, Avolio, Norman, & Avey, 2008). One of the fundamental purposes of teachers is not only enriching the educational needs of the youth but also inspiring and encouraging students to live a positive and rewarding life. A way that educators may be able to fulfil this purpose is if they are able to attain a life that is positive and rewarding, and they are able to grow, develop and flourish as individuals over time.
This research study is situated in the positive psychology paradigm and made use of the conservation of resources theory as its theoretical framework. The positive psychology paradigm was used because teachers have a direct impact on the quality of education students receive, it becomes necessary for a more positive approach to be undertaken, where the positive capacities teachers possess are enhanced and cultivated (Herbert, 2011). These positive capacities may act as buffers when educators experience challenging demands and encounter symptoms of burnout (Herbert, 2011). It is imperative that educators in South Africa achieve job satisfaction as these teachers will remain more committed to their jobs and their performance will improve (Luthans, Avolio, Norman, & Avey, 2008). It is also necessary for teachers to become aware of their strengths and positive attributes, which will enable them to transfer their positive outlook to their students and thereby cultivate a generation of positive, happy, committed and satisfied youth, who are able to excel academically and have an impact on how successful South Africa will be in the future.

1.3. Problem Statement

Educators possess a valuable and important role in society; which is the role of developing and enriching the minds of the youth (Cronin, 1991). It becomes imperative for educators to be able to develop and flourish and to maintain an optimistic and hopeful outlook on life, so that these attitudes can be passed onto the youth of South Africa. The amount of stressors and demands placed on educators in South Africa are taxing and play a role in the depletion of internal resources teachers possess for their valuable work (Higgs, 1995). These demands negatively influence the motivation and satisfaction educators derive from their work, which can negatively influence the quality of education the youth receive. It is therefore necessary for a positive approach to be undertaken towards the study of educators and how certain
positive capacities can aid in the development and flourishing of educators. This research study aims to place emphasis on Psychological Capital (PsyCap) and the tremendous potential it has to provide value to the work arena. The positive effects of PsyCap will be explored to determine whether its positive capacities can play a role in increasing the satisfaction teachers possess in their work, while decreasing the level of burnout they experience. This research study will add to the body of research conducted on PsyCap in the South African context and will highlight the positive role it can have for educators in a South African context.

1.4. Research Objectives

Based on the background of the research study and the problem statement, the general objective of this study is to investigate the relationship between Psychological Capital, Subjective Wellbeing, Burnout and Job Satisfaction; and secondly to explore whether Psychological Capital mediates the relationship between Subjective Wellbeing and Burnout.

The specific objectives are:

- To conceptualise Psychological Capital, Subjective Wellbeing, Burnout and Job Satisfaction through the literature review.

- To establish the relationship between Psychological Capital, Subjective Wellbeing, Burnout and Job Satisfaction amongst educators in four educational institutions in the Umlazi region.

- To explore whether Psychological Capital mediates the relationship between Subjective Wellbeing and Burnout.
1.5. Research Questions

1) How has Psychological Capital, Subjective Wellbeing, Burnout and Job Satisfaction been conceptualised in the literature?

2) What is the relationship between Psychological Capital, Subjective Wellbeing, Burnout and Job Satisfaction?

3) Does Psychological Capital mediate the relationship between Subjective Wellbeing and Burnout?

1.6. Summary

This chapter has provided a background to the study and highlighted the need for the study being conducted. This chapter has also identified the main objectives to be achieved through this research study, and listed the research questions that are answered through the study.
1.7. Structure of the Research Study

Chapter 1: Introduction

This chapter provides a detailed discussion of the background and problem statement of the current research study; the chapter also includes the research objectives and research questions of the study.

Chapter 2: Review of Literature

This chapter presents a review of research that has been conducted on Psychological Capital, Subjective Wellbeing, Burnout and Job Satisfaction. This chapter also outlined the theoretical framework underpinning the research study.

Chapter 3: Research Methodology

This chapter provides a detailed account of the research design, research methodology, sampling method, data collection method, and data analysis method used in the current research study.

Chapter 4: Results

This chapter provides the results obtained through the research study.

Chapter 5: Discussion

This chapter provides an in-depth discussion of the results obtained in the research study within the context of existing literature.

Chapter 6: Conclusion, Limitations and Recommendations

This chapter provides a conclusion the current research study and highlights the limitations surrounding the study and possible recommendations for future research.
CHAPTER 2

REVIEW OF LITERATURE

2.1. Introduction

Educators play a significant role in the lives of the youth; educators become more than just a teacher imparting invaluable knowledge in the minds of the youth, but they also assume the role of an empathetic mentor as they attempt to provide their students with the best learning environment they have to offer (Harden & Crosby, 2000). Despite the significant role and valuable work educators are tasked with, many South African educators are faced with unique and challenging demands on a daily basis as they attempt to create valuable and enriching learning environments for their students (Higgs, 1995). Teachers in South Africa are often subject to under-resourced classrooms, inadequate teaching resources, poor educational facilities, and many teachers are placed in poor socio-economic environments with minimal assistance or resources, and are still expected to improve the intellect of young minds thus partly impacting how the youth will progress in their futures (Hammett & Staeheli, 2009). These pervasive and taxing demands affect the level of motivation educators possess for their jobs and the level of satisfaction they achieve from occupying such important roles in society. These demands faced by educators in South Africa have a direct effect on the increasing turnover rates being experienced in the South African teaching environment (Xaba, 2003).

It is imperative that a focus on enhancing and the cultivating of positive capacities within teachers is examined. This research study aims to investigate the positive psychological capacities inherent in PsyCap, and the possible positive role it may play in enhancing the
satisfaction educators experience and possess for their work, while decreasing the level of burnout they experience.

2.2. Positive Psychology

This research study is situated within the framework of positive psychology. The positive psychology paradigm was developed by Seligman and Csikszentmihalyi in 2000. This paradigm was created to provide an alternative direction in psychology. Historically, psychology’s main focus was on the weaknesses that plagued individuals and how creating ways to fix these weaknesses would create a psychologically and physically sound individual (Seligman, Steen, Park & Peterson, 2005). Seligman and Csikszentmihalyi (2000) changed the direction of this negative focus, to a focus on the positive aspects individuals possessed, and how enhancing these positive aspects would create a happy and fulfilled individual. Positive psychology is “the scientific study of optimal human functioning. It aims to discover and promote factors that allow individuals, communities, and societies to thrive and flourish” (Compton, 2005, p. 4). Positive psychology focuses on enhancing positive emotions and adaptable behaviour and how enhancing these positive aspects of individuals contributes to a more satisfactory and productive life (Seligman & Csikszentmihalyi, 2000).

The positive psychology paradigm is built upon three central propositions, the first is positive emotions, the second is positive individual traits, and the third is positive institutions (Positive Psychology Center, 2007). Positive emotions are the subjective states individuals experience such as happiness, joy and pleasure; while individual traits refers to the concrete behavioural patterns individuals possess (Compton, 2005). Positive institutions refer to the creation and maintenance of institutions that support individuals and provide them with healthy and nurturing environments (Compton, 2005). The ambit of positive psychology
stretches far beyond the individual level, as can be inferred by the three propositions it rests on. This all encompassing view of positive psychology aims to enhance the strengths and virtues individuals possess and are able to cultivate to bring about psychological growth and improved wellbeing (Fredrickson, 2001). Researchers have found success in developing positive psychology variables in business organisations and in athletics and educational settings (Luthans, Avolio, Avey, & Norman, 2007; Snyder, 2000).

Positive psychology has given rise to a construct which focuses on the strengths of individuals and the cultivating of these positive attributes individuals possess, while de-emphasising the focus on the weaknesses and shortcomings of individuals. This construct is known as Psychological Capital (PsyCap) (Luthans et al., 2004). It is believed that increased focus on the personal strengths and good qualities of individuals will lead to improved individual and organisational performance (Luthans et al., 2004). Research proves that emphasis being placed on the strengths of individuals rather than fixating on fixing what is wrong with them, leads to individuals being able to flourish and thrive (Luthans, Avey, Clapp-Smith, & Li, 2008). This positive understanding of focusing and cultivating the positive attributes of individuals, while de-emphasising the focus on weaknesses is especially relevant for educators within the South African context. It is imperative for educators to enhance and cultivate their positive attributes and acknowledge the invaluable role they possess in society as this may negate against the demands and stressors placed on them. By teachers developing and flourishing, their satisfaction with their lives and with their jobs may increase, which would possibly counteract the effects of burnout. With their increasing satisfaction, educators in South Africa may become more committed to their jobs despite the demands they encounter. This can have a significant impact on the teacher turnover rates in South Africa, and can have positive influence on the quality of education the youth receive as teachers may be more willing to go the extra mile in the education of their students.
2.3. Psychological Capital

Psychological Capital emerged from the field of Positive Organisational Behaviour (POB). POB is a derivative of the field of Positive Organisational Scholarship, which is premised on the belief that unlocking hidden potential in individuals and focusing on their excellence, will not only benefit the individual but also have positive effects for the organisation they work for (Spreitzer et al., 2005). Avey, Luthans and Jensen (2009) define POB 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” (p. 678). PsyCap is premised on a similar belief as POB; PsyCap is focused on the personal strengths and positive qualities of individuals and this focus is believed to lead to improved individual and organisational performance (Luthans et al., 2004). PsyCap comprises of four positive psychological states; self-efficacy, hope, optimism and resilience (Luthans et al., 2004). Stajkovic and Luthans (1998) define self-efficacy (or confidence) as the “individual’s conviction about his or her abilities to mobilise the motivation, cognitive resources, and courses of action needed to successfully execute a specific task within a given context” (p. 47). Self-efficacy can be described as a situation where individuals feel a sense of reliance, certainty and assurance in their skills and knowledge which enables them to effectively accomplish tasks and be in control of certain situations.

Snyder et al. (1991) defines hope as “a positive motivational state that is based on an interactively derived sense of successful (a) agency (goal-oriented energy) and (b) pathways (planning to meet goals) (p. 47). Snyder (2000) distinguished two dimensions of hope; willpower and pathways. Willpower can be described as the motivation and expectation individuals possess for achieving desired goals (Luthans et al., 2008). Pathways refers to the psychological resources individuals possess that help individuals formulate alternate pathways to achieve their goals, these pathways help individuals achieve their goals despite
obstacles they may encounter (Luthans et al., 2008). Optimism refers to “an attribution style that interprets positive events through personal, permanent, and pervasive causes and negative events through external, temporary and situation – specific ones” (Peterson et al., 2011, p. 430). Optimistic individuals often internalise positive events and externalise negative events (Seligman & Schulman, 1986; Seligman, 1998). Luthans (2002) defines resiliency as “the capacity to rebound or bounce back from adversity, conflict, failure, or even positive events, progress, and increased responsibility” (p. 702).

From the above discussion which highlighted the four states PsyCap comprises of, a definition of PsyCap can be delineated. Luthans, Youssef, and Avolio (2007) define psychological capital 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) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success” (p. 3). This definition of PsyCap emphasises that these positive psychological capacities have developmental properties, meaning that these resources are open to development, they can be enhanced and they can be drawn from when individuals feel the need to.

Luthans et al. (2004) proposed that PsyCap can be invested in and managed and thereby they imply that the positive psychological capacities composed in the construct are states rather than fixed traits. This assertion brings forward the debate occurring around the construct of PsyCap. The state versus trait debate has been discussed extensively for a number of years (Allen & Potkay, 1981). Research conducted by Conley (1984) found that psychological constructs are best understood as more or less stable. Since PsyCap is a derivative of POB, it is regarded as being state-like and open to development, which differentiates PsyCap from
other positive constructs such as self-esteem and conscientiousness which are trait-like (Cameron & Caza, 2004; Cameron, Dutton & Quinn, 2003; Roberts, 2006). Support for the state-like nature of the positive psychological capacities composed in PsyCap can be found in research conducted by Bandura, Snyder, Carver and Scheier and Wagnild and Young. Bandura (1997) highlighted strategies to increase self-efficacy, while Snyder (2000) provided evidence that hope is open to growth and even published the state–hope scale, to illustrate its developmental properties. Carver and Scheier (2002) investigated and outlined strategies to develop optimism, while Masten and Reed (2002) also outlined strategies to enhance resilience, which was supported by research conducted by Wagnild and Young (2003).

Within the teaching profession there is an imminent need for teachers to incorporate a positive orientation to their work, this is necessary because of the many demands being placed on teachers in the South African environment, which often leads to high rates of burnout and dissatisfaction of work amongst these educators (Herbert, 2011). By educators possessing a positive orientation towards their work it may negate against the demands placed on them, and may have a role in increasing their satisfaction with their jobs. The four psychological states comprised in PsyCap may prove to be beneficial to educators. Luthans et al. (2007) believes that individuals who possess all four states inherent in PsyCap will prove to be better performers in their jobs as well as be more satisfied workers. If teachers are able to possess confidence in themselves and their work tasks, they may be able to withstand the numerous job demands they face. If teachers are able to strive towards their goals and overcome barriers blocking their goals, as well as have an optimistic outlook about their work. It may lead to decreased rate of burnout amongst educators and an increase in the rates of job satisfaction experienced amongst them. Teachers need to possess confidence in their work tasks and how they relay educational information to their students to encourage their learning (self-efficacy). Educators must also be able to handle the daily struggles presented
by students (resiliency). Teachers need to remain positive and hopeful when advising students on reaching their goals and achieving their ambitions, as it will lead to students being hopeful (optimism and hope).

Research conducted by Luthans et al. (2007) found PsyCap to be positively related to job satisfaction. Cetin (2011) found job satisfaction to be positively related to the hope, resilience and optimism dimensions of PsyCap. A study conducted by Cheung, So-Kum Tang and Tang (2011) in China found PsyCap to be negatively associated with burnout, but positively associated with job satisfaction. Research conducted by Herbert (2011) in Stellenbosch found high levels of hope, optimism, self-efficacy and optimism to be associated with low levels of burnout and stress. This research indicates that PsyCap may act as a personal coping resource and may negate against the development of burnout over time (Herbert, 2011). The findings of the research conducted by Herbert (2011) highlights the possibilities of positive attributes negating against the effects of demands and stressors, which is relevant to this research study. This research study is intended to highlight the positive effects of cultivating and enhancing the positive attributes inherent in PsyCap, which could possibly negate against burnout, while increasing satisfaction rates of educators in South Africa. The limited studies (Herbert, 2011; Wang et al., 2012) conducted investigating the relationship between PsyCap and burnout in educational settings within the South African context highlights the need for more research to be conducted to illustrate the positive focus of PsyCap and how this focus may lead to an alternative understanding of burnout, which may aid in preventing its occurrence amongst educators and other work professions.

Research conducted by Lyubomirsky, King and Diener (2005) found that positive, happy individuals had improved physical and mental health outcomes and behaviour. Avey, Luthans, Smith and Palmer (2010) found a relationship between PsyCap and both hedonic and eudaimonic wellbeing, which indicates that PsyCap can play a role in influencing instant
gratification as well as play a role in the achievement of gratification and happiness. A study conducted by Culbertson, Fullagar and Mills (2010) has shown that PsyCap predicted individuals’ eudaimonic wellbeing, which highlights the hope state of PsyCap, where individuals feel motivated to achieve their goals (willpower) because they trust in their cognition (pathways) to achieve conditions of positive feelings. PsyCap’s focus on the strengths and virtues of individuals can be seen to be linked to the development of wellbeing over time (Fredrickson, 2001).

2.4. Subjective Wellbeing

Subjective Wellbeing is a derivative of the positive psychology field and is focused on the cultivating of positive emotions to ensure the optimal functioning of individuals (Ryan & Deci, 2001). Wellbeing can be defined as the “optimal psychological functioning and experience” (Ryan & Deci, 2001, p. 142). Wellbeing can be differentiated into two categories; hedonic wellbeing and eudaimonic wellbeing (Culbertson et al., 2010). The hedonic aspect of wellbeing refers to subjective emotions such as happiness and the experience of pleasure, and thereby is characterised by the presence of positive moods and the absence of negative moods (Ryan & Deci, 2001). The eudaimonic aspect of wellbeing is more cognition based and focused on the motivation individuals possess to achieve their goals and thereby contributes to positive feelings (Culbertson et al., 2010).

It is important to distinguish between subjective wellbeing and happiness, as these two constructs are often used interchangeably, but they are distinctly different. Happiness can be defined as the “high ratio of positive to negative feelings” (Uchida et al., 2004, p. 61). Diener et al. (1999) defines subjective wellbeing as “a broad category of phenomena that includes people’s emotional responses, domain satisfaction and global judgements of life satisfaction”
By these definitions it is easy to understand why both constructs are often confused and used interchangeably, as both constructs have a focus on the emotional aspects of wellbeing. The difference between happiness and subjective wellbeing is that subjective wellbeing focuses on both the affective and the cognitive aspects of individuals (Ozmete, 2011). For the purpose of this research study only subjective wellbeing will be explored, as it incorporates both the affective and cognitive aspects of individuals.

Subjective wellbeing includes a variety of terms that pertain to how individuals feel and think about their lives, therefore subjective wellbeing focuses on self-evaluations (Ozmete, 2011). Diener (2000), differentiates four concepts which combined, constitute subjective wellbeing, these are; positive affect, negative affect, domain satisfaction and cognitive life satisfaction.

Positive affect and negative affect refers to the presence of positive emotions (e.g. joy, happiness) and the absence of unpleasant emotions (e.g. anger, sadness) (Luhmann et al., 2011). Characteristics related to positive affect include optimism, self-efficacy and confidence, which can be linked to the resources comprised in PsyCap (Lyubomirsky, Diener, & King, 2005). Subjective wellbeing refers to an individual’s affective and cognitive evaluation of their life. The affective aspect is a hedonic evaluation guided by emotions and feelings, while the cognitive aspect refers to an information-based appraisal of an individual’s life (Van Hoon, 2007). The information-based appraisal is used as part of a judgement process, whereby an individual judges whether their life measures up to their expectations. The evaluation of an individual’s life serves as a basis for attaining satisfaction; when individuals feel their lives measures up to their expectations they usually achieve satisfaction (Bakker & Oerlemans, 2010). This evaluation can also take the form of affect, meaning that individuals may experience positive or negative emotions when evaluating their lives. Individuals experience high subjective wellbeing when they (a) are satisfied with their lives and (b) experience frequent positive emotions and infrequent negative emotions (Diener,
Subjective wellbeing does not only refer to global judgements individuals make about their lives but it can also be determined by how satisfied individuals are in specific domains in their life, such as in their work life or their marriage (Ozmete, 2011).

If individuals are able to attain satisfaction with their lives or with their occupations, the more likely they are to suffer from the effects of the demands and stressors placed on them, such as burnout (Ames et al., 2004). Burnout is still considered as being highly prevalent in the teaching profession (Kokkinos, 2006; Hall et al., 2005; Jackson & Rothman, 2006). Most research conducted on teacher burnout has focused on how teachers may be unsuited to their environmental demands, which is usually perceived as the reason for the high rates of burnout amongst teachers. No studies have incorporated the health promoting effect of subjective wellbeing on burnout, which is reported as having an aiding potential during times of distress (Vazi et al., 2011). A study conducted by Vazi et al. (2011) reported that indicators of subjective and psychological wellbeing can be evaluated for inclusion in burnout prevention interventions in teachers. There have been no studies conducted investigating the relationship between subjective wellbeing and burnout levels amongst teachers. This research study aims to contribute literature towards filling this research gap; as a focus on the key strengths individuals possess may be key to overcoming the high burnout rates amongst educators.

2.5. Burnout

Burnout is a term often used to describe instances where individuals are experiencing mental exhaustion (Schaufeli, 2003). Burnout can be described as a psychological condition which arises when individuals are exposed to stressful work conditions and environments. There
have been many definitions proposed to conceptualise burnout. Burnout was first defined by Freudenberger as the feeling of physical, emotional, and mental exhaustion experienced as a continuing chronic condition of stress in life and at work (Freudenberger, 1974). The most common definition of burnout was put forth by Maslach and Jackson (1986) who defined burnout as “a syndrome of emotional exhaustion, depersonalization and reduced personal accomplishment that can occur among individuals who do ‘people work’ of some kind” (p. 1). Schaufeli and Enzman (1998) define burnout as “a persistent, negative, work-related state of mind in ‘normal’ individuals that is primarily characterised by exhaustion, which is accompanied by distress, a sense of reduced effectiveness, decreased motivation, and the development of dysfunctional attitudes and behaviours at work” (p. 36). Burnout can be understood as a self-perpetuating process which negatively affects individuals achieving their goals, while also depleting their resources in process.

Burnout refers to a cluster of psychological (affective and cognitive), physical and behavioural symptoms (Van Tonder & Williams, 2009). Burnout can be experienced by individuals in any profession, as the construct possesses state like properties, meaning that burnout can develop over time depending on the factors which influence its occurrence (Van Tonder & Williams, 2009). Factors which influence the onset of burnout are job, occupational and organisational characteristics, as well as individual factors such as personality characteristics (Maslach, Schaufelli, & Leiter, 2001). The process of burnout can be described as the gap experienced between what is ‘anticipated’ and what is ‘perceived’, when individuals feel that they are unable to perform in a manner they expected to, it often results in individuals feeling worthless and frustrated, which leads to burnout (Friedman, 2000).

Maslach, Schaufeli and Leiter (2001) distinguished three dimensions inherent in burnout, these dimensions consist of exhaustion, cynicism and reduced personal efficacy. Feelings of
decreased emotional resources individuals possess can be described as exhaustion. Cynicism refers to a negative, pessimistic attitude individuals have towards their work. While reduced professional efficacy can be described as feelings of incompetency which individuals possess. Within the education profession, burnout can be conceptualised as including three distinct dimensions; emotional exhaustion, depersonalisation and low personal accomplishment (Maslach et al., 1996). Emotional exhaustion can be described as feelings of being emotionally over-extended and exhausted, while depersonalisation refers to the development of negative feelings about work (Sari, 2004). Reduced personal accomplishment is experienced when there are decreased feelings of competence and achievement (Sari, 2004).

An alternative conceptualisation of burnout was put forward by Demerouti (1999), with the development of the Oldenburg Burnout Inventory. This conceptualisation of burnout encompasses two dimensions of the construct; exhaustion and disengagement (Demerouti, 1999). Exhaustion can be described as occurring because of increased exposure to particular job demands, which is a result of intensive physical, affective and cognitive strain (Demerouti, Bakker, & Mostert, 2010). This conceptualisation of exhaustion includes the physical, affective and cognitive components of burnout. Disengagement occurs when individuals distance themselves from work and develop negative attitudes about their jobs and work tasks. The conceptualisation of burnout put forward by Demerouti differs from that of Maslach, Schaufelli and Leiter, because this understanding of burnout does not include the personal efficacy dimension, as it is not believed to be a core dimension of burnout. It is believed that personal efficacy may be a result of burnout or it may be viewed as a personal characteristic, similar to that of self-efficacy (Demerouti & Bakker, 2007). Demerouti’s (1999) conceptualisation of burnout was used for this research study as it is a newer more relevant conceptualisation of burnout which proposes an understanding of the effects of burnout on educators as a result of the pervasive and taxing demands they endure.
Research has shown that burnout is not an outcome based on individual deficiencies but is rather an outcome of an individual’s work environment (Burke & Greenglass, 2001; Houkes, De Jonge & Bakker, 2003). The occurrence of burnout develops through extensive exposure to stressors in the work environment which results in the depletion of intrinsic energy resources (Toker & Biron, 2012). Burnout can be viewed as a distinct aspect of stress; it is the manner in which many individuals respond to stressors in the work environment, and is usually the result of demands which have been experienced by the individual (Shirom, 1989).

Exhaustion is a symptom most characteristic of burnout, as it often leads to individuals being unresponsive to their work tasks and dissatisfied with their work (Rothmann, 2003). Another critical aspect of burnout is the relationship individuals have with their work. There are times when individuals experience extremely high levels of exhaustion which often leads to them emotionally and cognitively distancing themselves from their work. This level of exhaustion usually results in individuals becoming unresponsive to the needs of others and the demands of their work tasks (Rothmann, 2003). Pines (1995) found burnout to be experienced by individuals who enter their careers with a strong sense of motivation, idealism and obligation. Those who are less motivated when entering their careers may still experience stress and isolation, but they will not experience burnout (Pines, 1995).

Burnout is a major problem being experienced by many individuals in a vast array of occupations; its effects have often led to individuals feeling de-motivated, unenthusiastic, ineffective and drained. Burnout amongst educators in South Africa is common, as South African teachers have unique taxing demands placed on them daily. South African teachers are often placed in situations where they have to teach massive classes (40 to 60 students) with inadequate resources and teaching equipment. There have also been issues regarding the introduction of the OBE system in 2000, which has increased the workload of teachers significantly (Van Tonder & Williams, 2009). Research conducted on burnout has shown that
it plays a factor in job turnover, absenteeism, low morale and job dissatisfaction (Rothmann, 2003). A study conducted by George, Louw and Badenhorst, (2008) in relation to burnout and job satisfaction amongst teachers in a Namibian school, found emotional exhaustion and depersonalisation to be correlated with low levels of job satisfaction. Since burnout has often been linked to the experience of stress and subsequently job dissatisfaction; job satisfaction is viewed as an outcome of burnout. With growing literature in positive psychology, it becomes necessary to research job satisfaction as a way of combating burnout. Within the teaching profession in South Africa it has become of paramount to focus on the positive aspects of individuals and work (POB), which can be seen as leading to job satisfaction.

2.6. Job Satisfaction

Locke (1976) defined job satisfaction as “...a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experiences” (p. 1304). Implicit in this definition of job satisfaction is the importance of both affect and cognition. The evaluation of a job, therefore involves both thinking and feelings, which can be linked to the affective and cognitive aspects of subjective wellbeing. Job satisfaction has become increasingly important over the past few years as organisations face turbulent times, where employee turnover is on the rise and where high performance is a necessity for organisations to survive. Job satisfaction has been researched extensively to determine its link to worker productivity and organisational effectiveness (Menon & Athanasoula-Reppa, 2011). Job satisfaction can be viewed as resource that individuals can draw from, as job satisfaction may serve as a buffer against negative influences in the workplace, such as burnout (Van Saane, Sluiter, Verbeek, & Frings-Dresen, 2003). Shann (1998) emphasised that teacher job satisfaction should be understood as a multifaceted construct; he also proposed that teacher job satisfaction is
directly linked to teacher commitment and retention and therefore it contributes to school effectiveness.

There have been many theorists who have outlined different conceptualisations of job satisfaction. Maslow (1954) proposed a hierarchy of needs to understand job satisfaction. The first layer of the needs hierarchy is focused on basic needs, the second layer is focused in security needs, the third layer is focused on social needs, the fourth layer is focused on esteem needs, while the fifth layer is focused on self-actualisation needs; therefore they believe that individuals achieve satisfaction when their needs on all levels are met. George, Louw and Badenhorst (2008), found a direct correlation between job satisfaction and self-actualisation, which is the fifth layer of Maslow’s hierarchy of needs. Herzberg, Mausner and Synderman (1959) proposed a different conceptualisation of job satisfaction. These theorists distinguished two factors related to the understanding of job satisfaction, these are; intrinsic factors and extrinsic factors. Intrinsic factors refers to the motivation that emanates from within an individual, individuals are motivated because of pleasure or satisfaction they experience; while extrinsic factors refers to motivation that stems from external motivators such as rewards; which lead to favourable outcomes. Intrinsic factors are believed to have a positive effect on satisfaction, while extrinsic factors are believed to cause dissatisfaction if they are not present, but they do not increase satisfaction if they are present (Menon & Athanasoula-Reppa, 2011). A conceptualisation of intrinsic and extrinsic job satisfaction put forward by Weiss, Dawis, England and Lofquist (1967), describes intrinsic satisfaction as the feelings individuals possess regarding the nature of their work tasks. While extrinsic satisfaction is described as the feelings individuals possess regarding aspects of their work environment (Weiss, Dawis, England, & Lofquist, 1967).

A study conducted by Tuetttemann (1991) found that intrinsic factors played a major role in job satisfaction for teachers in Australia. Scott et al. (1999) found that teachers in the United
Kingdom experienced job satisfaction as a result of intrinsic factors of their work. Another study conducted by Mwamwenda (1995) with teachers in the Transkei, found that intrinsic factors were important for teachers achieving job satisfaction. Nhundu (1994) discovered that self-appraisals and role clarity factors were predictors of job satisfaction for teachers in Zimbabwe. This study also revealed that intrinsic factors were more important than extrinsic factors for the attainment of job satisfaction (Nhundu, 1994). A study conducted by Chimbganda (1999) in Botswana, found that extrinsic factors were more important for job satisfaction. Locke (1976) put forth a value theory, in which he believed individuals achieved job satisfaction when they perceived their work as meaningful and fulfilling, and their levels of commitment and productivity increased. According to Locke (1976), high levels of commitment and productivity is an indicator of job satisfaction. Mosley et al. (1993) proposed that job satisfaction is attained when individuals acquire rewards from their jobs. While Greenberg and Baron (1993) assert that job satisfaction is attained when an individual’s work outcomes match the desires of that individual.

Hackman and Oldham (1976) proposed the job characteristics model as a manner of explaining how certain characteristics of a job can intrinsically motivate individuals and thereby increase their levels of job satisfaction. Hackman and Oldman (1976) outlined five work dimensions which contribute to positive work outcomes, such as job satisfaction. These five work dimensions are skill variety, task identity, task significance, autonomy and task feedback (Faturochman, 1997). Skill variety refers to the many skills and talents required by individuals to complete a work task, while task identity refers to the full completion of a work task, from beginning to end with a visible outcome (Hackman & Oldham, 1976). Task significance refers to the impact a job has on the lives of others (Faturochman, 1997). Autonomy is understood as the freedom an individual possesses in undertaking a work task, while task feedback refers to the information individuals receive about how effectively they
have performed a work task (Hackman & Oldham, 1976). A study conducted by Said and Munap (2010) found a relationship between all five dimensions inherent in the job characteristics model and job satisfaction.

Hackman and Oldham (1976) further suggested that jobs should be designed to increase the presence of these five characteristics, and if this is done then it may result in the emergence of three critical psychological states in individuals. These states are (a) experienced meaningfulness of work, (b) experienced responsibility for work outcomes and (c) knowledge of the results of work activities (Ololube, n.d). Individuals experience work as meaningful when their work is viewed as worthwhile and becomes valued by themselves or someone else. Responsibility for work outcomes is experienced when individuals feel accountable for the results of their work tasks. Knowledge of the results of work tasks is acquired when individuals are made aware of how effectively they are performing their tasks. According to Hackman and Oldham (1976) the experience of these three critical psychological states will result in high levels of job satisfaction being experienced by individuals.

Research regarding job satisfaction amongst teachers has received increased attention recently as the teaching profession is subject to a declining status as many teachers are becoming dissatisfied with their positions, which often leads to high turnover rates (Gendin & Sergeev, 2002). There have also been issues regarding the retention of qualified teachers in underprivileged schools, as many teachers are dissatisfied with both intrinsic and extrinsic factors in their work (Farrel & Oliveira, 1993). Buckley, Schneider and Shang (2005) have reported high turnover rates of teachers over the past few decades in developing countries. These outlined issues indicate the need for more research on job satisfaction to be conducted as it may aid in the retention of teachers, which is imperative as teachers provide the youth with fundamental building blocks to direct their lives. Steyn (1992) proposed that the different attitudes of a teacher, their physical wellbeing, life expectancy, absenteeism,
turnover and their success in the profession are all dependent on the degree of job satisfaction experienced by the teacher. Steyn (1992) further proposed that the effectiveness of an educational system is dependent to a large extent on the job satisfaction experienced by the teachers employed in that system.

2.7. Theoretical Framework

The theoretical framework in which this research study was conducted was the Conservation of Resources Theory (COR), which was developed by Hobfoll in 1989. This theory is related to the positive psychology paradigm because the theory consists of principles that can be understood as incorporating all the elements necessary to form positive emotions, positive individual traits and positive institutions, which are the three main propositions of the positive psychology paradigm. The conservation of resources theory, “…holds that everyone seeks to conserve the quantity and quality of their resources and to limit any circumstance that might endanger the quantity or quality of these resources” (Lee, 2010, p. 1).

Individuals experience stress as a consequence of factors threatening to diminish their resources, they then seek to retain their resources in order to maintain equilibrium. Individuals aim to build and acquire more resources in the aim of being able to withstand any demand placed on them and to leave the situation with as many resources as they possibly can. The notion that individuals try to preserve their resources in order to maintain their equilibrium and derive pleasure from un-stressful experiences is a notion that has had a long history in the field of psychology. Freud introduced the pleasure principle which is the notion that humans instinctually seek that which is pleasurable (Freud, 1900), while Maslow (1968) proposed that people seek physical resources, then social resources, then psychological resources, in a hierarchical manner. In order for individuals to experience a demand as
threatening to their resources, they need to conceptualise what is being experienced, as well
as what resources they are trying to protect. Conservation of resources theory postulates that
this feeling being experienced is conceptualised as stress. “Stress is defined as a reaction to
the environment in which there is, (a) the threat of net loss of resources, (b) the net loss of
resources, or (c) a lack of resource gain following the investment of resources” (Hobfoll,
1989). Individuals experience stress even when stress is merely perceived; therefore the mere
thought of a demand diminishing resources is sufficient to create the feeling of stress.

COR places emphasis on resources which influences an individual’s ability to cope with
stressors. “Resources are defined as those objects, personal characteristics, conditions, or
energies that are valued by the individual or that serve as a means for attainment of these
objects, personal characteristics, conditions or energies” (Hobfoll, 1989). Resources are
important to and protected by individuals because they contain instrumental value as well as
symbolic value to them. According to the conservation of resources theory individuals may
possess four resources that if threatened to lose will result in stress being experienced by the
individual. The first resource is, “object resources which is valued because of some aspect of
their physical nature or because of their acquiring secondary status value based on their rarity
and expense” (Hobfoll, 1989). The second resource is, “Conditions which is resources to the
extent that they are valued and sought after” (Hobfoll, 1989). The third resource is, “Personal
characteristics which is resources to the extent that they generally aid stress resistance”
(Hobfoll, 1989). The fourth resource is, “Energies which includes time, money and
knowledge” (Hobfoll, 1989). Another resource is social support, this doesn’t fit into any
specific category but can be used in any circumstance, and it is used to, “provide or facilitate
the preservation of valued resources” (Hobfoll, 1989).

PsyCap serves as a personal characteristic resource as the four resources it comprises of (self-
efficacy, optimism, hope and resiliency) may result in increased wellbeing when the levels of
these four resources are high (Culberston, Fullagar, & Mills, 2010). Research needs to be conducted illustrating the effect of positive emotions and positive resources, and how these positive capacities may mediate between burnout and improve the wellbeing of individuals and lead to satisfaction.

2.8. Summary

This chapter has provided a detailed account of the literature surrounding PsyCap, Subjective Wellbeing, Burnout and Job Satisfaction. Through the literature review each of the four constructs being used in this research study has been conceptualised. The chapter has also provided an account of the results of previous research that was conducted using the four constructs of this research study. This chapter has also outlined the theoretical framework (Conservation of Resources Theory) underlying this research study.
CHAPTER 3

RESEARCH METHODOLOGY

3.1. Introduction

This chapter provides a detailed account of the research design and process utilised in this research study. The research methodology used in the study; the sampling technique used to sample educators; the characteristics of the participants; and the method and instruments used to collect, and analyse the data are explored.

3.2. Research Design

The research study was conducted using a quantitative research design. Quantitative research is, “explaining phenomena by collecting numerical data that are analyzed using mathematically based methods (in particular statistics)” (Creswell, 1994). The quantitative paradigm was the most appropriate design for this research study. It had the advantage of keeping the study objective and allowed for the aims of the study to be deduced from the data. The quantitative paradigm was also the most appropriate design for this particular research study as it is cost effective; which was relevant for this research study because the researcher faced budget constraints. The quantitative design allowed the study to be conducted in a certain time frame, which was important to the researcher who faced time constraints. The current research study was conducted using a cross-sectional research design as this design measured data at one specific time. “In cross-sectional studies variables of interest in a sample of subjects are assayed once and the relationships between them are determined” (Hopkins, 2000. p. 2). The research study was conducted during an eight month
period which made the cross sectional research design the most appropriate, as the researcher had a specific time frame to assess the educators due to school holidays.

3.3. Sampling

The research study made use of a non-probability sampling strategy. Non-probability sampling was used because participants were chosen based on accessibility (Kitchenham & Pfleeger, 2002). The sample was selected using convenience sampling. The reason this sampling technique was used is because it allowed the researcher to sample participants based on easy accessibility and it had the advantages of being a cheaper and more time efficient sampling technique (Kitchenham & Pfleeger, 2002). These advantages pertained to the researcher as he/she faced budget and time constraints.

The number of educators sampled across the four different educational institutions was 103. The sample consisted of 89 female participants and 14 male participants. The majority of the sample were in the 41 and older age group (57.3%). 12.6% of the participants were in the 36 to 40 year age group; 8.7% of the participants were in the 31 to 35 year age group; and 13.6% of the participants were in the 26 to 30 year age group category; while only 7.8% of the participants were in the 20 to 25 year age group. The racial demographics showed that most of the participants belonged to the White race group (74); followed by the Indian (22); African (6); and Coloured (1) race groups. The majority of participants had obtained a Diploma (37.9%), while a large percentage of the participants had obtained Degrees (32.0%). 18.4% of the participants had obtained their Honours qualification, and only five participants had obtained their Masters degree (4.9%). Seven participants had only obtained the Matric certificates (6.8%). The majority of the participants had been working for their educational
institution for over 10 years (45.6%). The characteristics of the participants can be found in Table 1.

Table 1

*Characteristics of Participants*

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>14</td>
<td>103</td>
<td>13.6</td>
</tr>
<tr>
<td>Female</td>
<td>89</td>
<td>103</td>
<td>86.4</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African</td>
<td>6</td>
<td>103</td>
<td>5.8</td>
</tr>
<tr>
<td>Indian</td>
<td>22</td>
<td>103</td>
<td>21.4</td>
</tr>
<tr>
<td>Coloured</td>
<td>1</td>
<td>103</td>
<td>1.0</td>
</tr>
<tr>
<td>White</td>
<td>74</td>
<td>103</td>
<td>71.8</td>
</tr>
<tr>
<td><strong>Age Group</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-25</td>
<td>8</td>
<td>103</td>
<td>7.8</td>
</tr>
<tr>
<td>26-30</td>
<td>14</td>
<td>103</td>
<td>13.6</td>
</tr>
<tr>
<td>31-35</td>
<td>9</td>
<td>103</td>
<td>8.7</td>
</tr>
<tr>
<td>36-40</td>
<td>13</td>
<td>103</td>
<td>12.6</td>
</tr>
<tr>
<td>41 and older</td>
<td>59</td>
<td>103</td>
<td>57.3</td>
</tr>
<tr>
<td><strong>Qualifications</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 12</td>
<td>7</td>
<td>103</td>
<td>6.8</td>
</tr>
<tr>
<td>Diploma</td>
<td>39</td>
<td>103</td>
<td>37.9</td>
</tr>
<tr>
<td>Degree</td>
<td>33</td>
<td>103</td>
<td>32.0</td>
</tr>
<tr>
<td>Honours</td>
<td>19</td>
<td>103</td>
<td>18.4</td>
</tr>
<tr>
<td>Masters</td>
<td>5</td>
<td>103</td>
<td>4.9</td>
</tr>
<tr>
<td><strong>Tenure</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-2 years</td>
<td>13</td>
<td>103</td>
<td>12.6</td>
</tr>
<tr>
<td>3-4 years</td>
<td>13</td>
<td>103</td>
<td>12.6</td>
</tr>
<tr>
<td>5-6 years</td>
<td>17</td>
<td>103</td>
<td>16.5</td>
</tr>
<tr>
<td>7-8 years</td>
<td>10</td>
<td>103</td>
<td>9.7</td>
</tr>
<tr>
<td>9-10 years</td>
<td>3</td>
<td>103</td>
<td>2.9</td>
</tr>
<tr>
<td>Over 10 years</td>
<td>47</td>
<td>103</td>
<td>45.6</td>
</tr>
</tbody>
</table>
3.4. Data Collection

The data collection technique that was used for this study was the survey design. A survey design is, “a design in which data is collected with questionnaires or through personal interviews with members of an identified population” (Design, n.d). This design was used because it allowed for the collection of data that could not directly be observed; such as attitudes and emotional states. Information regarding these unobservable states was collected through the use of questionnaires (Cozby, 2004). The use of the survey design was also the most appropriate as it allowed the researcher to distribute the questionnaires amongst a large number of participants at one specific time.

3.5. Measuring Instruments

Data was collected through the use of 5 instruments: A Biographical Questionnaire, Psychological Capital Questionnaire, Satisfaction with Life Scale, Burnout Inventory and Minnesota Job Satisfaction Questionnaire. All five of the questionnaires were closed-ended; therefore participants simply chose their responses amongst the possible categories.

The biographical questionnaire was developed by the researcher and was used to collect information regarding the demographics of the participants in the study. Demographic information that was collected pertained to the participants’ gender, age group, race group, highest qualification obtained and the number of years participants had worked at the educational institution. (See Appendix C).

PsyCap was measured using the Psychological Capital Questionnaire (PCQ), which was developed by Luthans, Avolio, Avey and Norman (2007). The PCQ consists of 24 items on a 6 point likert scale, the scale measured items according to six categories: 1= strongly
disagree, 2 = disagree, 3 = somewhat disagree, 4 = somewhat agree, 5 = agree, and 6 = strongly agree. The PCQ consists of four subscales which measure self-efficacy, hope, optimism and resilience. An item reflecting the self efficacy subscale is “I feel confident helping to set targets/goals in my work area”. An item reflecting the hope subscale is “If I should find myself in a jam at work, I could think of many ways to get out of it”. An item reflecting the optimism subscale is “I always look on the bright side of things regarding my job”. An item reflecting the resilience subscale is “I usually take stressful things at work in stride”. Luthans, Avolio, Avey and Norman (2007) found the cronbach alpha reliability of PsyCap to be 0.89 and the cronbach alpha reliabilities of the four subscales were found to be 0.85, 0.80, 0.79 and 0.72 respectively. A study conducted by Du Plessis and Barkhuizen (2012) in South Africa, found the reliability coefficients of the four subscales to be 0.86, 0.86, 0.77 and 0.81 respectively. These cronbach alpha reliabilities indicate a high internal consistency between the items in the PCQ. (See Appendix D).

Subjective Wellbeing was measured using the Satisfaction with Life Scale (SWLS), which was developed by Diener, Emmons, Larson and Griffin (1985). The satisfaction with life scale consists of 5 items on a 7 point likert scale. The scale measured items according to seven categories: 1 = Strongly Agree, 2 = Agree, 3 = Agree Somewhat, 4 = Undecided, 5 = Disagree Somewhat, 6 = Disagree, and 7 = Strongly Disagree. Eid and Diener (2004) found a very high cronbach alpha coefficient of 0.90, which indicated very high internal consistency for the items in the satisfaction with life scale. A study conducted by Maluka and Grieve (2003) in South Africa found the cronbach alpha coefficient of the SWLS to be 0.77. (See Appendix E).

Burnout was measured using the Oldenberg Burnout Inventory (OLBI), which was developed by Demerouti (1999). The OLBI consists of 16 items on a 4 point likert scale. The scale measured items according to 4 categories: 1 = Strongly Agree, 2 = Agree, 3 = Disagree, 4 =
Strongly Disagree. The OLBI consists of two subscales which measure exhaustion and disengagement. An item reflecting the exhaustion subscale is “After my work, I usually feel worn out and weary”. An item reflecting the disengagement is “Over time, one can become disconnected from this type of work”. A South African study conducted by Tilakdharee, Ramidial and Parumasur (2010) found the cronbach alpha reliabilities for the two subscales to be 0.82 and 0.80 respectively and found the cronbach alpha for the OLBI to be 0.93. (See Appendix F).

Job Satisfaction was measured using the Minnesota Job Satisfaction Questionnaire (MSQ), which was developed by Weiss, Dawis, England and Lofquist (1967). The MSQ consists of 20 items on a 5 point likert scale. The scale measured items according to 5 categories: 1 = Very Dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied and 5 = Very Satisfied. The MSQ consists of three subscales, which measures intrinsic satisfaction, extrinsic satisfaction and general satisfaction. An item reflecting the intrinsic subscale is “Being able to keep busy all the time”. An item reflecting the extrinsic subscale is “The way my boss handles his/her workers”. General satisfaction is a summation of all 20 items. Arvey, Abraham, Bouchard and Segal (1989) found the cronbach alpha reliabilities for the three subscales to be 0.86, 0.80 and 0.90 respectively. A South African study conducted by Buitendach and Rothmann (2009), found the cronbach alpha reliabilities for the three subscales to be 0.82, 0.79 and 0.86. (See Appendix G).

According to Nunally and Bernstein (1994) reliability coefficients of scales should be greater than 0.70. Since the cronbach alpha coefficients for all four questionnaires were found to be greater than 0.70, these questionnaires were considered acceptable to be used for this study.
3.6. Research Procedure

The following procedure applied to all four educational institutions. Data collection took place over a period of two weeks. The researcher phoned the secretaries of each of the four schools participating in the study; and set up a meeting with the principal of each the schools. The researcher discussed the details and the objectives of the research study with each of the principals. A letter of permission was obtained from all four principals and the date for the distribution of questionnaires was determined, which will was agreed on by each of the principals. (See Appendix B).

Educators who were willing to participate in the study were provided with a letter describing the nature of the research study and the objectives of the study. Issues of confidentiality and anonymity were outlined in the letter. Each educator was provided with an informed consent form before they participated in the research study.

The researcher personally distributed all questionnaires to each of the educator’s in the four schools’ participating in the study, during July 2012. The two week period was decided on by the schools as this period provided the educators adequate time to complete their questionnaires. All participants were informed by the researcher that they should submit their completed questionnaires in a collection box placed in their staff rooms. The researcher placed a collection box in the staff room at each of the four participating schools, with a notice attached to it outlining the due date for the collection of the questionnaires. At the end of the two week period, the researcher picked up all four collection boxes containing the completed questionnaires.
3.7. Data Analysis Method

Data was analysed using SPSS statistical software, version 19 (SPSS, 2009). The research study first made use of descriptive statistics to describe the data. Through descriptive statistics the minimum and maximum scores of each questionnaire were obtained, the standard deviation, mean, kurtosis and skewness values were also calculated. The cronbach alpha of each questionnaire was determined to ensure that there was internal consistency. According to Nunally and Bernstein (1994) reliability coefficients should be greater than 0.70 to be considered internally consistent.

Confirmatory factor analysis was conducted to investigate construct validity. Confirmatory factor analysis was conducted on PsyCap, Burnout and Job Satisfaction. Confirmatory factor analysis, “is a statistical technique used to verify the factor structure of a set of observed variables” (Suhr, nd, p. 1). The PsyCap questionnaire consists of four subscales, the OLBI consists of two subscales and the Job Satisfaction scale consists of three subscales; it was therefore necessary to conduct factor analysis. Factor analysis allowed for the factors influencing the participants’ responses to be determined and it allowed for the identification of underlying factors (Suhr, nd). Confirmatory factor analysis was also necessary to determine the factors which best represents the data. Before confirmatory factor analysis was conducted on the PCQ, items 13, 20 and 23 were reversed. Before confirmatory factor analysis was conducted on the OLBI, items 2, 3, 4, 6, 8, 9, 11 and 12 were reversed. These items were reversed due to negative wording of the items.

Inferential statistics were used to make inferences about the population. The current research study made use of the Pearson r correlation analysis to determine the relationship between PsyCap, Subjective Wellbeing, Burnout and Job Satisfaction. The relationship between PsyCap, Subjective Wellbeing, Burnout and Job Satisfaction was evaluated to determine
whether they were practical and/or statistically significant relationships. The researcher made use of the following guidelines to determine the importance of practically and statistically significant relationships: 0,3=medium effect; 0,5=large effect (Steyn, 2002).

Once a significant relationship was found between PsyCap, Subjective Wellbeing and Burnout; a linear regression analysis was used to test if PsyCap mediated the relationship between Subjective Wellbeing and Burnout. According to Baron and Kenny (1986) mediation is supported if: (i) The first regression equation shows that Subjective Wellbeing (IV) predicts PsyCap (MV). (ii) The second regression equation shows that PsyCap and Subjective Wellbeing (MV and IV) predict Burnout (DV). (iii) The third regression equation shows that Burnout (MV) is regressed on Subjective Wellbeing (IV). A Sobel test was used to support the mediating effect of PsyCap; the Sobel test assessed whether PsyCap carried the effects of Subjective Wellbeing to Burnout.

3.8. Ethical Considerations

Ethical issues of anonymity and confidentiality were dealt with by providing participants with an informed consent form, which they had to provide their signature. This ensured that participants’ identities would not be disclosed and that there would be no identifying information of participants or the educational institutions, at any time, either through academic presentations, and/or publications. Participants as well as the participating educational institutions would only be referred to, in all presentations, and/or publications, using pseudonyms. Participants were also informed that their participation was entirely voluntary and that they were free to withdraw from the study at any time that they felt uncomfortable, with no negative implications. Lastly the ethical concerns regarding the data after the completion of the research study would be dealt with by ensuring that all
questionnaires would be locked away in a file cabinet in the University of Kwazulu Natal’s School of Applied Human Sciences department for a period of five years. After this five year period, questionnaires will be disposed of by the shredding of each questionnaire.

3.9. Summary

This chapter has provided a detailed account of how the research study was conducted. The chapter has provided an explanation of the research design of the study, the sampling technique that was used in the study, the measuring instruments that were used, the method for data collection was discussed, and the procedure for the study was outlined. This chapter also provided an account of how the data was analysed. This chapter included a table highlighting the characteristics of the participants used in the study. This chapter also outlined the ethical considerations that were followed during the conduction of the research study.
CHAPTER 4
RESULTS

4.1. Introduction
This chapter provides a comprehensive discussion on the results found in this research study. This chapter provides the results of the factor analysis conducted on PsyCap, Burnout and Job Satisfaction. The Cronbach alpha reliabilities of all scales and their factors are provided. The result of a Pearson correlation analysis is provided which indicates the statistical and practical significance of the relationships between the constructs. This chapter also provides the results of a linear regression analysis and a multiple regression analysis, which was used to determine if PsyCap mediated the relationship between subjective wellbeing and burnout.

4.2. Confirmatory Factor Analysis
A confirmatory factor analysis was conducted on the items of the Psychological Capital Questionnaire (PCQ), Oldenburg Burnout Inventory (OLBI), and the Minnesota Job Satisfaction Questionnaire (MSQ).

Confirmatory factor analysis was conducted on PsyCap to determine the number of factors inherent in the scale. Before a confirmatory factor analysis was conducted on the PsyCap scale, items 13, 20 and 23 were reverse coded. An analysis of the eigenvalues and the scree plot revealed that only 1 factor could be extracted. Twenty three of the twenty four items loaded on this one factor. This one factor was labeled PsyCap. This one factor included all four subscales of PsyCap; therefore this one factor included items reflecting all four positive psychological states. A reliability analysis was conducted on this 1 extracted factor and the reliability coefficient was as follows: Factor 1 = 0.91 (See Table 5).
Table 2

*Pattern Matrix of the PCQ*

<table>
<thead>
<tr>
<th>Item</th>
<th>PsyCap</th>
<th>Item</th>
<th>PsyCap</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCQ 1</td>
<td>0.67</td>
<td>PCQ 13</td>
<td>0.47</td>
</tr>
<tr>
<td>PCQ 2</td>
<td>0.55</td>
<td>PCQ 14</td>
<td>0.70</td>
</tr>
<tr>
<td>PCQ 3</td>
<td>0.67</td>
<td>PCQ 15</td>
<td>0.46</td>
</tr>
<tr>
<td>PCQ 4</td>
<td>0.73</td>
<td>PCQ 16</td>
<td>0.56</td>
</tr>
<tr>
<td>PCQ 5</td>
<td>0.60</td>
<td>PCQ 17</td>
<td>0.62</td>
</tr>
<tr>
<td>PCQ 6</td>
<td>0.58</td>
<td>PCQ 18</td>
<td>0.69</td>
</tr>
<tr>
<td>PCQ 7</td>
<td>0.65</td>
<td>PCQ 19</td>
<td>0.43</td>
</tr>
<tr>
<td>PCQ 8</td>
<td>0.76</td>
<td>PCQ 20</td>
<td>-</td>
</tr>
<tr>
<td>PCQ 9</td>
<td>0.57</td>
<td>PCQ 21</td>
<td>0.63</td>
</tr>
<tr>
<td>PCQ 10</td>
<td>0.53</td>
<td>PCQ 22</td>
<td>0.43</td>
</tr>
<tr>
<td>PCQ 11</td>
<td>0.65</td>
<td>PCQ 23</td>
<td>0.43</td>
</tr>
<tr>
<td>PCQ 12</td>
<td>0.68</td>
<td>PCQ 24</td>
<td>0.57</td>
</tr>
</tbody>
</table>
Confirmatory factor analysis was conducted on the OLBI scale to determine the number of factors inherent in the scale. Before a confirmatory factor analysis was conducted on the OLBI scale, items 2, 3, 4, 6, 8, 9, 11 and 12 were reverse coded. An analysis of the eigenvalues showed that 2 factors could be extracted. The scree plot also showed that 2 factors could be extracted. Twelve of the sixteen items loaded on the two factors. Factor 1 was labelled Disengagement (Demerouti, Mostert & Bakker, 2010). This factor included items which indicated that individuals distanced themselves from work and formed negative attitudes about their jobs and work tasks. An item illustrating Disengagement is “It happens more and more often that I talk about my work in a negative way”. Factor 2 was labelled Exhaustion (Demerouti, Mostert & Bakker, 2010). This factor included items which indicated that individuals felt like their emotional resources were depleted. An item illustrating Exhaustion is “After my work, I usually feel worn out and weary”. A reliability analysis was conducted on the two extracted factors and the reliability coefficients were as follows: Factor 1 = 0.73 and Factor 2 = 0.69 (See Table 5).
Table 3

*Pattern Matrix of the OLBI*

<table>
<thead>
<tr>
<th>Item</th>
<th>Disengagement</th>
<th>Exhaustion</th>
</tr>
</thead>
<tbody>
<tr>
<td>OLBI 1</td>
<td>0.79</td>
<td>-</td>
</tr>
<tr>
<td>OLBI 2</td>
<td>-</td>
<td>0.83</td>
</tr>
<tr>
<td>OLBI 3</td>
<td>0.52</td>
<td>-</td>
</tr>
<tr>
<td>OLBI 4</td>
<td>-</td>
<td>0.75</td>
</tr>
<tr>
<td>OLBI 5</td>
<td>0.60</td>
<td>-</td>
</tr>
<tr>
<td>OLBI 6</td>
<td>0.67</td>
<td>-</td>
</tr>
<tr>
<td>OLBI 7</td>
<td>0.68</td>
<td>-</td>
</tr>
<tr>
<td>OLBI 8</td>
<td>-</td>
<td>0.68</td>
</tr>
<tr>
<td>OLBI 9</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>OLBI 10</td>
<td>-</td>
<td>0.63</td>
</tr>
<tr>
<td>OLBI 11</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>OLBI 12</td>
<td>-</td>
<td>0.63</td>
</tr>
<tr>
<td>OLBI 13</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>OLBI 14</td>
<td>-</td>
<td>0.61</td>
</tr>
<tr>
<td>OLBI 15</td>
<td>0.79</td>
<td>-</td>
</tr>
<tr>
<td>OLBI 16</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Confirmatory factor analysis was also conducted on the MSQ. An analysis of the eigenvalues revealed that 2 factors could be extracted. However, the scree plot showed that 1 factor could be extracted. Fourteen of the twenty items loaded on this one factor. This one factor was labelled General Satisfaction. The general satisfaction factor included both the intrinsic and
extrinsic subscales of job satisfaction. General satisfaction included items related to the feelings individuals possessed regarding the nature and aspects of their work tasks and work environment. A reliability analysis was conducted on the one extracted factor and the reliability coefficient was as follows: Factor 1= 0.88 (See Table 5).

Table 4

*Pattern Matrix of the MSQ*

<table>
<thead>
<tr>
<th>Item</th>
<th>General Satisfaction</th>
<th>Item</th>
<th>General Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSQ 1</td>
<td>-</td>
<td>MSQ 11</td>
<td>0.49</td>
</tr>
<tr>
<td>MSQ 2</td>
<td>-</td>
<td>MSQ 12</td>
<td>0.75</td>
</tr>
<tr>
<td>MSQ 3</td>
<td>0.41</td>
<td>MSQ 13</td>
<td>0.58</td>
</tr>
<tr>
<td>MSQ 4</td>
<td>-</td>
<td>MSQ 14</td>
<td>0.57</td>
</tr>
<tr>
<td>MSQ 5</td>
<td>0.77</td>
<td>MSQ 15</td>
<td>0.76</td>
</tr>
<tr>
<td>MSQ 6</td>
<td>0.54</td>
<td>MSQ 16</td>
<td>0.56</td>
</tr>
<tr>
<td>MSQ 7</td>
<td>-</td>
<td>MSQ 17</td>
<td>0.75</td>
</tr>
<tr>
<td>MSQ 8</td>
<td>-</td>
<td>MSQ 18</td>
<td>0.47</td>
</tr>
<tr>
<td>MSQ 9</td>
<td>0.45</td>
<td>MSQ 19</td>
<td>0.79</td>
</tr>
<tr>
<td>MSQ 10</td>
<td>-</td>
<td>MSQ 20</td>
<td>0.67</td>
</tr>
</tbody>
</table>

Following next is the descriptive statistics table for the constructs and their respective factors. The cronbach alpha coefficients of all the constructs and their factors are also provided.
4.3. Descriptive Statistics

Table 5

Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>M</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>PsyCap</td>
<td>103</td>
<td>66.00</td>
<td>138.00</td>
<td>109.77</td>
<td>14.72</td>
<td>-0.30</td>
<td>-0.14</td>
<td>0.91</td>
</tr>
<tr>
<td>SW</td>
<td>103</td>
<td>5.00</td>
<td>30.00</td>
<td>13.33</td>
<td>5.47</td>
<td>0.80</td>
<td>0.38</td>
<td>0.81</td>
</tr>
<tr>
<td>Burnout</td>
<td>103</td>
<td>18.00</td>
<td>51.00</td>
<td>35.91</td>
<td>6.90</td>
<td>-0.33</td>
<td>-0.19</td>
<td>0.86</td>
</tr>
<tr>
<td>Disengagement</td>
<td>103</td>
<td>7.00</td>
<td>22.00</td>
<td>14.07</td>
<td>3.09</td>
<td>-0.09</td>
<td>0.07</td>
<td>0.73</td>
</tr>
<tr>
<td>Exhaustion</td>
<td>103</td>
<td>4.00</td>
<td>17.00</td>
<td>11.98</td>
<td>2.51</td>
<td>-0.47</td>
<td>0.08</td>
<td>0.69</td>
</tr>
<tr>
<td>GS</td>
<td>103</td>
<td>28.00</td>
<td>67.00</td>
<td>52.57</td>
<td>8.43</td>
<td>-0.79</td>
<td>0.45</td>
<td>0.88</td>
</tr>
</tbody>
</table>

PsyCap = Psychological Capital

SW = Subjective Wellbeing

GS = General Satisfaction

A Komogorov-Smirnov test was conducted to assess the normality of PsyCap, Subjective Wellbeing, Burnout, and Job Satisfaction. The results of the Komogorov-Smirnov test revealed that there was no difference between the distributions of the sample and population as the significance values for all four scales were above 0.05; thus indicating that the sample distributions were normally distributed. The Cronbach alpha coefficient for all measuring instruments are considered to be acceptable compared to the guideline of $\alpha \geq 0.70$ (Nunnally
& Bernstein, 1994). The Cronbach alpha coefficient for the Psychological Capital scale was \( \alpha \geq 0.70, r = 0.91 \). The Cronbach alpha coefficient for the Subjective Wellbeing scale was \( \alpha \geq 0.70, r = 0.81 \). The Cronbach alpha coefficient for the Burnout scale was \( \alpha \geq 0.70, r = 0.86 \). The Cronbach alpha for Disengagement was \( \alpha \geq 0.70, r = 0.73 \). The Cronbach alpha for Exhaustion was \( \alpha \leq 0.70, r = 0.69 \). The Cronbach alpha for General Satisfaction was \( \alpha \geq 0.70, r = 0.88 \).

Since the reliability coefficients of all scales used in this study were found to be 0.70 and above; they were considered acceptable according to the guidelines of Nunnally and Berstein (1994); which states that reliability coefficients should be greater than 0.70 to be internally consistent.

Following next is the results of the Pearson correlation analysis, which reveals the practical and statistical significance of the relationships between each of the constructs and their respective factors.
4.4. Pearson Correlation Analysis

Table 6

*Pearson Correlations between the scales and factors*

<table>
<thead>
<tr>
<th></th>
<th>PsyCap</th>
<th>SW</th>
<th>Burnout</th>
<th>DE</th>
<th>EX</th>
<th>GS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PsyCap</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>SW</td>
<td>-0.30**+</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Burnout</td>
<td>-0.62**++</td>
<td>-0.37**+</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>DE</td>
<td>-0.64**++</td>
<td>-0.38**+</td>
<td>0.90**++</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>EX</td>
<td>-0.54**++</td>
<td>-0.24*</td>
<td>0.87**++</td>
<td>0.66**++</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>GS</td>
<td>0.52**++</td>
<td>0.42**+</td>
<td>-0.55**++</td>
<td>-0.57**++</td>
<td>-0.38**+</td>
<td>1</td>
</tr>
</tbody>
</table>

*p ≤ 0.05; **p ≤ 0.01

+ r ≥ 0.30 – Practically significant relationship (Medium effect)

++ r ≥ 0.50- Practically significant relationship (Large effect)

PsyCap = Psychological Capital

SW = Subjective Wellbeing

DE = Disengagement

EX = Exhaustion
Following the descriptive statistics analysis a Pearson correlation analysis was conducted to determine the relationship between Psychological Capital, Subjective Wellbeing, Burnout and Job Satisfaction. The correlation analysis indicated that PsyCap had a statistically and practically significant relationship with subjective wellbeing (medium effect); ($p \leq 0.01$, $r = 0.30$). The correlation analysis showed that PsyCap had a statistically and practically significant relationship with burnout (large effect); ($p \leq 0.01$, $r = 0.62$). PsyCap was also found to have a statistically and practically significant relationship with both subscales of burnout; disengagement and exhaustion (large effects); ($p \leq 0.01$, $r = 0.64$) and ($p \leq 0.01$, $r = 0.54$) respectively. The correlation analysis also revealed that PsyCap had a statistically and practically significant relationship with the job satisfaction (general satisfaction) (large effect); ($p \leq 0.01$, $r = 0.52$).

The correlation analysis showed that subjective wellbeing had a statistically and practically significant relationship with burnout (medium effect); ($p \leq 0.01$, $r = 0.37$). Subjective wellbeing was also found to have a statistically and practically significant relationship with disengagement (medium effect); ($p \leq 0.01$, $r = 0.38$). The correlation analysis also revealed that subjective wellbeing had a statistically significant relationship with exhaustion; ($p \leq 0.05$, $r = 0.24$). Subjective wellbeing was also found to have a statistically and practically significant relationship with job satisfaction (general satisfaction) (medium effect); ($p \leq 0.01$, $r = 0.42$).

Burnout was found to have statistically and practically significant relationship with both of its subscales; disengagement and exhaustion (large effects); ($p \leq 0.01$, $r = 0.90$); ($p \leq 0.01$, $r = 0.87$) respectively. The correlation analysis showed that burnout had a statistically and
practically significant relationship with job satisfaction (general satisfaction) (large effect); (p \leq 0.01, r = 0.55). Disengagement was found to have a statistically and practically significant relationship with exhaustion (large effect), (p \leq 0.01, r = 0.66). Disengagement was also found to have a statistically and practically significant relationship with job satisfaction (general satisfaction) (large effect), (p \leq 0.01, r = 0.57). The correlation analysis showed that exhaustion had a statistically and practically significant relationship with the job satisfaction (general satisfaction) (medium effect); (p \leq 0.01, r = 0.38).

Following next is the results of a simple linear regression analysis and a multiple regression analysis, which provides an indication of PsyCap mediating the relationship between subjective wellbeing and burnout.
4.5. Regression Analysis

Table 7

*Simple Linear Regression Analysis (Subjective Wellbeing and PsyCap)*

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>t</th>
<th>P</th>
<th>F</th>
<th>R</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>Beta</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Constant</td>
<td>120.02</td>
<td>3.69</td>
<td>32.50</td>
<td>0.00*</td>
<td>8.99</td>
<td>0.29</td>
</tr>
<tr>
<td></td>
<td>Subjective Wellbeing</td>
<td>-0.77</td>
<td>2.66</td>
<td>-0.29</td>
<td>-2.99</td>
<td>0.00*</td>
<td></td>
</tr>
</tbody>
</table>

*p ≤ 0.05

A linear regression analysis was conducted to determine whether Subjective Wellbeing predicts PsyCap. The results of the linear regression analysis indicates that Subjective Wellbeing predicts 82% of the variance in PsyCap; (F = 8.99, p ≤ 0.05, R² = 0.082).
A second linear regression analysis was conducted to determine whether PsyCap and Subjective Wellbeing predicted Burnout. The results of the linear regression analysis indicates that PsyCap predicts 38% of the variance in Burnout; (F = 62.98, p ≤ 0.05, R² = 0.384). The results also indicated that Subjective Wellbeing predicts 14% of the variance in Burnout; (F = 16.08, p ≤ 0.05, R² = 0.137).
Table 9

Mediated Regression Analysis

Regression analysis with Subjective Wellbeing and PsyCap as independent variables and Burnout as the dependent variable.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>T</th>
<th>P</th>
<th>F</th>
<th>R</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>Beta</td>
<td>T</td>
<td>P</td>
<td>F</td>
<td>R</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>29.69</td>
<td>1.68</td>
<td>17.71</td>
<td>0.00*</td>
<td>16.08</td>
<td>0.37</td>
</tr>
<tr>
<td></td>
<td>Subjective Wellbeing</td>
<td>0.47</td>
<td>0.17</td>
<td>0.37</td>
<td>4.01</td>
<td>0.00*</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>(Constant)</td>
<td>120.02</td>
<td>3.69</td>
<td>32.50</td>
<td>0.00*</td>
<td>8.99</td>
<td>0.29</td>
</tr>
<tr>
<td></td>
<td>PsyCap</td>
<td>-0.77</td>
<td>0.26</td>
<td>-0.29</td>
<td>-2.99</td>
<td>0.00*</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>(Constant)</td>
<td>61.14</td>
<td>4.66</td>
<td>13.13</td>
<td>0.00*</td>
<td>36.93</td>
<td>0.65</td>
</tr>
<tr>
<td></td>
<td>Subjective Wellbeing</td>
<td>0.27</td>
<td>0.10</td>
<td>0.21</td>
<td>2.66</td>
<td>0.009</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PsyCap</td>
<td>-0.26</td>
<td>0.04</td>
<td>-0.56</td>
<td>-7.07</td>
<td>0.00*</td>
<td></td>
</tr>
</tbody>
</table>

*p ≤ 0.05

A multiple regression analysis was conducted to determine whether PsyCap mediated the relationship between Subjective Wellbeing and Burnout. According to Baron and Kenny (1986) three steps must be fulfilled in order to test for mediation. To test for mediation beta coefficients of different regression equations must be compared (Baron & Kenny, 1986). Firstly, the mediator should be predicted by the independent variable. Secondly, the dependent variable should be predicted by the mediator and the independent variable. Lastly,
the dependent variable should be regressed on the independent variable, while controlling the mediator. If all the steps are conducted and they prove significant and the independent variable does not predict the dependent variable while controlling the mediator, it then indicates perfect mediation.

Table 9 demonstrates that 14% of the variance in Burnout is explained by Subjective Wellbeing; when PsyCap was entered into the analysis, 43% of the variance in Burnout was explained. Only the regression coefficient of PsyCap ($\beta = 0.56$) was statistically significant when it was entered with Subjective Wellbeing into the regression equation. Subjective Wellbeing was a statistically significant predictor of PsyCap (See Table 7) and Burnout (See Table 8). However, the regression coefficient of Subjective Wellbeing was not statistically significant when it was entered with PsyCap into the regression equation (See Table 9). It can therefore be deduced that PsyCap mediates the relationship between Subjective Wellbeing and Burnout. To further support this finding a Sobel Test was conducted. The Sobel test indicated $Z = 2.77$ and $p = 0.005$. According to this mediation analysis, PsyCap is confirmed as mediating the relationship between Subjective Wellbeing and Burnout.

4.6. Summary

This chapter has provided the results of factor analysis on the PsyCap, Burnout and Job Satisfaction constructs. The analysis revealed that a one factor model best suited the PsyCap construct; a two factor model best suited the Burnout construct; and a one factor model best suited the Job Satisfaction construct. This chapter has also provided the descriptive statistics, reliability coefficients and correlation analysis of all four constructs and their respective factors. This chapter also provided the results from the linear regression analysis and
mediated regression analysis, which indicated that PsyCap mediates the relationship between Subjective Wellbeing and Burnout.
5.1. Introduction

This chapter provides an inclusive discussion of the results obtained in this research study. A discussion on the results of the confirmatory factor analysis; reliability analysis; correlation analysis; linear regression analysis; and mediated regression analysis are provided.

5.2. Discussion

The general aim of the research study was to determine how PsyCap, Subjective Wellbeing, Burnout and Job Satisfaction have been conceptualised in literature. This aim was fulfilled through the literature review underlying the study. The second aim of the study was to determine the relationship between PsyCap, Subjective Wellbeing, Burnout and Job Satisfaction of educators in the Umlazi Region of KwaZulu Natal. The study lastly aimed to determine whether PsyCap mediated the relationship between Subjective Wellbeing and Burnout.

A confirmatory factor analysis was conducted on the items of the PCQ, OLBI and MSQ. The result of the factor analysis on the PCQ revealed that a one factor model best fitted the data. All four of the subscales inherent in PsyCap loaded on this one factor. Luthans et al. (2007) found that the four subscales of the PCQ can load separately on four different factors, indicating that all four of the subscales can provide a measure of PsyCap and their own subscale as well.

The result of the factor analysis for the OBLI showed that a two factor model best fitted the data. These two factors were labelled disengagement and exhaustion. These two factors
corresponded to the two factors that were found by Demerouti for the OLBI (Demerouti, 1999).

The result of the factor analysis for the MSQ revealed that a one factor model best fitted data. The intrinsic and extrinsic subscales of the MSQ loaded onto this one factor. George et al. (2008) found a three factor model of job satisfaction in their research; in their research they identified the intrinsic, extrinsic and general satisfaction subscales of job satisfaction. Rothmann (n.d) found a two factor model of job satisfaction in his research; Rothmann identified the intrinsic and extrinsic subscales of job satisfaction in his research. Weiss et al. (1967) suggested that a three factor model can be used to measure job satisfaction; however they proposed that the third factor was a summation of the intrinsic and extrinsic subscales. This research study thus labelled the one factor General Satisfaction, and it included both the intrinsic and extrinsic subscales of Job Satisfaction. The possible reason why a one factor model best fitted the data in this research study may be attributed to the relatively small sample size (n=103) of this study.

A reliability analysis was conducted to assess the psychometric properties of the Psychological Capital Questionnaire (PCQ), the Satisfaction with Life Scale (SWLS), the Oldenburg Burnout Inventory (OLBI), and the Minnesota Job Satisfaction Questionnaire (MSQ). The Cronbach alpha coefficients of all the measuring instruments were above 0.70, which indicated that they all had a high internal consistency. The Cronbach alpha coefficients were considered acceptable according to the guidelines of Nunnally and Bernstein (1994), which suggests that Cronbach alpha coefficients should be 0.70 and above. The Cronbach alpha coefficient of the PCQ was 0.90. Luthans et al. (2007) found a slightly lower reliability coefficient of 0.89 for the PCQ. The Cronbach alpha for the Satisfaction with Life Scale was
Eid and Diener (2004) found a higher reliability coefficient for the Satisfaction of Life Scale of 0.90. The Cronbach alpha coefficient of the OLBI was found to be 0.86. A higher reliability coefficient was found by Tilakdharee et al. (2010) for the OLBI of 0.93. The Cronbach alpha coefficient for the MSQ was found to be 0.86. Arvey et al. (1989) found a slightly higher reliability coefficient for the MSQ of 0.90.

A Pearson correlation analysis was conducted to determine the relationship between PsyCap, Subjective Wellbeing, Burnout, and Job Satisfaction. The result of the Pearson correlation revealed that there was a statistically and practically significant relationship between PsyCap and Subjective Wellbeing; however it was found to be an inverse relationship. This indicated that as educators levels of subjective wellbeing increased, their levels of PsyCap decreased. Research conducted by Avey et al. (2010), found a statistically and practically significant relationship between PsyCap and subjective wellbeing, however this relationship was not inverse. According to Luthans et al. (2007) the psychological resources comprised in PsyCap have developmental properties, indicating that these resources are open to development and they can be enhanced and drawn from when individuals are in need of them. These developmental properties of PsyCap suggest that these psychological resources will not be drawn on if individuals are feeling satisfied or if there is no need to draw on them. The finding from this research study supports the state/trait debate surrounding the construct of PsyCap. The result of the Pearson correlation suggests that educators that are satisfied with their lives, experience frequent positive emotions and infrequent negative emotions, are less likely to draw on the internal positive psychological resources inherent in PsyCap; thus resulting in an inverse relationship between PsyCap and Subjective Wellbeing.

PsyCap was found to have statistically and practically significant relationships with both
exhaustion and disengagement; these were also found to be inverse relationships. This finding suggests that when educators’ levels of PsyCap are high then their levels of exhaustion and disengagement are low. This finding can be explained through the theoretical framework underlying this study. The Conservation of Resources theory suggests that individuals work to conserve and protect their resources, and thus aim to increase their positive resources to deter and cope with stressors (Lee, 2010). The positive psychological resources inherent in PsyCap can serve as a personal characteristic resource. This suggests that as educators experience negative feelings and states due to exhaustion or disengagement as a result of their work tasks or environment, they draw on the positive psychological resources in PsyCap to counter against the effects of exhaustion and disengagement. Thus, as levels of their PsyCap increase, their levels of exhaustion and disengagement decrease. Herbert (2011) found that high levels of PsyCap were associated with low levels of burnout, which supports the possibility of PsyCap being a personal coping resource. The psychological resources inherent in PsyCap (self-efficacy, hope, optimism, and resilience) may prevent against the development and progression of burnout.

A statistically and practically significant relationship was found between PsyCap and job satisfaction. This finding indicates that high levels of PsyCap are correlated with high levels of job satisfaction amongst the educators. Larsons and Luthans (2006) found a statistically and practically significant relationship between PsyCap and job satisfaction. This finding highlights the positive effects of the psychological resources comprised in PsyCap. As educators’ levels of PsyCap increase, the more satisfied they are with factors pertaining to their jobs and the more satisfaction they derive from internal aspects of their jobs.

Subjective wellbeing was found to have statistically and practically significant relationships
with both exhaustion and disengagement; and these were found to be inverse relationships. The researcher could not find any research that had been conducted investigating the relationship between subjective wellbeing and burnout levels amongst educators. Vazi et al. (2011) suggests that subjective wellbeing can have positive effect on burnout and can have aiding potential during times of distress; thus deterring against the negative effects or the onset of burnout. This assertion is supported by the finding in this study; as educators’ levels of subjective wellbeing increased, their levels of disengagement and exhaustion decreased. Thus, indicating that subjective wellbeing may have deterred against the feelings of exhaustion and disengagement educators may have experienced in their work tasks and environment.

Job Satisfaction was found to have statistically and practically significant relationships with both exhaustion and disengagement; these were also found to be inverse relationships. George et al. (2008) found an inverse relationship between job satisfaction and burnout. This finding suggests that as the levels of job satisfaction increased amongst educators, their levels of disengagement and exhaustion decreased. Van Saane et al. (2003) proposed the possibility of job satisfaction serving as a resource to deter against the negative effects of burnout. This proposition is supported in this research study, as the high levels of job satisfaction experienced amongst educators may have deterred against the effects of burnout. Thus, low levels of disengagement and exhaustion were reported when the levels of job satisfaction were high.

Job satisfaction was found to have a statistically and practically significant relationship with subjective wellbeing. Research conducted by Malka and Chatman (2003) found a statistically and practically significant relationship between job satisfaction and subjective wellbeing. The
results of this research study indicated that as the level of job satisfaction amongst the educators’ increased, so did their levels of subjective wellbeing. This statistically and practically significant relationship suggests that educators’ were not only satisfied with their lives in general, but were also satisfied with the intrinsic and extrinsic aspects of their jobs and work environment.

A multiple linear regression analysis was conducted to determine whether psychological capital mediated the relationship between subjective wellbeing and burnout. Baron and Kenny’s (1986) mediation model was used for this linear regression analysis. Baron and Kenny (1986) outlined three steps needed to assess for mediation. Firstly, the independent variable should predict the mediator. Secondly, the mediator and independent variables should predict the dependent variable. Thirdly, the dependent variable should be regressed on the independent variable, while controlling the mediator. If all three steps are conducted and they prove significant; and the independent variable does not predict the dependent variable while controlling the mediator, then it indicates perfect mediation (Baron & Kenny, 1986).

Two simple linear regressions were conducted to fulfill the first two steps of mediation. The results of the linear regression indicated that Subjective Wellbeing had statistically significant predictive value for PsyCap. The result of the second linear regression indicated that both PsyCap and Subjective Wellbeing had statistically significant predictive value for Burnout; thus satisfying the first two steps of mediation.

To fulfill the third step of mediation, a mediated regression analysis was conducted. The regression coefficient of Subjective Wellbeing was not statistically significant when it was entered with PsyCap into the regression coefficient. Subjective Wellbeing was found to not be a statistically significant predictor of Burnout, once PsyCap was added to the regression equation. This indicated that PsyCap mediated the relationship between Subjective Wellbeing
and Burnout. To further support this finding, a Sobel test was conducted. The result of the Sobel test confirmed the mediating effect of PsyCap on the relationship between Subjective Wellbeing and Burnout.

Although the researcher could not find any literature to support the finding of PsyCap mediating the relationship between Subjective Wellbeing and Burnout; according to Luthans et al. (2007) PsyCap can serve as a psychological resource which can be drawn on during periods of distress. Further research conducted by Vazi et al. (2011) suggests that Subjective Wellbeing can have aiding potential during times of stress, thus deterring against the negative effects of stress such as burnout. The result of the linear regression analysis conducted in this research study indicates the possibility of the positive psychological capacities inherent in PsyCap, coupled with the aiding potential of Subjective Wellbeing being carried over to reduce the negative effect of burnout on the wellbeing of educators.

The research study has addressed all the research questions it aimed to. Firstly all four constructs were conceptualised through the literature review of the study. The results of the research study indicated that there were practically and statistically significant relationships between PsyCap, Subjective Wellbeing, Burnout and Job Satisfaction. Lastly, the results of the study indicated that PsyCap did mediate the relationship between Subjective Wellbeing and Burnout.

5.3. Summary

This chapter has provided a detailed discussion of the results found in this research study. This chapter explained each of the results obtained in this research study and also highlighted the relevant literature that supported the findings found in this research study.
CHAPTER 6
CONCLUSION, LIMITATIONS AND RECOMMENDATIONS

6.1. Introduction

In this chapter, conclusions about the research study findings are made. Limitations of the present study are discussed and possible recommendations for future research are presented.

6.2. Conclusions

The following conclusions are made in accordance with the specific literature underlying each of the four constructs; the research objectives and research questions; and the empirical findings obtained in the present research study.

6.2.1. Conclusion in accordance with the specific literature objective of the study

The following conclusion can be made in regards to the constructs of Psychological Capital, Subjective Wellbeing, Burnout, and Job Satisfaction.

Psychological Capital

For the purpose of this research study, PsyCap was conceptualised as an individual’s positive psychological state of development (Luthans et al., 2007). PsyCap has been conceptualised as consisting of four positive psychological states; self-efficacy, hope, optimism, and resilience (Luthans et al., 2004). Self-efficacy refers to an individual’s confidence in their abilities and skills to achieve a goal or to take action to execute a specific task (Stajkovic & Luthans, 1998). Hope is an individual’s positive motivational state that is based on their motivation and expectation to attain a goal (Snyder et al., 1991). Optimism refers to an individual’s
attribution style that internalises positive events and externalises negative events (Seligman, 1998). Resiliency refers to an individual’s capacity to bounce back from adversity and negative occurrences in life (Luthans, 2002). The positive psychological states inherent in PsyCap can be invested in and managed and can thus be drawn on during times of need. These four positive psychological states are believed to enhance a person’s ability to perform and increase organisational performance (Luthans et al., 2004).

**Subjective Wellbeing**

For the purpose of this research study, Subjective Wellbeing was conceptualised as an individual’s affective and cognitive evaluation of their life. Subjective wellbeing is experienced when individuals are satisfied with their lives and they experience frequent positive emotions and infrequent negative emotions (Diener et al., 1991). Subjective wellbeing consists of four concepts; positive affect, negative affect, domain satisfaction, and cognitive life satisfaction (Diener, 2000). Positive and negative affect refers to the presence of positive emotions and the absence of negative or unpleasant emotions (Luhmann et al., 2011). Subjective wellbeing can also be experienced even if individuals are only satisfied with certain domains in their life, such as their work life or marriage (Omzete, 2011). Cognitive life satisfaction refers to individuals attaining satisfaction on the basis of information; this serves as a judgement process where the individual measures whether their life has measured up to their expectations or not, if it has, the individual usually achieves satisfaction (Bakker & Oerlemans, 2010).

**Burnout**

For the purpose of this research study, Burnout was conceptualised as feelings of physical, emotional, and mental exhaustion that occurs through prolonged stress in life and at work (Freudenberger, 1974). Burnout consists of two dimensions; exhaustion and disengagement
(Demerouti, 1999). Exhaustion refers to decreased emotional resources which help individuals cope with stressors; this occurs through increased exposure to job demands (Demerouti, 1999). Disengagement refers to the process of individuals distancing themselves from work and work tasks and developing negative attitudes about their jobs (Demerouti, 1999).

**Job Satisfaction**

For the purpose of this research study, Job Satisfaction was conceptualised as the positive emotional state that results from an individual’s appraisal of their job or job experiences (Locke, 1976). Job satisfaction consists of two concepts; intrinsic factors, and extrinsic factors (Synderman, 1959). Intrinsic factors refers to the motivation that individuals derive from within themselves because of the satisfaction they experience; while extrinsic factors refers to the motivation individuals derive through external motivators such as rewards (Synderman, 1959). Intrinsic factors have a positive effect on satisfaction, while extrinsic factors are believed to cause dissatisfaction if they are not present (Menon & Athanasoula-Reppa, 2011).

**6.2.2. Conclusion in accordance with the empirical results of the study**

The empirical findings of the present research study are summarised below in terms of the research questions of the study:

1. What is the relationship between Psychological Capital, Subjective Wellbeing, Burnout and Job Satisfaction?

According to the empirical results of the research study; PsyCap was found to have statistically and practically significant relationship with Subjective Wellbeing; however this
was found to be an inverse relationship. This suggests that as educators levels of subjective wellbeing increased, their levels of PsyCap decreased. This finding asserts that educators that are satisfied with their lives and experience frequent positive emotions and infrequent negative emotions are less likely to draw from the positive psychological states inherent in PsyCap.

PsyCap was also found to have statistically and practically significant relationships with both Exhaustion and Disengagement; these were also found to be inverse relationships. This suggests that if educators are experiencing high levels of PsyCap, it is more likely that they will then experience low levels of exhaustion and disengagement.

PsyCap was found to have a statistically and practically significant relationship with Job Satisfaction. This suggests that as educator’s levels of PsyCap increase the more likely they are to be satisfied with factors pertaining to their jobs and the internal aspects of their jobs.

Subjective Wellbeing was found to have statistically and practically significant relationships with both Exhaustion and Disengagement; these were found to be inverse relationships. This suggests that as educator’s levels of subjective wellbeing increased, their levels of exhaustion and disengagement decreased.

Subjective Wellbeing was found to have a statistically and practically significant relationship with Job Satisfaction. This suggests that if educators are satisfied with their lives in general the more likely they are to be satisfied with the intrinsic and extrinsic aspects of their jobs and work environment.

Job Satisfaction was found to have statistically and practically significant relationships with both Exhaustion and Disengagement; these were also found to be inverse relationships. This
suggests that if educator’s levels of job satisfaction are high the more likely they are to experience low levels of exhaustion and disengagement.

2. Does Psychological Capital mediate the relationship between Subjective Wellbeing and Burnout?

According to the empirical results of the research study; all three conditions needed to meet mediation were fulfilled and PsyCap was found to mediate the relationship between Subjective Wellbeing and Burnout.

6.3. Limitations

The present research study was conducted with a relatively small sample size (n =103), future research should incorporate a larger sample were more informative results can be derived and where the results can be generalised to the population at large. This research study made use of a cross sectional research design were the causal direction of relationships between PsyCap, Subjective Wellbeing, Burnout and Job Satisfaction were not be determined. A longitudinal research design may be better suited for future research, where more definitive results can be obtained. The present study sampled participants across different educational institutions that were in the same geographical location; future research may be conducted were participants are sampled across multiple locations, this would increase the reliability of future research and may reveal informative information in regards to decreasing burnout rates amongst educators, while increasing their satisfaction and wellbeing rates. The research study made use of non-probability convenience sampling where participants where sampled based on easy accessibility. Future research should sample more educators from a variety of educational institutions as the demands and challenges experienced could differ per
educational institution and geographical location and can thus affect the burnout and satisfaction rates of educators. This research study made use of a survey design where self-reported questionnaires were used for data collection. This may have affected the reliability and validity of the study as participants may have answered in a socially desirable manner.

6.4. Recommendations

This research study explores the relationship between PsyCap, Subjective Wellbeing, Burnout and Job Satisfaction; however there has been no research conducted on PsyCap, subjective wellbeing, burnout and job satisfaction together; thus there is a need for research to be conducted to link these constructs. The research study indicated that PsyCap mediates the relationship between Subjective Wellbeing and Burnout, which indicates that it is possible for burnout to be minimized through the enhancement of the positive capacities of PsyCap and the aiding potential of Subjective Wellbeing. There has currently been no research conducted using PsyCap as a mediating variable between subjective wellbeing and burnout; more research should be conducted to see if the result found in the present research study can be supported or not.

The research study also indicated that job satisfaction could also be drawn on as a resource to mitigate against the negative effects of burnout. There has been very little research to date highlighting the aiding potential of subjective wellbeing for educators; as well as the possible resource job satisfaction can provide in times of distress; it is thus necessary for more research to be conducted to illustrate the role that PsyCap can play as a resource, but also the role that Subjective Wellbeing and Job Satisfaction can play as resources in times of stress.
In conclusion, the results of this research study provided valuable information in respect to increasing the satisfaction and wellbeing rates of teachers in South Africa through the enhancement of PsyCap; while minimizing the burnout rates amongst educators. This is essential for educators in South Africa as teachers do possess an invaluable role and thus research like this is imperative to counter against the high burnout rates, and indirectly the high teacher turnover rates in South Africa. It is important for teachers to be content and satisfied with their work as they possess an indispensable role in society.

6.5. Summary

The chapter provided a concluding discussion on the main results of the research study and indicated why there were of importance. This chapter also indicated the possible limitations of the current research study and provided numerous recommendations on how they can be avoided or minimized for future research. This chapter also provided a brief indication on certain areas where more research can be conducted.
7. References


DOI: 10.1207/s15327752jpa4901_13, PMid:16367493


8. Appendices

8.1. Appendix A: Participant Letter of Permission

To whom it may concern

I am an Industrial Psychology Masters student at the University of KwaZulu-Natal. I am required to conduct a research project this year in order to obtain my Masters degree. I am interested in conducting research investigating the relationship between Psychological Capital, Subjective Wellbeing, Burnout and Job Satisfaction amongst educators.

This research study will require you to fill in five different types of questionnaires in order to collect the data. This data will not be used for any other purpose except for this research study. Your responses will be treated in a confidential manner and will only be viewed by the researcher and the researcher’s supervisor when analysing the data. I would appreciate your participation in this research study, your participation is entirely voluntary and there will be anonymity of all those who participate in this research study. Under no circumstances will the name of the educational institution be mentioned in the research project. Participants are free to withdraw from the research at any time without any negative consequences. All data that is collected will be locked away for a period of five years, after which all data will be disposed off.

If you wish to obtain information on your rights as a participant, please contact Ms Phumelele Ximba, Research Office, UKZN, on 031 360 3587.
Declaration

I…………………………………………………………………………………………… (full names of participant) hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project.

I understand that I am at liberty to withdraw from the project at any time, should I so desire.

SIGNATURE OF PARTICIPANT                                                     DATE

………………………………………                                                ………………………

Contact Details:

Researcher
Andrea Hansen
Tel No.: 0826144008
Email: 208500535@ukzn.ac.za

Supervisor
Prof. J.H Buitendach
Tel No.: 031-2601034/ 2547
Email: Buitendach@ukzn.ac.za
Letter of Permission

To whom it may concern

I am an Industrial Psychology Masters student at the University of Kwa Zula-Natal. I am required to conduct a research project this year in order to obtain my Masters degree. I am interested in conducting research investigating the relationship between Psychological Capital, Subjective Wellbeing, Burnout and Job Satisfaction amongst educators.

I would appreciate your co-ordination and assistance in allowing me to distribute questionnaires amongst the educators at your institution for completion during June/ July 2012. The participation of the educators is voluntary, and their responses will be treated in a confidential manner. The anonymity of all educators as well as the educational institution is guaranteed. Under no circumstances will the name of the institution be mentioned in the research project. Participants are free to withdraw from the research at any time without any negative consequences. The collection of data through the questionnaires is primarily for the purpose of my research, and will not be used for any other purpose that has not been specified.

Thank you

Miss A. Hansen.
082 6144008

Sign.  

Date: 11/5/12
Letter of Permission

To whom it may concern,

I am an Industrial Psychology Masters student at the University of Kwa Zulu-Natal. I am required to conduct a research project this year in order to obtain my Masters degree. I am interested in conducting research investigating the relationship between Psychological Capital, Subjective Wellbeing, Burnout and Job Satisfaction amongst educators.

I would appreciate your co-ordination and assistance in allowing me to distribute questionnaires amongst the educators at your institution for completion during June/July 2012. The participation of the educators is voluntary, and their responses will be treated in a confidential manner. The anonymity of all educators as well as the educational institution is guaranteed. Under no circumstances will the name of the institution be mentioned in the research project. Participants are free to withdraw from the research at any time without any negative consequences. The collection of data through the questionnaires is primarily for the purpose of my research, and will not be used for any other purpose that has not been specified.

Thank you

Miss A. Hansen,
082 6144008

Sign: [Signature]
Date: 28 May 2012
Letter of Permission

To whom it may concern

I am an Industrial Psychology Masters student at the University of Kwa Zulu-Natal. I am required to conduct a research project this year in order to obtain my Masters degree. I am interested in conducting research investigating the relationship between Psychological Capital, Subjective Wellbeing, Burnout and Job Satisfaction amongst educators.

I would appreciate your co-ordination and assistance in allowing me to distribute questionnaires amongst the educators at your institution for completion during June/July 2012. The participation of the educators is voluntary, and their responses will be treated in a confidential manner. The anonymity of all educators as well as the educational institution is guaranteed. Under no circumstances will the name of the institution be mentioned in the research project. Participants are free to withdraw from the research at any time without any negative consequences. The collection of data through the questionnaires is primarily for the purpose of my research, and will not be used for any other purpose that has not been specified.

Thank you

Miss A. Hansen.
082 6144008

Sign: [Signature]

Date: [Date]
8.5. Appendix B (iv): Letter of Permission from School D

Letter of Permission

To whom it may concern

I am an Industrial Psychology Masters student at the University of Kwa Zulu-Natal. I am required to conduct a research project this year in order to obtain my Masters degree. I am interested in conducting research investigating the relationship between Psychological Capital, Subjective Wellbeing, Burnout and Job Satisfaction amongst educators.

I would appreciate your co-ordination and assistance in allowing me to distribute questionnaires amongst the educators at your institution for completion during June/July 2012. The participation of the educators is voluntary, and their responses will be treated in a confidential manner. The anonymity of all educators as well as the educational institution is guaranteed. Under no circumstances will the name of the institution be mentioned in the research project. Participants are free to withdraw from the research at any time without any negative consequences. The collection of data through the questionnaires is primarily for the purpose of my research, and will not be used for any other purpose that has not been specified.

Thank you

Miss A. Hansen,
082 6144008

Sign: [Signature]

Date: 22.6.2012
8.6. Appendix C: Biographical Questionnaire

Biographical Questionnaire

Please answer the following questions by marking the appropriate boxes:

1. Gender
   (1) Male
   
   (2) Female

2. Race
   (1) African
   
   (2) Indian
   
   (3) Coloured
   
   (4) White
   
   (5) Other

3. Age Group
   (1) 20-25
   
   (2) 26-30
   
   (3) 31-35
(4) 36-40

(5) 41 and older

4. Qualifications (Mark highest qualification that you have obtained)

(1) Less than Grade: 12

(2) Grade: 12

(3) Diploma

(4) Degree

(5) Honours

(6) Masters

(7) PhD

5. Tenure (Period at organisation)

(1) 1-2 years

(2) 3-4 years
| (3) 5-6 years |   |
| (4) 7-8 years |   |
| (5) 9-10 years |   |
| (6) Over 10 years |   |
# Appendix D: Psychological Capital Questionnaire

**PsyCap Questionnaire (PCQ)**

**Instruction:**

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>Strongly disagree</th>
<th>Disagree</th>
<th>Somewhat disagree</th>
<th>Somewhat agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Somewhat disagree</td>
<td>Somewhat agree</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>2.</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Somewhat disagree</td>
<td>Somewhat agree</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>3.</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Somewhat disagree</td>
<td>Somewhat agree</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>4.</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Somewhat disagree</td>
<td>Somewhat agree</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>5.</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Somewhat disagree</td>
<td>Somewhat agree</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>6.</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Somewhat disagree</td>
<td>Somewhat agree</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>7.</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Somewhat disagree</td>
<td>Somewhat agree</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>8.</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Somewhat disagree</td>
<td>Somewhat agree</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>9.</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Somewhat disagree</td>
<td>Somewhat agree</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>10.</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Somewhat disagree</td>
<td>Somewhat agree</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>11.</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Somewhat disagree</td>
<td>Somewhat agree</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>12.</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Somewhat disagree</td>
<td>Somewhat agree</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>13.</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Somewhat disagree</td>
<td>Somewhat agree</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>14.</td>
<td>I usually manage difficulties one way or another at work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</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</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16.</td>
<td>I usually take stressful things at work in stride.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17.</td>
<td>I can get through difficult times at work because I’ve experienced difficulty before.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18.</td>
<td>I feel I can handle many things at a time at this job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19.</td>
<td>When things are uncertain for me at work, I usually expect the best.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20.</td>
<td>If something can go wrong for me work-wise, it will.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>21.</td>
<td>I always look on the bright side of things regarding my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</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</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>23.</td>
<td>In this job, things never work out the way I want them to.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>24.</td>
<td>I approach this job as if “every cloud has a silver lining”.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Appendix E: Satisfaction with Life Scale

Satisfaction with Life Scale (SWLS)

Instructions: The following are statements of the life satisfaction that you may agree or disagree with. Please indicate your agreement with each of the statements by crossing out the appropriate number to each statement. 1 = Strongly Agree; 2 = Agree; 3 = Agree Somewhat; 4 = Undecided; 5 = Disagree Somewhat; 6 = Disagree and 7 = Strongly Disagree.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Agree Somewhat</th>
<th>Undecided</th>
<th>Disagree Somewhat</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>In most ways my life is closely to my ideal.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>The conditions of my life are excellent.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>I am satisfied with my life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>4</td>
<td>So far I have gotten the important things I want in my life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>5</td>
<td>If I could live my life over, I would change almost nothing.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
## 8.9. Appendix F: Oldenburg Burnout Inventory

### Oldenburg Burnout Inventory

Instruction:
Below you find a series of statements with which you may agree or disagree. Using the scale, please indicate the degree of your agreement by selecting the number that corresponds with each statement: (1) Strongly agree, (2) Agree, (3) Disagree, (4) Strongly disagree.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I always find new and interesting aspects in my work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. There are days when I feel tired before I arrive at work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. It happens more and more often that I talk about my work in a negative way.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. After work, I tend to need more time than in the past in order to relax and feel better.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. I can tolerate the pressure of my work very well.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. Lately, I tend to think less at work and do my job almost mechanically.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. I find my work to be a positive challenge.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. During my work, I often feel emotionally drained.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. Over time, one can become disconnected from this type of work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. After working, I have enough energy for my leisure activities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. Sometimes I feel sickened by my work tasks.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. After my work, I usually feel worn out and weary.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13. This is the only type of work that I can imagine myself doing.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14. Usually, I can manage the amount of my work well.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Question</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>15. I feel more and more engaged in my work.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. When I work, I usually feel energized.</td>
<td></td>
<td></td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
### 8.10. Appendix G: Minnesota Job Satisfaction Questionnaire

**Job Satisfaction Questionnaire**

Instruction: Please rate the extent to which you feel (dis)satisfied with the following statements by circling the appropriate number on the 1-5 point scale, below.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Very Dissatisfied</th>
<th>Dissatisfied</th>
<th>Neither</th>
<th>Satisfied</th>
<th>Very Satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>Being able to keep busy all the time.</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2.</td>
<td><strong>The chance to work alone on the job.</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3.</td>
<td><strong>The chance to do different things from time to time.</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4.</td>
<td><strong>The chance to be ‘somebody’ in the community.</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5.</td>
<td><strong>The way my boss handles his/her workers.</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6.</td>
<td><strong>The competence of my supervisor in making decisions.</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7.</td>
<td><strong>Being able to do things that don’t go against my conscience.</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8.</td>
<td><strong>The way my job provides for steady employment.</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9.</td>
<td><strong>The chance to do things for other people.</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10.</td>
<td><strong>The chances to tell people what I do.</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11.</td>
<td><strong>The chance to do something that makes use of my abilities.</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12.</td>
<td><strong>The way company policies are put into practice.</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13.</td>
<td><strong>My pay and the amount of work I do.</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14.</td>
<td><strong>The chances for advancement on this job.</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15.</td>
<td><strong>The freedom to use my own judgment.</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16.</td>
<td><strong>The chance to try my own methods of doing the job.</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17.</td>
<td><strong>The working conditions.</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18.</td>
<td><strong>The way my co-workers get along with each other.</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19.</td>
<td><strong>The praise I get for doing a good job.</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20.</td>
<td><strong>The feeling of accomplishment I get from my job.</strong></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
23 August 2012

Ms Andrea Anne Hansen 208500535
School of Applied Human Sciences

Dear Miss Hansen

Protocol reference number: HSS/0781/012M
Project title: Psychological Capital, Subjective Wellbeing, Burnout and Job Satisfaction amongst educators in the Umlazi Region.

EXPEDITED APPROVAL

I wish to inform you that your application has been granted Full Approval through an expedited review process:

Any alteration(s) to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. PLEASE NOTE: Research data should be securely stored in the school/department for a period of 5 years.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

[Signature]

Professor Steven Collings (Chair)

cc: Supervisor: Prof Johanna Hendrina Buitendach
    Academic Leader: Prof Johanna Hendrina Buitendach
    School Admin. Mrs Doreen Hattingh
COLLEGE OF HUMANITIES

DECLARATION - PLAGIARISM

I, Andrea Hansen, declare that

1. The research reported in this thesis, except where otherwise indicated, is my original research.

2. This thesis has not been submitted for any degree or examination at any other university.

3. This thesis does not contain other persons' data, pictures, graphs or other information, unless specifically acknowledged as being sourced from other persons.

4. This thesis does not contain other persons' writing, unless specifically acknowledged as being sourced from other researchers. Where other written sources have been quoted, then:
   a. Their words have been re-written but the general information attributed to them has been referenced
   b. Where their exact words have been used, then their writing has been placed in italics and inside quotation marks, and referenced.

5. This thesis does not contain text, graphics or tables copied and pasted from the Internet, unless specifically acknowledged, and the source being detailed in the thesis and in the References sections.

Signed

Andrea Hansen