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**INYUVESI  
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**Occupational stress, workplace incivility and job satisfaction with the moderating role of psychological capital among staff in an Emergency Services Control Unit**

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## DECLARATION

I declare that this dissertation is my own unaided work. All citations, references and borrowed ideas have been duly acknowledged. The dissertation is being submitted for the degree of Masters of Social Science in Industrial Psychology, in the School of Applied Human Sciences, in the Faculty of Humanities, Development and Social Science, University of KwaZulu-Natal, Durban, South Africa. None of the present work has been submitted previously for any degree or examination in any other University.

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## ABSTRACT

The present study aimed to establish the moderating role of psychological capital in the relationship between occupational stress, uncivil workplace behaviour and job satisfaction among Emergency Service Control Unit staff in the eThekweni region of Durban, KwaZulu-Natal. The theoretical frameworks of The Job Stress Model (Spector & Fox, 2002) and The Broaden-and-Build Theory of Positive Emotions (Frederickson, 1998) were utilised to understand the relationships between occupational stress, uncivil workplace behaviour, job satisfaction and psychological capital. The research aim of the current study was to determine the relationship between occupational stress, uncivil workplace behaviour, job satisfaction and psychological insofar as determining whether psychological capital and occupational stress possessed any predictive value for the outcomes of uncivil workplace behaviour and job satisfaction as well as whether psychological capital moderated the relationship between uncivil workplace behaviour and occupational stress. A quantitative research designed was employed in the current study using a Positive Psychology framework. A cross-sectional survey design was utilised and data was collected from a sample of 70 (n=70), where all participants completed questionnaires which measured each of the constructs under investigation. Data for the present study was collected using six questionnaires, namely; a Biographical Questionnaire, The Job Stress Scale, The Uncivil Workplace Behaviour Scale, Minnesota Satisfaction Questionnaire as well as the Psychological Capital Questionnaire. The data analysis phase consisted of descriptive and inferential statistics, Pearson Product-Moment correlation analysis, multiple regression as well as hierarchical regression. The results of the current study indicated that high levels of occupational stress are highly correlated with high levels of uncivil workplace behaviour and low levels of job satisfaction. Further, findings indicated that high levels of psychological capital were highly correlated to high levels of job satisfaction but not correlated to uncivil workplace behaviour. In addition, findings suggested

that both psychological capital and occupational stress exhibited a predictive value for job satisfaction, whilst the hopeful-confidence subconstruct of psychological capital further predicted job satisfaction. Lastly, it was found that psychological capital did not moderate the relationship between occupational stress and job satisfaction. In spite of the various limitations of the current study, it has produced significant findings which in itself, offers a valuable contribution to academic literature, predominantly within the domain of positive psychology and call centre research in the South African context.

**Key Words:** Occupational Stress, Job Stress, Uncivil Workplace Behaviour, Incivility, Job Satisfaction, Psychological Capital, Call Centre, Emergency Services

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# CHAPTER 1

## INTRODUCTION

### 1.1 Introduction

This chapter provides a brief introduction into the research area of the current study. Moreover, there is an emphasis on the background and significance herein and explores the relationship between the constructs in the study, namely; occupational stress, uncivil workplace behaviour, job satisfaction and psychological capital. Following this, the research objectives and aims are defined to provide a holistic view of the purpose that the present research wishes to fulfil. Additionally, this chapter outlines the chapter divisions for this research study and concludes with a summary.

### 1.2 Study background

The call centre industry is one of the largest and fastest growing industries in the service sector, both in South Africa and internationally (Swart, 2006; Holman, Batt & Holtgrewe, 2007; Kazalarska, 2009). As the call centre industry has provided much employment opportunities for a large number of people, it has also been criticised in the literature for its stressful environment and high labour turnover that it creates (Oodith, 2012). According to Benner, Lewis and Omar (2007), such stressful working conditions for call centre representatives stems from the increased demands for performance and the subsequent implementation of performance-monitoring mechanisms only serves to further exacerbate tension between managers and employees. According to Little and Dean (2006), call centres have received negative publicity throughout South Africa with regards to how they are managed as well as coming under much criticism of researchers, advancing that managers are too focused on

emphasising efficiency goals and productivity targets; subjecting employees to frequently high-levels of monitoring and creating stress-inducing working environments (Setar, Buitendach & Kanengoni, 2015). Therein, with working environments already being considered 'toxic', low quality, highly monotonous with repetitive and demanding interpersonal and technical skills (Holman, Wood & Stride, 2005), the presence of such a high degree of performance monitoring and feedback would only function to further compound its known effect on occupational stress (Holman, Batt & Holtgrewe, 2007) which may provide an explanation as to why employees in South African call centres experience elevated levels of stress (Kazalarska, 2009; Oodith, 2012; Setar, Buitendach & Kanengoni, 2015). These high levels of stress experienced by call centre representatives are according to Thomson (2003), attributed to the highly repetitive and mundane nature of work.

Call centres, at their core, are there to provide a service to customers and the level of customer satisfaction cannot be overlooked (Gordi, 2006). The call centre performance is critical when looking at customer service delivery (Marr & Neely, 2004). Therein, according to Moshavi and Terborg (2002), the customer satisfaction is largely dependent on the level of job satisfaction and motivation of the service provider. Call centres are relatively a new domain of research whereas job satisfaction according to Muchinsky (1993, p.299) is "one of the most researched areas in I/O psychology". Even though some research has been done on job satisfaction in call centres, there is a lack of research on the relationship between job satisfaction and psychological capital, especially in the South African context (Gordi, 2006; Subramoney, 2015; Dawson, Veliziotis & Hopkins, 2017).

Call centre managers are consistently exploring alternative avenues to combat intrinsic, work-related issues within the call centre industry such as high stress levels, high staff turnover and

emotional burnout (Holdsworth & Cartwright, 2003), whereby such factors have a direct negative impact on job satisfaction (Oodith, 2012) further warranting the need for an investigation into occupational stress and uncivil workplace behaviour. In this sense, uncivil workplace behaviour (or commonly termed “incivility”) can be broadly expressed as encompassing both interpersonal deviant behaviours such as harassment, gossiping or theft from a co-worker as well as organisationally deviant behaviours such as deliberately working at a slower rate or sabotaging company property (Bibi, Karim & ud Din, 2013). However, workplace interventions usually centre around potentially illegal conduct rather than issues of uncivil workplace behaviour (Lim, Cortina & Magley, 2008). Previous research conducted by Van Jaarsveld, Walker and Skarlicki (2010) endeavoured to examine the relationship between occupational stress and the effects of uncivil workplace behaviour within a Canadian call centre environment, in conjunction with studying the role of psychological capital in this relationship (Setar, Buitendach & Kanengoni, 2015).

The present study mirrors that of van Jaarsveld, Walker and Skarlicki’s (2010) but contrastingly differs in its aim of examining the relationship between occupational stress and job satisfaction in conjunction with the potential moderating role of psychological capital *among* South African Emergency Services Control Unit telecommunicators within the eThekweni region. Therefore, the definitive distinction between previous research and the present study is the examination of job satisfaction in this relationship as well as the extension of the sample into the Emergency Services domain. The importance of investigating such constructs within the Emergency Services Control Unit stems from the significance and overall nature of work, whereby the emergency response for both fire and police appliances as well as other resources is central to the success of the mission to save lives and property (Service Level Agreement between Fire & Emergency Control Centre, 2011). Therein, response times to

reported incidences are often regulated insofar as informing official police and fire reports which at a later stage may be used during legal proceedings, thus highlighting the importance of accuracy during responding to calls (Service Level Agreement between Fire & Emergency Control Centre, 2011). Moreover, accurate messages manually logged and voice recorded are also critical when such records are to be used for any form of enquiry and verification of the true sequence of certain events (Service Level Agreement between Fire & Emergency Control Centre, 2011). A detailed comparison between 'traditional' call centres and that of an Emergency Services Control Unit is examined in Chapter 2.

The theoretical framework adopted in the present study utilises Spector and Fox's (2002) Job Stress Model as a possible explanation for occupational stress and counterproductive work behaviour (CWB) which is distinctive from uncivil workplace behaviour; the differentiation between which is discussed in Chapter 2. According to Spector and Fox (2002), if an employee appraises a threatening situation as being potentially stressful, there is an increased likelihood that this would foster an emotional reaction in them, which would resultantly culminate in their acting out and/or engaging in counterproductive work behaviour. It is imperative to note that even though there is an overlap between counterproductive work behaviour (CWB) and uncivil workplace behaviour, this has seemingly, in no way fuelled the production of literature that examines the relationship between occupational stress and uncivil workplace behaviour, with only Penney and Spector's (2005) research attempting to examine this relationship and later, Roberts, Scherer and Bowyer (2011) as well as Setar, Buitendach and Kanengoni (2015) investigating the moderating role that psychological plays in such a relationship.

Benner, Lewis and Omar (2007) have illustrated that South African call centre representatives have displayed elevated levels of stress (Holman, Wood & Stride, 2005; Gordi, 2006;



Kazalarska, 2009; Setar, Buitendach & Kanengoni, 2015) that has consequently seen employees react in an aggressive manner and engage in uncivil workplace behaviour (Van Zyl, 2002; Gordi, 2006; Oodith, 2012; Setar, Buitendach & Kanengoni, 2015). Even though literature has been conducted (albeit, limited) on the relationship between two or more of these constructs, a fundamental gap remains within the realm of call centre research; that is, as far as could be ascertained, no published research examining these constructs within Emergency Services. Therefore, to widen the scope of research within in both the domains of positive psychology and call centre research, an investigation into the relationship of the primary constructs of the present paper allowed for the comparison of already established literature to that of the Emergency Services domain. In that, it allows for the examination and interpretation of differences in results to various mitigating factors, such as the nature of their work.

There is a wide variety of existing literature detailing occupational stress, uncivil workplace behaviour, job satisfaction and psychological capital within the confines of a 'traditional' call centre. However, research has been limited in investigating the relationship between occupational stress, uncivil workplace behaviour and job satisfaction with the moderating role of psychological capital among staff in Emergency Services Control Unit. The focus of this study is to therefore quantitatively explore the relationship between these four constructs, specifically in relation to Emergency Services Control Unit staff in the South African context.

The insight gained from this study has the potential to inform codes of conduct so that norms of respectable interaction prevail at all levels of the organisation. Furthermore, research herein would shed light on the interpersonal relations of Emergency Service Control Unit staff and the overall organisational climate that they work in. The results inform whether more or less

attention needs to be paid to the organisational climate and job satisfaction of Emergency Services Control Unit Representatives.

The results of this study would also be useful to managers of other call centres of a similar nature around South Africa, as it's important that they are aware of possible employee discontentment. Finally, this study has the potential to motivate other researchers to conduct their own studies using various other methodologies and constructs, to further explore occupational stress, uncivil workplace behaviour and job satisfaction among Emergency Services call centre representatives.

### **1.3 Research Objectives**

The general objectives, in conjunction with the specific objectives of the present study, form the aim. The objectives of the study follow.

#### **1.3.1 The Primary and General Objectives**

In light of the study background and motivation, the primary objective of the present study was to determine the relationship between occupational stress, uncivil workplace behaviour, job satisfaction and the moderating role of psychological capital. In addition to this, the current study aims to determine whether psychological capital and occupational stress hold any predictive outcomes of uncivil workplace behaviour and job satisfaction. The general objective of the present study is to investigate the relationship between occupational stress, uncivil workplace behaviour and job satisfaction with the moderating role of psychological capital among staff in Emergency Services Control Unit.

### **1.3.2 Specific Research Objectives**

The following are the research questions of this study:

1. To determine the psychometric properties of the various measuring instruments.
2. To determine the relationship between occupational stress, uncivil workplace behaviour, job satisfaction and psychological capital.
3. To determine whether occupational stress and psychological capital are predictors of uncivil workplace behaviour.
4. To determine whether occupational stress and psychological capital are predictors of job satisfaction
5. To determine the extent to which psychological capital moderates the relationship between occupational stress and uncivil workplace behaviour and/or job satisfaction.

### **1.3.3 Research Questions**

1. What are the psychometric properties of the various measuring instruments?
2. What is the relationship between occupational stress, uncivil workplace behaviour, job satisfaction and psychological capital?
3. Are occupational stress and psychological capital predictors of uncivil workplace behaviour?
4. Are occupational stress and psychological capital predictors of job satisfaction?
5. To what extent does psychological capital moderate the relationship between occupational stress and uncivil workplace behaviour and/or job satisfaction?

## **1.4 Structure of the Study**

### **Chapter 1: Introduction**

This chapter provides the foundation on which the topic of the present study is discussed, with specific focus posited on the background and motivation for this study. Moreover, an outline of the research objectives and questions of the present study has been provided. Lastly, this chapter presents a general overview of the chapter division for the rest of the study.

### **Chapter 2: Literature Review**

This chapter comprises of two parts; a review of past literature and the theoretical framework for the present study. The first segment comprises of definitions and a review of existing research in the broad areas of positive psychology, with specific emphasis on the four primary constructs of the present study; occupational stress, uncivil workplace behaviour, job satisfaction and psychological capital. The second segment of this chapter addresses the theoretical frameworks of the current study that are utilised to examine the relationships between the main constructs.

### **Chapter 3: Methodology**

This chapter discusses the adopted research method in carrying out the present study. Within this chapter, there is a detailed account of the research design, sampling method, methods of data collection (including research instruments) and analysis, as well as the ethical considerations adopted during the course of the study.

## **Chapter 4: Results**

This chapter provides the results of a statistical analysis performed on information retrieved from the data collection phase of the present study. Within this chapter, there will be an examination of the Descriptive statistics, in conjunction with the Cronbach alpha coefficients for each of the research measures within the present study. Moreover, an assessment of the relationships between constructs will be made using the Pearson product-moment correlation result. The results from the multiple regression analysis will be presented, as well as Psychological Capital's role as a moderating variable within the present study will be established using the results from a hierarchical regression analysis.

## **Chapter 5: Discussion**

This chapter contextualises and discusses the results obtained in Chapter 4. Moreover, it elaborates on findings in relation to the context of existing literature and strives to answer the proposed research questions of the present study.

## **Chapter 6: Conclusions, Limitations and Recommendations**

This chapter examines the inferences and conclusions that can be drawn from the findings of the current study. Furthermore, limitations of the study and recommendations for future research beyond the scope of this study are reflected on.

## **1.5 Chapter Summary**

This chapter introduced the present study and provided a discussion on the background and motivation for the selection of this study. In this vein, this chapter outlined both the research objectives and questions that the current study was designed to address. Lastly, this chapter provided an outline for the division of chapters within this research study.

The next chapter herein presents a discussion and review of existing literature within the domain of positive psychology and explores previous research literature on occupational stress, uncivil workplace behaviour, job satisfaction and psychological capital.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

Within this chapter, an overview of existing general academic literature on positive psychology, as well as the four main constructs under study is expounded. The discussion within this chapter commences with a background in positive psychology as the presenting foundation for the current research. Moreover, the main constructs under study, namely; occupational stress, uncivil workplace behaviour, job satisfaction and psychological capital is presented and discussed with a focus on both international and national academic literature. Furthermore, the theoretical underpinnings that constitute the theoretical framework of the current study are elucidated upon.

#### **2.2 Positive Psychology**

Psychology, as a discipline and science, has been largely criticised for its preoccupation with healing and implicitly, the weaknesses of the individual (Seligman & Csikszentmihayli, 2000). Positive psychology thus marks the deviation from traditional psychology's preoccupation with negative factors that inhibit human functioning (Kesari, 2012). The fixation on a disease-model of human functioning in terms of human weakness, illness and pathology, has led to a failure to acknowledge the importance of human strengths, positive traits and emotions (Setar, Buitendach & Kanengoni, 2015; Subramoney, 2015). Therein, the abundance of academic knowledge surrounding the adverse, pathological conditions of under which human beings manage to survive, has overshadowed a focus on how human beings advance under benign

conditions (Seligman & Csikszentmihayli, 2000). It is understandable that, as a result, the preoccupation of pathological factors has neglected the content individual located within prosperous communities (Subramoney, 2015). The introduction of positive psychology then seems necessary as it acts as a catalyst, according to Subramoney (2015, p.12), "in the redirection of psychology from having a preoccupation with fixing pathology to also include the building of positive qualities of individuals". Positive psychology then strives to focus on more appreciative and open experiences of human motive, potentials and capacities, through which comes an identification of knowing 'what works' for the individual, leading to building upon these foundations of positive human experience (Sheldon & King, 2001; Seligman, 2002).

In essence, positive psychology through the identification of virtues, strengths and the fostering of what is best in them, permits individuals to thrive, prosper and flourish, allowing for the creation of competencies and capabilities within the individuals' self (Seligman & Csikszentmihayli, 2000; Gable & Haidt, 2005). However, in saying this, positive psychology in no way negates the existence and experience of human dysfunction and suffering; rather, it aims to study human experiences of happiness and joy insofar that it is able to address the wider spectrum of individual experience (Gable & Haidt, 2005). Sheldon and King (2001), as well as Seligman (2002), contextualise the importance of this by explaining that it is crucial to examine the aspects of human nature that are deemed positive, in order for them to be built upon and developed within individuals as an avenue to achieve positive psychological outcomes. It has been noted by Seligman and Csikszentmihalyi (2000, p.7) that "researchers have discovered that there are human strengths that act as buffers against mental illness, such as courage, optimism, faith, hope, interpersonal skill and the capacity for insight". Therefore, since positive psychology is geared towards understanding the magnitude and intensity of positive human strengths and thoughts (Gable & Haidt, 2005), being able to build a multiplicity of



understanding about qualities such as faith, optimism and hope, contributes to the science of human strength, that endeavours to learn and understand how individuals foster such virtues (Kesari, 2012).

Such progressive developments in positive psychology however, has not materialised exclusively without criticism. The undisclosed flexibility found within methodological approaches to analysing positive psychological variables has been the centre of Simmons, Nelson and Simonsohn's (2011) criticism; it is postulated that the inherent flexibility in data collection processes and analysis may exacerbate false-positive rates, resulting in researchers being more inclined to present statistically significant findings rather than evidence that disapproves an effect (Simmons, Nelson & Simonsohn, 2011; Subramoney, 2015). Research advanced by Kunda (1990) two decades prior, supports these findings (Simmons, Nelson & Simonsohn, 2011; Subramoney, 2015) by contending that researchers in the domain of positive psychology are often faced with the contentious issue of ambiguous analytical decisions that resultantly spurs researchers to opt for results that offer a statistically significant finding.

Such criticism is both acknowledge and subsequently refuted by Luthans and Avolio (2009) who contend that positive psychology falls within a scientific domain and thus, utilises rigorous scientific methodological approaches and tools. Moreover, positive psychology presents a wealth of prospects for both current and future research through the modification and creation of established and novel theories (Carr, 2005). Such prospects would allow for the assessment of a variety of hypotheses advanced by the biopsychosocial model, such as that of positive organisational behaviour, that is explored in the world of work (Subramoney, 2015).

Positive organisational behaviour, unlike popularised positive organisational psychology is distinctive in that it is both theory and research-based, measurable and thus, scientific (Luthans

& Youssef, 2007). However, positive organisational behaviours' differentiation extends far past this as unlike positive psychology and other positive psychology-related constructs, there is a preoccupation with state-like psychological resource capacities which provide the impetus for positive organisational behaviour to be flexible and receptive to change (Luthans, Avolio, Avey & Norman, 2007). The following section addresses the significance of Positive Organisational Behaviour as it intersects with Positive Psychology and Psychological Capital.

### **2.3 Positive Organisational Behaviour (POB)**

The extension and application of positive psychology within the human resources context sees the development of positive organisational behaviour (POB) bloom within the corporate world (Luthans & Youssef, 2007). The introduction of POB within the organisational context is envisioned to aid in the development and management of human resources practices in today's workplace, through the identification of an emergent focus on a positive approach (Luthans et al., 2007). Bearing this in mind, Luthans (2002, p.59), views POB as referring to, "the study application of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today's workplace".

Furthermore, it is important to note that POB does not strive to merely mirror or present a novel finding for the significance of positivity, but rather highlights the indispensability of an increased focus on the research, theory-building and application of positive traits and behaviours within the workplace (Luthans & Youssef, 2007). With POB's strong emphasis on individuals' positive psychological facets and strong human resources in relation to improved employee health and performance, it comes as no surprise that researchers within this domain may similarly emphasise cognitive and affective capacities such as work engagement and

creativity respectively (Bakker & Schaufeli, 2008; Setar, Buitendach & Kanengoni, 2015). Owing to POB constructs as being state-like as opposed to fixed, they are able to develop and change; this implies that it is necessary to view the role of states such as resilience, self-efficacy, hope, optimism and numerous other personal resources, in relation to the demands of the workplace and the enhancement of work performance (Luthans et al., 2007; Bakker & Schaufeli, 2008). According to Luthans and Youssef (2004), the aforementioned constructs do not only meet the criteria of positive organisational behaviour but also form the core constructs that constitute psychological capital.

#### **2.4 Psychological Capital (PsyCap)**

Emanating from the positive organisational behaviour domain, psychological capital (PsyCap) marked the representation of individuals' propensities that, "accrue through positive psychological constructs such as efficacy, optimism, hope and resilience (Luthans et al., 2007, p. 542). A more elaborate definition of PsyCap sees it as being:

"... an individual's positive psychological state of development 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 towards goals, and when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resiliency) to attain success" (Luthans, Avolio, Walumbwa & Li, 2005, p. 255).

Literature advanced by Lewis (2011), has illustrated the importance of seeing psychological capital as being a psychological state and therein, implies that PsyCap can be developed within

the individual, as they progress through life. Inherent in this, is an understanding that psychological states are essentially a transient human phenomenon, meaning that they are unfixed and have the ability to develop within a person over time (Lewis, 2011).

Previous research conducted in relation to psychological capital in South Africa has attempted to evaluate the relationship between psychological capital and various other constructs such as occupational stress, turnover intentions and happiness among teachers (Kesari, 2012). More specifically, parallel with this study, the relationship between PsyCap, work engagement and organisational commitment has been evaluated within call centres in the South African context (Simons & Buitendach, 2013).

There has been a multitude of studies that have investigated the relationship between PsyCap and the influence it has on other variables, such as occupational stress, uncivil workplace behaviour (Roberts, Scherer & Bowyer, 2011) and job satisfaction (Luthans et al., 2007). Despite this, it is important to note that not all these studies have been conducted in the South African context, and there is yet to be a study that analyses the relationship between these constructs collectively. Thus, this study aims to investigate the relationship between occupational stress, uncivil workplace behaviour and job satisfaction with the moderating role of psychological capital among staff in Emergency Services Control Unit.

In order to fully examine the relationship between PsyCap and any other construct, it is imperative to see that construct in relation to the sub-constructs of PsyCap (self-efficacy, resilience, hope and optimism). Thus, further consideration is made, in terms of the sub-constructs of PsyCap with that of occupational stress, uncivil workplace behaviour and job satisfaction.

### 2.4.1 Self-Efficacy

Put simply, self-efficacy refers to an individual's state of self-belief (Lewis, 2011). According to Bandura (1982), self-efficacy embroils an individual's perceptions of themselves and furthermore, their ability to competently engage with a task. The relationship between an individual's self-efficacy in relation to their effort, persistence and choice of activity has been well documented, as Bandura (1997) posits that individuals who possess high levels of self-efficacy, tend to be more diligent with work, are self-motivated, thrive on the challenge before them and lastly, set high goals for themselves (Luthans & Youssef, 2007). Thus, Bandura (1997) stressed the significance of self-efficacy as a means to catalyse the process of overcoming boundaries to reach success. Conversely, those individuals who have low self-efficacy would expectedly not succeed at completing or engaging with a task and therefore, not exert much effort in performing it (Cole, 2007; Cole, Daly & Mak, 2009).

According to Lewis (2011), the development of self-efficacy is characterised by the attainment of experience and mastery over specific tasks. Weight is given to this statement through the studies of Bandura and Locke (2003), and Luthans and Youssef (2007) who advance that there is a strong link between employees work performance and the level of self-efficacy (Bandura & Locke, 2003); moreover, that those individuals who possess high levels of self-efficacy, experience greater levels of well-being and positive work experiences (Luthans & Youssef, 2007). Within an organisational setting, self-efficacy translates into an "employees' conviction or confidence about his or her abilities to mobilise the motivation, cognitive resources or courses of action needed to successfully execute a specific task within a given context" (Stajkovic & Luthans, 1998, p.66). Inherent within the concept of self-efficacy then, is that the individual possesses an internal positive belief that they are able to do a task (Kesari, 2012). The benefit of those employees within the workplace who have higher levels of self-efficacy

centres around their positive experiences at work and elevated levels of wellbeing; the essentiality of self-efficacy then, is elucidated through great success resulting from a positive self-belief in their abilities (Luthans & Youssef, 2007; Kesari, 2012; Setar, Buitendach & Kanengoni, 2015).

According to Speier and Frese (1997), fostering a culture to develop self-efficacy among employees proves crucial to the streamlining of organisational processes; therein, the self-efficacious employee attempts to not only embark on occupational self-development, but also to devise ideas for improved work-related processes. Research findings advanced by Jex and Bliese (1999) revealed that self-efficacy serves as a moderator between stress and work which exemplifies that when the variable of control maintains a crucial element in stress, the individual or employee with control, will not suffer adverse effects. Conversely, those individuals with lower self-efficacy for implementing control and are exposed to a stressful process may fall victim to the harmful effects of that exposure (Jex & Bliese, 1999; Subramoney, 2015).

In light of this, the conclusion can be made that since self-efficacy acts as a catalyst in overcoming potential boundaries to success; implicitly then, resistance in the form of persistence through anxiety-inducing tasks (Lewis, 2011) may offer an elucidation for the resilience of the individual, in terms of their ability to adapt to their changing milieu.

#### **2.4.2 Resilience**

There are a multitude of conceptualisations of what exactly resilience is, and how it is interpreted (Fletcher & Sarkar, 2013) which makes it increasingly difficult to compare research findings on resilience; even with these discrepancies, however, Fletcher and Sarkar (2013)

claim that most definitions of resilience encroach around the ideas of positive thought. With that being said, Windle, Bennet and Noyes (2011) see resiliency as the ability of an individual to adapt to trauma, stress and unpredictable occurrences. This definition is coherent with Luthans' (2002, p.702), conceptualisation of resilience, as being "the positive psychological capacity to rebound, to 'bounce back' from adversity, uncertainty, conflict, failure, or even positive change, progress and increased responsibility". In conjunction to this, a study by Werner and Smith (1992), saw that there were core characteristics in individuals who were resilient that serve as protective factors against stressors in one's life; namely, good self-esteem, planning skills and a social support network (Setar, Buitendach & Kanengoni, 2015).

In contrast to self-efficacy, optimism and hope which is expressed proactively, resiliency is more often than not, exhibited as a reaction or response to a setback (Avey, Luthans & Youssef, 2006). According to Coutu (2002), there are seemingly common characteristics among those individuals who have increased levels of resilience. Besides being able to overcome conflict, uncertainty and adversity, individuals share a deep belief in the meaningfulness of life, a steadfast acknowledgement of reality and the ability to improve and adapt in the face of substantial change (Coutu, 2002). Furthermore, it has been posited by Lewis (2011) that the development of resilience is achieved through continuous exposure to difficult situations in order to learn from these predicaments in a fruitful way.

As the call centre industry has provided many employment opportunities for a large number of people, it has been criticised in the literature for its stressful environment and high labour turnover that it creates (Oodith, 2012). This is only exacerbated by shift work that ultimately, has a bearing on the quality of the representatives' lives at work (Hannif, McDonnell, Connell & Burgess, 2010). A study conducted by Visser (2007) within a South African call centre,

illustrated that those individuals that demonstrated resilience also continued to have positive thoughts and able to constructively adapt, even in the most adverse of circumstances (Avey, Luthans & Jensen, 2009). Therein, this implies that due to the call centre representative's increased levels of resilience, the lower the perceived level of stress was, which ultimately would have resulted in higher levels of job satisfaction and overall well-being. As in the study conducted by Visser (2007), the proactive nature of resilience feeds a capacity for the individual "to overcome, steer through, bounce back and reach out to pursue knowledge and experience deeper relationships and find meaning in life" (Reivich & Shatte, 2002, p.103).

Therein, resiliency provides not a linearly reactive concept but rather a complex, proactive unification of processes that stimulate an individual's ability to grow (Kesari, 2012). For this reason, one can purport that developing resiliency in employees contributes to their overall psychological strength, owing to the enrichment of their creativity, positive thought, hope and experiences of wellbeing which would resultantly see employees who are able to better cope with adverse situations.

### **2.4.3 Hope**

In order to fully understand the complex construct of hope, it is imperative that it is interpreted as being a state of mind (Lewis, 2011). Essentially this requires us to conceptualise hope as constituting, "a delicate balance of experiencing the pain of difficult life experiences, sensing and interconnectedness with others, drawing upon one's spiritual or transcendent nature, and maintaining a rational or mindful approach for responding to these life experiences" (Farran, Herth & Popovich, 1995, p.5). Much like resiliency and self-efficacy, high levels of hope allow individuals to foresee obstacles that hinder them from achieving their goals and resultantly, spurs them to adopt a contingency planning strategy by identifying numerous alternative



pathways through which they can pursue and attain their goals (Snyder, 2000). In layman's terms, hope encompasses not only the will and drive to succeed, but also an awareness of the steps required to achieve the goal (Snyder, 2000).

Literature advanced by Snyder, Irvine and Anderson (1991) and later, Snyder (2000) see hope as being a positive emotional and motivational construct that comprises of two sub-constructs that are founded upon "an interactively derived sense of successful (a) agency (goal direct energy) and (b) pathways (planning to meet goals)" (p.287). Within this study, Snyder (2000) illustrated the importance of hope as acting as a protective factor in response to feelings of vulnerability, unpredictability and uncontrollability. The result of this that individuals who possess increased capacities of hope are essentially more competent in adopting alternative pathways to achieve one's goal in their job (Avey, Luthans & Youssef, 2010).

With this in mind, it is elementary to understand that hope drives individuals toward the attainment of their goal through the use of both internal and external resources (Morse & Doberneck, 1995) and thus, would result in lower levels of perceived stress. The relevance of work-related issues within the call centre industry (Holdsworth & Cartwright, 2003), such as high-stress levels, high staff turnover and emotional burnout exemplify the need for hope, as a sub-construct of PsyCap to be investigated. Findings from Herbert's (2011) study gives weight to the above through the indication that the inevitability of occupational stress and the like, can be diminished by positive psychological resources such as hope, resulting in employees that display creativity, autonomy, optimism and resourcefulness.

#### **2.4.4 Optimism**

Unlike hope, which is seen as a state of mind, optimism is generally considered as a state of explanation (Lewis, 2011). Tiger (1971) advances a relatively concise definition of optimism, and envisions it as “a mood or attitude associated with an interpretation about the social and material – one in which the evaluator regards as socially desirable to his [or her] advantage, or for his [or her] pleasure” (p.18). Luthans, Avolio, Walumbwa and Li (2005), advance that to an optimistic individual, setbacks and failure are not viewed negatively but rather, present a challenge and an opportunity to improve upon prior strategies, in order to guarantee future success. Therein, optimists are considered to have adopted an attributional style of thinking as individuals who ascribe positive events as being the result of pervasive, permanent and internal factors whilst negative factors are viewed as situation-specific, temporary and external factors (Seligman, 1998).

However, it is imperative to note that the potential danger of being overly optimistic about achieving positive outcomes lay in the refusal to accept that there are factors beyond the ambit of one’s control that have the possibility of leading to unnecessary exposure to risk and potentially, to failure (Lewis, 2011). Therein, optimism possesses both a realistic and flexible component in that it involves the distinction between what can and cannot be accomplished within a given situation (Kesari, 2012). Termed ‘realistic optimism’ (Schneider, 2001), it is seen as being a state rather than that of a dispositional trait, that allows the individual to embrace an objective assessment of what an individual can succeed in as well as what resources are required at that given time (Subramoney, 2015).

Studies conducted in South Africa, have shown that optimism has a significant, direct relationship to ill-health and burnout whereby individuals with inflated optimism experienced

lower levels of ill-health and burnout (Rothmann, 2008). The research of Tuten and Neidermeyer (2004) within a call centre environment, concluded that representatives who exhibited higher capacities for optimism have relatively lower perceived levels of work stress and work conflict than those of pessimistic agents.

Taking into account the above discussion, it becomes elementary to understand that self-efficacy, resilience, hope and optimism are greatly significant in the development of psychological strength in employees, however; the amalgamation of these constructs forms the higher order central idea of PsyCap (Luthans, Avey, Avolio, Norman & Combs, 2009). Largely considered the at the forefront of positive psychology, the construct of PsyCap since its conception in early 2002 has undergone an array of investigation (Snyder, 2000; Luthans, 2002; Totterdell, Wood & Wall, 2006; Luthans et al., 2007; Rothmann, 2008; Bandura, 2008; Lewis, 2011) that has indicated the multiplicity of outcomes that PsyCap factors into, such as; elevated job satisfaction, turnover, decreased employee cynicism, employee engagement and wellbeing.

A substantial amount of previous research has indicated the beneficial, positive role that PsyCap plays in relationships with other positive psychological outcomes such as occupational satisfaction and work engagement (Luthans et al., 2009). Findings from two separate, yet parallel studies found that elevated levels of psychological capital were associated with a decreased levels of occupational stress (Avey, Luthans & Jensen, 2009) as well as lowered levels of uncivil workplace behaviour (Avey, Luthans & Youseff, 2010). The study of PsyCap in South Africa has been slow to start but has grown exponentially in the last decade; research by Rothman and Cilliers (2007), Herbert (2011), Du Plessis and Barkhuizen (2012) as well as Simons and Buitendach (2013) have pioneered and signified the positive role that nurturing and

strengthening PsyCap would have for employees in a variety of settings such as call centres, human resource departments to teachers in public schools.

The study conducted by Herbert (2011) is of particular importance as it intricately explores the relationship between PsyCap, its sub-constructs (self-efficacy, resilience, hope and optimism) as well as occupational stress, employee engagement and burnout. Findings herein, indicated a negative relationship between PsyCap and occupational stress, thus indicating that those employees who possessed elevated levels of PsyCap are more inclined to contend with seemingly low levels of occupational stress (Herbert, 2011). As far as could be ascertained, no further published studies regarding PsyCap and occupational stress in the South African context were discovered.

## **2.5 Occupational Stress**

After an extensive review of existing literature, there is a seemingly emergent theme of uncertainty when defining stress; therein, there is no single agreed definition, however, numerous theorists have advanced their own conceptualisations of stress (Cooper & Williams, 1991; Hart & Cooper, 2001; Viljoen & Rothmann, 2009). If one bases their understanding on the seminal work of Hans Selye, who is often considered the ‘father’ of stress research, one can start identifying the subjective nature of stress in terms of it being, "an adaptive syndrome or non-specific response to demands placed upon the human body, which either stimulate or threaten the individual" (Selye, 1956, p.38). Within this line of thinking, stress is understood as being part of a complex psychological state that originates from an individual’s cognitive appraisal of the adaption to the demands of their surroundings (Cox, 1987). To elaborate on this further, Andersson (2002), conceptualises stress as essentially being a response to the self-

perceived imbalance between an individual's resources to successfully address the demands of the situation presented.

Whilst reviewing occupational stress, it is imperative to understand it as being subjective in nature and implicitly, the appraisal of stress is primarily therefore based on perceptions pertaining to whether or not an individual can cope and manage with the various demands that are placed on them as a whole, as well as the constraints placed on the individual, their characteristics and support afforded to them (Herbert, 2011; Cox, 1987). In this vein, it is elementary to deduce that the degree of hindrance that emerges due to the imbalance between the job demands and the individuals' resources places significant strain in both their personal and work capacities (Lazarus & Folkman, 1984). Owing to the perceptual differences in an individual's evaluation of stress, the assessment of such, cannot be viewed as objective (Herbert, 2011; Roberts et al., 2011).

Understandably, stress does not only occur within personal domains but transcends into the world of work. Even though there are shared characteristics between stress and occupational stress (Cooper, Dewe & O'Driscoll, 2001), Spector (1997, p.108) advances that occupational stress "is the sum total of factors experienced in relation to work which affects the psychosocial and physiological homeostasis of the worker, the individual factor is termed a stressor and stress is the individual worker's reaction to stressors". Unlike stress itself, occupational stress is confined within the ambit of the work environment and typically refers to the inherent characteristics of the occupation that causes social, physiological and psychological imbalances within the individual based on their own subjective appraisal of a stressor (Kesari, 2012). The impression given by literature is that stress or occupational stress in this regard is an inherently negative construct; however, this is not the case as not all experiences of stress can be

considered negative (Herbert, 2011). It is common knowledge that copious amounts of stress or 'distress' (Lazarus & Folkman, 1984) can result in acute physiological, psychological and emotional repercussions for individuals (Setar, Buitendach & Kanengoni, 2015); conversely, good experiences of stress or 'eustress' (Herbert, 2011) serves as a resource to aid individuals whilst performing challenging tasks. What eustress advances then, is that the kind of stress experienced during energising or challenging activities will succour an individual's performance under pressure and better able them to cope with unforeseen changes within the working environment (Coon & Mitterer, 2007; Herbert, 2011). It is imperative that such a distinction is made within the ambit of this study insofar as to ensure that there is no misinterpretation of findings; thus, for the purposes of this study, the term 'occupational stress' will be synonymous with distress.

In South Africa, demands within and outside of the work environment that contribute to high levels of stress, inevitably lead to increased displays of competition among employees (Van Zyl, 2002). As a result, Van Zyl (2002) claims that occurrences of conflict, aggressive behaviour, poor communication amongst employees and low morale become the norm. It is elementary then, to understand that due high levels of occupational stress and the associated occurrences of incivility and inter-employee conflict, grows a need for the effective monitoring of stress as a way to ensure optimal organisational functioning (Herbert, 2011). Previous studies (Roberts et al., 2011; Van Jaarsveld, Walker & Skarlicki, 2010) have found that there was a significant positive relationship between occupational stress and displays of uncivil workplace behaviour; more pertinent to this study is the moderating role of psychological capital in this relationship. It is imperative to note that a previous study (Penney & Spector, 2005) has illustrated the link between uncivil workplace behaviour as a stressor within the workplace and its role in provoking individuals to engage with counter-productive work behaviour. The above

contextualises the need for occupational stress to be a crucial area of investigation as the benefit of its understanding provides the impetus to further examine its negative outcomes, such as uncivil workplace behaviour, but also build on the existing knowledge of PsyCap's role as a moderating factor within the relationship.

As far as could be ascertained, prominent literature detailing the relationship between occupational stress and uncivil workplace behaviour (Van Jaarsveld, Walker & Skarlicki, 2010) as well as that of job involvement (Setar, Buitendach & Kanengoni, 2015) in conjunction with the role of psychological capital as a moderating factor in this relationship (Herbert, 2011; Setar, Buitendach & Kanengoni, 2015) were identified. However, no studies recognised the relationship between occupational stress, uncivil workplace behaviour, job satisfaction and the moderating role of psychological capital amongst call centre employees within the South African context, let alone that of the Emergency Control Unit employees.

## **2.6 Uncivil Workplace Behaviour (Incivility)**

Uncivil behaviours within the workplace are more often than not, of a milder nature and are generally regarded as low-intensity behaviours that can be both non-verbal and verbal, passive or active, but never physical (Martin & Hine, 2005). Contrastingly different from that of workplace civility that involves respect and positive regard for others, politeness which for all intents and purposes fosters a prosocial organisation citizenship and behaviour conducive to ensuring employee engagement (Andersson & Pearson, 1999). The core differentiation characteristic between civility and displays of incivility centre around issues of morality in that acts of civility are not necessarily undertaken with the intention to profit the organisation but rather because it is the morally correct thing to do (Anderrson & Pearson, 1999).

Taking the above into account, Andersson and Pearson (1999, p.457) purport that incivility can be defined as “a low-intensity deviant behaviour with ambiguous intent to harm the target, in violation of workplace norms for mutual respect. Uncivil behaviours are characteristically rude and discourteous, displaying a lack of regard for others”. Within the workplace, issues of incivility centre around acts that are often considered deviant in nature and are in violation of the commonly accepted, and often unwritten, workplace norms and acceptable standards of workplace behaviour (Roberts et al., 2011). Furthermore, the widespread phenomenon of incivility presents a multitude of far-reaching implications for effective organisational performance (Cortina, Magley, Williams & Langhout, 2001). Therein, uncivil workplace behaviour has cost organisations close to \$3 billion annually according to Pearson and Porath (2009) through high turnover, increased absenteeism and subpar performance. The negative effects of incivility within the workplace are often channelled through employees' strained interactions; retribution against uncivil working conditions thus, manifests in intentionally lowered productivity, working fewer hours, a loss of respect for management and superiors, and even resignation due to uncivil working conditions (Pearson & Porath, 2009).

It is imperative moving forward, that there is an acknowledgement of the overlap between uncivil workplace behaviour/incivility and that of counterproductive work behaviours (CWB). The differentiation between these two concepts can be reduced to three key characteristics; while uncivil workplace behaviour is not considered overtly hostile, threatening or intentional, contrastingly CWB is carried out with harmful intent toward either the individual or organisation (Setar, Buitendach & Kanengoni, 2015). However, it has been noted that due to the seemingly ambiguous and mild nature of incivility (Andersson & Pearson, 1999; Roberts et al., 2011), individuals who engage in such conduct can easily refute any claims that they acted with intention (Penney and Spector, 2005). Therein, a clear distinction between uncivil



workplace behaviour and CWB can be made in terms of incivility being regarded as a stressor, whilst CWB is seen as a reaction or response to stress (Spector & Fox, 2002; Penney & Spector, 2005). Anderson and Pearson (1999) indicated that in most research, there is a preoccupation with aspects of violence, aggression and deviant behaviour within the workplace context of which are congruent with the harmful intent of CWB. Consequently, milder forms of inconsiderate actions and verbalisations have been overlooked in preceding research (Setar, Buitendach & Kanengoni, 2015).

Studies concentrated around the examination of the relationship between occupational stress and incivility have indicated that there are increased levels of stress among individuals exposed to uncivil working conditions (Penney & Spector, 2005). Furthermore, this was corroborated by Roberts et al. (2011) who reported increased levels of stress in relation to an increase in workplace incivility when examining the relationship between occupational stress, workplace incivility and the role of psychological capital as a moderating factor. What is strikingly interesting about Roberts et al.'s (2011) findings, is that it illustrated a positive relationship between occupational stress and uncivil workplace behaviour but moreover, identified the buffering role that psychological capital assumed in this relationship; that is, its prevalence saw diminished levels of incivility even in elevated levels of occupational stress (Roberts et al., 2011). Although his sample consisted of university students who were demographically younger, such findings provide the impetus for further examination of these constructs within this study, in conjunction with the job satisfaction (as a positive psychological outcome) in order to assess the extent to which PsyCap moderates this relationship, especially within the call centre domain which is known for its stressful climate (Holman, Wood & Stride, 2005; Gordi, 2006; Kazarlarska, 2009; Simons & Buitendach, 2013).

Previous research conducted by Porath and Erez (2007) in terms of the organisational repercussions of incivility informed the notions of Pearson and Porath (2009) who related acts of uncivil workplace behaviour with decreased organisational citizenship and commitment behaviours, job satisfaction and resultantly, increased turnover (Penney & Spector, 2005; Lim & Teo, 2009). The prevalence of uncivil workplace behaviour then, causes a massive chain-reaction for both job satisfaction and employee turnover as Tett and Meyer (1993) identified a significant negative relationship between levels of job satisfaction and turnover; these findings were corroborated by Delobelle, Rawlinson, Ntuli, Malatsi, Decock and Depoorter (2010) almost a decade and a half later which further exacerbates the importance of studying job satisfaction as a consequence of uncivil workplace behaviour and lays the foundation for broadening the scope of inquiry to examine employee turnover in future research.

## **2.7 Job Satisfaction**

The most elementary way to frame job satisfaction was advanced by Muchinsky (1993, p.290) who claimed that job satisfaction was the “extent to which a person derives pleasure from a job”. To elaborate on this further, we can understand job satisfaction as involving a distinct set of feelings that are associated with a particular work setting which entails the perception of the employee (Smith, Kendall & Hulin, 1969) and inevitably results in an evaluation of one's situation in accordance with the individuals' values (Portugal, 1976). According to Subramoney (2015, p.27), job satisfaction is in essence, “the sense of satisfaction arises from the perceived relationship between what the employee desires to achieve from work and what the employee believes the work will bring to one”. Therefore, one can establish that job satisfaction represents not only the attitude of the employee to his or her duties but also that of their attitude toward their colleagues and the organisation as a collective (Subramoney, 2015).

It's important to note that job satisfaction is considered to be a multidimensional construct (Gordi, 2006) and in saying that, it can be influenced by both intrinsic and extrinsic factors; factors such as work values form are intrinsic whereas progress in one's career or remuneration is considered to be extrinsic (Hegney, Plank & Parker, 2006). Delobelle et al. (2010) identified a multitude of various factors in literature that affect the job satisfaction of employees, such as; organisational and work characteristics (i.e promotion, pay and nature of work) as well as other individualised characteristics (i.e tenure and age). In order to further distinguish between intrinsic and extrinsic factors that contribute to overall job satisfaction, Herzberg's (1966) model is utilised. Therein, Herzberg (1966) differentiated between intrinsic factors, or 'job satisfiers', that were synonymous with the experiences and nature of doing work that contributed to the job satisfaction and was dubbed 'motivators'. Extrinsic factors on the other hand, we considered 'job dissatisfiers' as they were associated with unfulfilled factors in one's life, such as that of career progression or promotion (Herzberg, 1966).

Appollis' (2010) study conducted in South Africa illustrated that there was a strong positive relationship between psychological capital and job satisfaction. Implicit in this, is that individuals who possessed higher levels of hope, resilience, self-efficacy and optimism, experienced greater levels of job satisfaction (Appollis, 2010). Contrastingly, the findings of Kaplan and Bickes (2013) study indicated that job satisfaction yielded a significant positive relationship with optimism and resilience but had no statistically significant relationship with self-efficacy and hope. However, Tuten and Neidermeyer's (2004) study conducted on call centre agents showed that even though optimists experienced lower perceived levels of occupational stress, pessimists experienced higher levels of job satisfaction (Tuten & Neidermeyer, 2004).

These findings are incongruent with Kaplan and Bickes (2013) proposition that job satisfaction bears a direct relation to optimism due to employee's innate propensity to have a positive attitude towards their work and thus, being able to thrive in challenging work environments. The above exacerbates the need to examine the relationship between PsyCap, its sub-constructs and job satisfaction within the Emergency Services domain as they cannot be simply taken at face-value and necessitates a further contextual inquiry within the Control Unit.

## **2.8 A general overview of call centres in South Africa**

According to Jack, Bedics and McCary (2006), a call centre can be defined and described as a voice operation centre that can provide either a conduit mechanism to a third-party or more over, an interface through which individuals (or, customers) can receive support, technical assistance or provisioning. Through the elimination of face-to-face interaction, call centres have become popularised within the service industry due to the cost-effective nature of a centralised communications centre (Visser & Rothmann, 2008). Consistent with Jack et al.'s (2006) definition of call centres, Holman, Wood and Stride (2005, p.222) provide a succinct definition of a call centre as being:

"a work environment in which the main business is mediated by computer and telephone-based technologies that enable the efficient distribution of incoming calls (or allocation of outgoing calls) to available staff, and permit customer-employee interaction simultaneously with the use of display screen equipment and the instant access to, and inputting of, information"

However, it is to be said that the popularised nature of call centres finds its niche in the utilisation of high-levels of technology-based work (that is, telephonic and computed-based

work) that demands increased levels of customer service, productivity and resultantly, elevated levels of stress and subsequent turnover (Gordi, 2006). Tidmarsh (2003) advances that for these reasons, call centres pose extremely challenging environments to work in and the need to satisfy both service priorities and budgetary constraints presents conflictual situations between both soft and hard goals as well as tangible and intangible outcomes (Dean, 2002). Furthermore, Taylor and Bain (1999), highlight that the preoccupation on efficiency and control has reportedly not only resulted in elevated levels of stress and subsequent turnover but manifests in a deterioration of service priorities and customer orientation. Thus, it is for this reason that the call centre industry has received negative publicity for the way that they are managed; moreover, researchers have scrutinised managerial leadership in that management's concern with stressing productivity targets and efficiency goals, has inadvertently seen managers undertaking surveillance methods to monitor staff performance, subjecting staff to stressful working conditions (Little & Dean, 2006). The above provides context to Holman, Wood and Stride's (2005) proposition that elevated levels of employee monitoring can be perceived as merely a job demand and is institutionalised as a method of increasing performance and resultantly, output.

Taylor and Bain (1999) purport that in the United Kingdom (UK), 2.3% of the country's total workforce is situated within the call centre industry; this is largely due to the expansive growth that the call centre industry has seen, coupled with the semi-skilled job requirements necessary for employment (Subramoney, 2015). Gordi (2006) elucidates further on this matter, indicating that the working conditions of call centres in the UK are appalling, which coupled with repetitive, mundane work and low wages has resultantly seen staff experiencing diminished levels of job satisfaction and elevated levels of depression. The monotony of such standardised, repetitive work serves a purpose, however, by ensuring that all clients or customers receive

equally effective service but consequently negates any room for foresight or creative thinking and may contribute to both physiological and emotional problems (Wieland & Timm, 2004). Thus, one can deduce that call centre staff often feel a sense of powerlessness in their work which often exacerbates their frustration with the presence of automated systems that only allow for 3-5 seconds between calls (Gordi, 2006). According to Taylor and Bain (1999), the constant influx of calls with no real room for agency, sees the call centre as resembling an assembly line within the individual's head, indicating that call centre staff often feel pressurised due to their cognisance that their current task is followed by a subsequent one immediately after. One of the core implications of this then, is that the average call centre employee receives on average 60-250 calls per shift (Gordi, 2006); implicitly, the subsequent emotional exhaustion experienced by call centre staff as a result of immense workloads postulates this relationship as being a predictor of employee turnover intentions (Visser & Rothmann, 2008).

Parallel to this, South Africa has seen vast development and growth in the call centre area with almost an estimated 20% growth per annum (Subramoney, 2015). According to Kjellerup (2001), in 2001 South Africa had approximately between 120 and 150 call centres that roughly employed 20000 to 30000 people. The current growth trend postulated by Subramoney (2015) is given weight when a comparison between Kjellerup (2001) and Jones' (2008) findings is made; thus, Jones (2008) highlighted that as of 2008, there were on average 1500 call centres in South Africa that were responsible for employing around 150000 to 175000 call centre staff. The wealth of call centres found in South Africa is illuminated by the efficiency and cost-effective manner in which organisation or institutions can reach their client base. Gordi (2006) identifies the expansive range of corporate domains that utilise call centres, ranging from the financial, airline, insurance to cellular phone/internet and mortgage sectors. In order to further contextualise the above, Jones (2008) proposes numerous reasons for the growth and increased

investment in South African call centres; financially, operating a call centre in South Africa costs 50% less than it would if it was based in America or Europe. Furthermore, South Africa has a favourable exchange rate between many foreign currencies and that of the South African Rand (Jones, 2008). Lastly, South Africa being a cosmopolitan country that possesses strong historical ties to both the UK and America means that majority of the population have African and/or European languages skills which in conjunction with the rich semi-skilled labour of its people, make the South African workforce ideal for a call centre environment (Gordi, 2006).

Taking into account both the international and national conditions and circumstances under which call centres have proliferated, it is no surprise that South African call centres have employee turnover rates that exceed 50% (Visser & Rothmann, 2008). Implicitly, the subsequent emotional exhaustion experienced by call centre staff as a result of immense workloads postulates this relationship as being a predictor of employee turnover intentions (Visser & Rothmann, 2008). However, the conditions under which call centre staff work does not only see employee turnover as being the only direct consequence and thus, the negative facets of call centre work have sparked much interest into the physiological, psychological and emotional wellbeing of call centre staff (Harry & Coetzee, 2011).

Benner, Lewis and Omar (2007) have illustrated that South African call centre representatives have displayed elevated levels of stress (Holman, 2005; Gordi, 2006; Kazalarska, 2009; Setar, Buitendach & Kanengoni, 2015) that has seen employees react in an aggressive manner and engage in uncivil workplace behaviour (Van Zyl, 2002; Gordi, 2006; Oodith, 2012; Setar, Buitendach & Kanengoni, 2015). Even though there has been literature conducted (albeit, limited) on the relationship between two or more of these constructs, there is a fundamental gap within the realm of call centre research; that is, as far as could be ascertained, no published

research examined these constructs within the Emergency Services domain. Therefore, in order to widen the scope of research within in both the domains of positive psychology and call centre research, an investigation into the relationship of the primary constructs of the present paper will allow for the comparison of already established literature to that of the Emergency Services domain. In that, it allows for the examination and interpretation of differences in results to various mitigating factors such as the nature of their work.

### **2.8.1 Emergency Services Control Unit**

Considering both the functions and components that have provided us with an overview of call centres both internationally and nationally, within the present study there is a preoccupation with call centres within the Emergency Services domain. Understandably, a call centre that deals with emergency calls (dubbed an ‘Emergency Services Control Unit’ or ESCU) are both similar but also fundamentally different from that of a traditional call centre. Any uncertainty as to whether or not an ESCU would fall within the ambit of what it means to be a call centre are dispelled by Nielsen, Nielsen and Iversen (2010, p.6) who claim that “emergency services, such as 112 and 911 [performs the same functions as that of the ESCU] in the European Union and the United States respectively, also fall under the category call centers”. Where most call centres operate within corporate domains ranging from the financial, airline, insurance to cellular phone/internet and mortgage sectors (Gordi, 2006), an Emergency Services Control Unit assists with emergency calls for assistance and the mobilisation of resources to remedy any situation (EMACC Performance Management Agreement, 2014). What this means then, is that the overall purpose of the Emergency Service Control Unit is to:



"ensure that emergency calls for assistance are answered timeously and to activate appropriate and quick responses to emergencies from the city's emergency services and responses that may be required from other auxiliary service providers within and outside of the municipality"

EMACC Performance Management Agreement (2014, p.2)

The structure of the Emergency Services Control Unit is based on 3 primary locales; Verulam, Durban Central and Pinetown. These locations consist of the only dispatch centres within the eThekweni Municipality and provide coordination for emergency services over four regions; namely, the Central, Northern, Western and Southern regions in eThekweni. In this regard, the Central region has boundaries formed against the South, West and Northern regions (EMACC Performance Management Agreement, 2014). The Northern region is represented by the Umngeni river as it constitutes the geographical borderline between the Central and Northern region (EMACC Performance Management Agreement, 2014). The Western region provides a primary response for the Reservoir Hills area whereas the Southern region boundary is formed between the Central and Western Regions (EMACC Performance Management Agreement, 2014). The above provides an elucidation of the topographical reach of the ESCU within the eThekweni Municipality in Durban, South Africa.

Considered to be telecommunicators rather than call centre agents, the individual function of both chief- and senior-telecommunicators as well as telecommunicators (representative of a 3-tier progression) alike, is to contribute to the efficiency of emergency services delivery/dispatch in conjunction with their own area of jurisdiction through the coordination of various duties that are associated with receiving calls for emergency services as well as mobilising appropriate resources to attend to emergency incidents, such as metro police, fire and disaster-related

instances (EMACC Performance Management Agreement, 2014). However, the chief- and senior-telecommunicators in this regard serves as mentors as well; herein, they are responsible for guiding and coaching telecommunicators while they are engaging in emergency handling sequences and during the dispatching of emergency services (EMACC Performance Management Agreement, 2014). Both telecommunicators and senior- or chief-telecommunicators are obligated to ensure efficiency in key performance areas of their jobs; thus, there is a vast range of competencies that need to be met to ensure quality service delivery to the public (EMACC Performance Management Agreement, 2014).

In this vein, both chief and senior telecommunicators in conjunction with telecommunicators are required to: receive and process calls in accordance with the Control Unit's call taking standard operational procedures; display thorough knowledge of databases and operating systems; have a thorough understanding of the topography within the eThekweni Municipal Area and areas of jurisdiction for all clients that are serviced by the centre; provide accurate information, relevant to the incident, and prompt the same to all responding units completion and ensure all radio messages are recorded accurately and timeously in the emergency services computerised system; display an ability to interact within a diverse environment in a courteous and professional manner; ability to resolve problems and potential conflict situations without the disruption of centre operations and lastly, display the ability to communicate at all levels (EMACC Performance Management Agreement, 2014). The purpose of emphasising the key performance areas of telecommunicators is to illustrate the fundamental differences in the nature of work they undertake as opposed to those agents in a 'traditional' call centre; 'traditional' in the sense that tasks fall in line with the financial, airline and mortgage and cellular phone/internet domains (Gordi, 2006) in contrast to those in the ESCU.

As far as could be established, there has been extremely limited research conducted within the ambit of Emergency Services both internationally and nationally, especially in relation to positive psychological constructs. However, a study conducted by Pierce and Lilly (2012) among 171 participants from 911 call centres across 24 states in the USA, saw that due to the continual barrage of stressful calls and a stress-inducing work environment, dispatchers suffered from peritraumatic distress which can be described as a sense of strong emotion felt after traumatic events (Pierce & Lilly, 2012). Moreover, participants reported feeling helpless, horrified and fearful in almost one-third of all calls they received (Pierce & Lilly, 2012). Such a study by Pierce and Lilly (2012) illustrate the benefit of assessing positive psychological constructs as an avenue to gain insight into the physiological, psychological and emotional experiences of emergency call centre staff. Prior to this study, Troxell (2009) conducted a survey on a sample of 497 emergency 911 dispatchers in Illinois and discovered that in that 16.3% of respondents exhibited symptoms of Compassion Fatigue (CF), which is defined as a condition whereby the individual experiences struggles with work-related secondary traumatic stress symptoms and burnout (Troxell, 2009). The above two studies represent the only published studies that paralleled the current study; no other studies could be obtained that directly pertain to the constructs under study (i.e occupational stress, uncivil workplace behaviour, job satisfaction and psychological capital). It is for this reason, that the current study aims to address that significant gap to widen the scope the of research within in both the domains of positive psychology and call centre research.

In order to address such a significant gap in the literature, an adequate theoretical framework is required in order to sufficiently understand, frame and analyse both the established literature and the findings produced within the present study. Both the Broaden-and-Build Theory (Frederickson, 1998) and the Job Stress Model (Spector & Fox, 2002) will be thoroughly

discussed in the following section within the context of this study to structure and elucidate the findings of this study.

## **2.9 Theoretical Framework**

For the purposes of this study, two theoretical frameworks are adopted; namely: Fredrickson's (1998) 'Broaden-and-Build' Theory and Spector and Fox's (2002) Job Stress Model, to address all the constructs in a way that is pertinent to the nature of the study. The relationship between occupational stress and incivility has been one that has been sporadically documented (Penney & Spector, 2005; Roberts et al., 2011). The adoption of Spector and Fox's (2002) Job Stress Model, which views emotional reactions that illicit counter-productive work behaviours as being an outcome of an employee's appraisal of a threatening situation, allows us to examine the relationship between job stress and counter-productive work behaviour.

As for incivility and counter-productive work behaviour overlap, adaptations of this model advanced by Penney and Spector (2005) provide a solid footing for the framing of this study. Furthermore, previous studies conducted by Roberts et al. (2011) using Spector's adapted Job Stress Model yielded significant results in terms of providing evidence of a stress-incivility reciprocal relationship whereby displays of incivility resulted in increased levels of stress and inflated stress levels manifested in acts of incivility (Roberts et al., 2011). In order to ensure coherence, the present study adopts the sentiments of Roberts et al. (2011) in that incivility is considered to be the outcome of stress, rather than that of a stressor.

The Broaden-and-Build Theory (Frederickson, 1998) focusses on positive emotions and their ability to do far more than cause feelings of happiness and joy, as well as provides an

overarching framework through which this study was framed. Furthermore, it provides a suitable framework to examine the relationship between occupational stress and job satisfaction as well as the moderating role of psychological capital in the relationship. According to Mind Tools Corporate (2014, p.2), positive emotions “also broaden behaviours (“thought-action repertoires”), such as awareness, play, discovery, and curiosity. The more positive emotions we experience, the wider the range of thought-action repertoires we have – in other words, the happier we are, the more flexible and creative we are in the way that we work”. The implication herein is that the experience of positive emotions then may broaden the range of options perceived by the individual and thus, open them up to a multiplicity of problem-solving approaches (Baumeister, Gailliot, DeWall & Oaten, 2006). It is of the opinion that the experience of positive emotions, therefore, presents an opportunity to construct states of wellbeing as well as deeper understanding of value that positive emotions can promote in individuals (Fredrickson & Joiner, 2002). According to Setar, Buitendach and Kanengoni (2015), this means that an individual’s positive traits that underlie the sub-constructs of psychological capital (i.e resilience, optimism, self-efficacy and hope) has the propensity to allow individuals to essentially ‘broaden and build’ (Setar, Buitendach & Kanengoni, 2015, p. 29) upon their already established psychological resources in order to ensure greater job satisfaction.

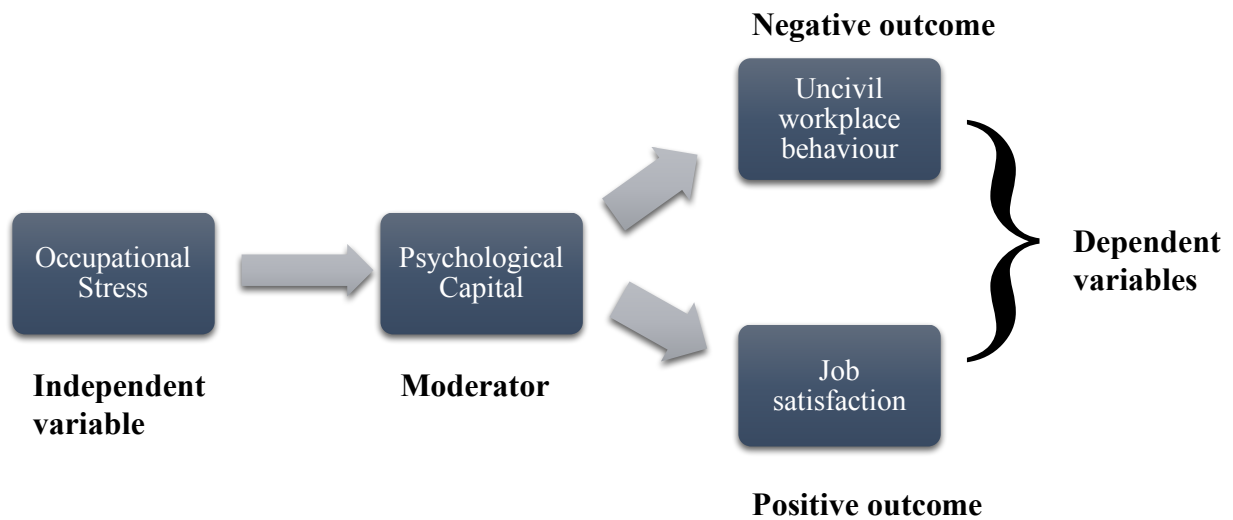
Prior research conducted by Roberts et al. (2011) has provided ancillary evidence for the role of psychological capital in moderating the relationship between occupational stress and incivility, in terms of those with higher levels of psychological capital being better equipped to cope with stressors that may inform displays of counter-productive work behaviours (like incivility) within the workplace. In other words, psychological capital and its sub-constructs, act as a buffer, thus moderating against the negative influences of occupational stress on job satisfaction due to the positive psychological resources at the individual’s disposal as a result

of high levels of psychological capital (Bandura, 2008; Roberts et al., 2011). The adoption of both The Job Stress Model (Spector & Fox, 2002) and the Broaden-and-Build Theory (Frederickson, 1998), provide a joint theoretical lens through which the relationship between occupational stress, uncivil workplace behaviour, job satisfaction and the moderating role of psychological capital can be evaluated.

## **2.10 The present study**

The purpose of the above literature review was to provide both a theoretical and conceptual foundation for the current study. More implicitly, the aim of this research study is to examine the relationship between occupational stress, uncivil workplace behaviour, job satisfaction and the moderating role of psychological capital among Emergency Control Unit staff from a positive psychology perspective. Previous studies (Avey et al., 2009; Appollis, 2010; Herbert, 2011; Simons & Buitendach, 2013) herein have focussed on PsyCap, but have not investigated its influence on a positive psychological outlook with regard to its ability to moderate levels of job satisfaction amongst call centre staff, and more specifically that of Emergency Control Unit staff. Moreover, as far as could be ascertained, no literature to date has addressed the measurement of occupational stress, uncivil workplace behaviour, job satisfaction or psychological capital in the domain of emergency call centre operations; for this reason, the current study aims to address that significant gap.

On the following page, a diagrammatic model that illustrates the proposed relationships between the constructs under study (i.e occupational stress, psychological capital, uncivil workplace behaviour and job satisfaction), is presented.



*Figure 1.* Model of study constructs (occupational stress, psychological capital, uncivil workplace behaviour and job satisfaction).

## 2.11 Chapter Summary

This chapter aimed to define prominent constructs within the current study, that is; occupational stress, uncivil workplace behaviour, job satisfaction as well as psychological capital and its sub-constructs (self-efficacy, optimism, resilience and hope). An introduction to both the broader areas of positive psychology and positive organisational behaviour were explored in conjunction with an analysis of literature and empirical study findings by other researchers that pertained to the aforementioned study constructs; these were examined and the relationships between findings were established or corroborated in order to present a foundation for the present research study. In order to contextualise and motivate for the current study, a critical evaluation of South Africa's call centre climate was embarked upon and a succinct comparison was made to that of the job requirements and purpose of the Emergency Control Unit. Lastly, the theoretical frameworks that were adopted for the current study were discussed.

## **CHAPTER 3**

### **METHODOLOGY**

#### **3.1 Introduction**

Within this chapter, the methodology for the proposed study is broadly outlined. Herein, there is a specific emphasis and explanation of the planned research design. Following this, there is an examination of the measuring instruments utilised during the data collection phase of the study; these instruments include The Job Stress Scale, the Uncivil Workplace Behaviour Scale, the Minnesota Satisfaction Questionnaire and the Psychological Capital Questionnaire. Thereafter, a discussion of the proposed data collection methods, procedures and statistical analysis efforts is explored. To conclude this chapter, ethical considerations relating to the present study is elucidated upon.

#### **3.2 Research Methodology**

##### **3.2.1 Research Design**

The approach employed in this study follows the quantitative guidelines put forth by modern positivism (Neuman, 2014). Often thought of as a numerical or statistical approach, quantitative research in essence, is about the quantification of information through the collection of data, of which is subjected to statistical analysis in order to support or refute alternative claims to knowledge (Neuman, 2014). The suitability of the quantitative design for the present study then, is stressed by the current study's aim to determine both a statistical (and practical) relationship between occupational stress, uncivil workplace behaviour, job satisfaction and psychological capital; moreover, the study aimed to understand psychological



capital as a moderating variable and to determine if psychological capital is a predictor of job satisfaction. This is corroborated by Neuman (2014) who asserts that the quantitative research design is appropriate for the investigation of relationships and permits the researcher to make inferences in regard to prediction and mediation.

Positivism, according to Guba (1999) is a belief system that suggests reality as existing “out there” (p.19) and is driven by immutable natural laws; furthermore, the ultimate aim of positivism is to predict and control natural phenomena (Guba, 1999). With that being said, positivist research is able to generate predefined observable measures through two phases; the conceptualisation and operationalisation phases (Terreblanche, Durrheim & Painter, 2007; Neuman, 2014). Conceptualisation involves the process of defining constructs in abstract terms in accordance with their theoretical meanings (Terreblanche, Durrheim & Painter, 2007) which takes place via an explorative literature review. The operationalisation (the quantitative study), comprises translating these theoretical definitions into observable indicators of that construct (Terreblanche, Durrheim & Painter, 2007) and includes the following:

1. Gathering of data by means of The Job Stress Scale, Uncivil Workplace Behaviour Scale, Minnesota Satisfaction Questionnaire (MSQ) and Psychological Capital Questionnaire (PCQ)
2. Processing of the data by means of statistical analysis.

This study would take the form of a non-experimental research design as there will be no manipulation of the input variables as well as no random assignment and control group (Rosenthal & Rosnow, 1996). Furthermore, the proposed study would be an explanatory non-experimental design, as the primary focus of the research, is to explain how a phenomenon works or operates and ultimately, to test hypotheses (Neuman, 2014). The cross-sectional

nature of the study stems from the fact that it was based on observations in a single point in time, providing a 'snapshot' of social phenomena (Pallant, 2011; Neuman, 2014). The suitability of the cross-sectional research design is elucidated by the call centre representatives' time-sensitive tasks, which justifies the quantitative design as being most suited to the time constraints of the Emergency Services Control Unit's environment.

### **3.2.2 Sampling Method**

Permission to conduct the present study was attained from the Head of Disaster Management & Emergency Control Unit (see Appendix 8) and a request was made to ascertain the shift rosters from the relevant supervisors. The present study used purposive sampling, which is a type of non-probability and non-random sampling; this according to Durrheim and Painter (2006, p.139), sees non-probability sampling as being a "kind of sampling where the selection of elements is not determined by the statistical principle of randomness" and thus, requires the researcher to select the units that will be observed based on the researchers own judgment about which ones will be the most representative (Neuman, 2014). The inclusion criteria adopted for the present study were as follows: individuals need to be employed within the Emergency Control Unit; individuals need to perform the function(s) as stipulated by the job description of the Emergency call centre representative.

### **3.2.3 Research Participants**

The participants in this proposed study consist of working adults in the Emergency Services Control Unit. The population consists of 89 (n=89) male and female call centre representatives across 3 Emergency Services Control Unit locations: Durban, Pinetown and Verulam within the EThekweni region in Durban, KwaZulu- Natal. A total of 89 questionnaires were distributed

to the employees at the various locations and 70 questionnaires were completed and returned (see Table 1); this is indicative of a 78.6% response rate.

Table 1  
*Characteristics of participants*

	ITEM	FREQUENCY	N	PERCENTAGE
GENDER	Male	28	70	40
	Female	42	70	60
AGE GROUP	24 years and younger	0	70	0
	25-35 years	33	70	47.1
	36-45 years	23	70	32.9
	46-55 years	14	70	20
	56 years and older	0	70	0
RACE GROUP	African	35	70	50
	Indian	26	70	37.1
	Coloured	4	70	5.7
	White	5	70	7.1
MARITAL STATUS	Single	27	70	38.6
	Divorced	5	70	7.1
	Widowed	2	70	2.9
	Married	31	70	44.3
	Living with a spouse	5	70	7.1
TENURE	Less than 5 years	2	70	2.9
	6-10 years	43	70	61.4
	11-20 years	12	70	17.1
	More than 20 years	13	70	18.6
QUALIFICATION	Matric certificate	35	70	50
	Diploma	28	70	40
	Degree	4	70	5.7
	Postgraduate Degree	3	70	4.3

The participants within the present study consisted of 70 employees working on a full-time basis in the Emergency Service Control Unit. Upon analysis of demographic variables, it was found that there was a substantially larger group of female participants (60%) in contrast to that of male participants (40%). In terms of age groups, most participants fell into the 25-35 years age group (47.1%), whereas 32.9% belonged to the 36-45 years age group and a smaller 20% belonged to the 46-55 years age grouping. Furthermore, there were no participants that fell below the age of 24 years or younger as well as no participant that exceeded the age of 56. The racial distribution of the sample indicates that participants were primarily African (50%), followed by a slightly lower number of Indian participants (37.1%) and then White and Coloured participants with 7.1% and 5.7% respectively. With respect to the participants' marital statuses, the majority (44.3%) were Married, followed by those participants who were Single (38.6%), Divorced (7.1%), Living with a Spouse (7.1%) and lastly, Widowed (2.9%).

In terms of tenure, i.e the number of years participants have spent working at the organisation, Table 1 indicates that 61.4% of participants have been employed for 6-10 years, whilst 18.6% of participants were employed for more than 20 years; 17.1% were employed for between 11-20 years whereas only 2.9% of all participants were only employed for less than 5 years. The highest qualifications obtained by participants ranged from 50% attaining a Matric Certificate, 40% having a Diploma, followed by participants who had Degree's and Postgraduate Degree's, constituting 5.7% and 4.3% respectively. Taking into account the above demographic variables, it can be concluded that this sample consisted of primarily African (50%) female participants (60%) between the ages of 25-35 (47.1%) who were single (38.6%). Furthermore, within this sample, majority of respondents possessed a Matric certificate (50%) and had been working for the Emergency Services Control Unit between 6-10 years (61.4%).

### **3.3 Data Collection Technique and Research Instruments**

The current study relies on the collection data through a survey design. Such survey research involves is quantitative in nature and requires a large human population of which, there is an identification of specific population to be studied (Cozby, 2004). Moreover, there is further selection of a representative sample, of which data is collected through questionnaires geared towards probes people's emotions, thoughts and behaviours (Cozby, 2004). For the present study, a cross-sectional survey design is appropriate as the study utilised questionnaires to gather information on constructs pertaining to the study (i.e occupational stress, uncivil workplace behaviour, job satisfaction and psychological capital) at one point in time.

Specific questionnaires were utilised during the data collection phase of the present study; these include a biographical questionnaire, the Job Stress Scale (Parker & DeCotiis, 1983), Uncivil Workplace Behaviour Scale (Martin & Hine, 2005), Minnesota Satisfaction Questionnaire (MSQ) (Spector, 1997) and Psychological Capital Questionnaire (PCQ) (Luthans, Youssef & Avolio, 2007) (see Appendices 3, 4, 5, 6, and 7) in order to discern whether or not there are statistically significant relationships that exist between the variables within the current study.

#### **3.3.1 Biographical Data Sheet**

The biographical data sheet was constructed for the specific purpose of this research study and was aimed at gathering information regarding the demographical information of participants. Questions asked herein were for the purposes of identifying the participants' gender, age group, race group, marital status, tenure and their highest attained qualification. It is important to note that these questions were close-ended and were developed specifically by the researcher, to fulfil the purpose of the present study.

### 3.3.2 The Job Stress Scale

Constructed by Parker and DeCotiis (1983), the Job Stress Scale consists of 13 items that are rated on a 4-point Likert scale (that is, 1 = Strongly Disagree; 4 = Strongly Agree). The Job Stress Scale can be further divided into two subscales, namely; Time Stress and Job-related Anxiety. Therein, there are a variety of statements that measure either subscale; statements such as: “I have too much work and too little time to do it” and “I frequently get the feeling that I am married to the company” measure Time Stress. Additionally, there are five items that measure Job-related Anxiety by using statements such as “Sometimes when I think about my job I get a tight feeling in my chest” and “I have felt fidgety or nervous as a result of my job” in the questionnaire. Cronbach alphas coefficients were determined by Parker and DeCotiis (1983) for each of the subscales as follows: Time Stress ( $\alpha = 0.86$ ) and Job-related Anxiety ( $\alpha = 0.74$ ). However, more recent research (Almendra, 2010; Setar, Buitendach & Kanengoni, 2015) has corroborated the above alphas values for both subscales but further determined a Cronbach alpha coefficient of 0.91 for the total scale.

An exploratory factor analysis on the JSS was conducted by Setar, Buitendach and Kanengoni (2015) within the South African context. The data from the study was subjected to a principal component analysis (PCA) in order to assess the suitability of the data for factor analysis (Setar, Buitendach & Kanengoni, 2015). The results from the PCA indicated the prevalence of numerous correlation coefficients above 0.30; moreover, the Kaiser-Meyer-Olkin value reported was 0.876, which substantially exceeds the recommended 0.60 (Setar, Buitendach & Kanengoni, 2015). Lastly, Bartlett’s Test of Sphericity was below 0.05, which indicated that it was statistically significant ( $p = 0.000$ ); therein, the above gives credence to the factorability of the correlation matrix (Setar, Buitendach & Kanengoni, 2015).

Setar, Buitendach and Kanengoni's (2015) research indicated that only two items on the JSS loaded onto the second factor and therefore, within their study, a decision was made only retain the first factor for further investigation. Resultantly, the one factor contributed 45.668% of the total variance whilst the second factor contributed 9.555% (Setar, Buitendach & Kanengoni, 2015). Moreover, all items except item 13 loaded on the first factor and therefore, did not fit the traditional two factor structure advanced by Parker and DeCotiis (1983); it can be deduced that such a one factor structure consists of only the first 12 items of the JSS without any subscales (Setar, Buitendach & Kanengoni, 2015). As far as could be ascertained, Setar, Buitendach and Kanengoni's (2015) research is to date, the only study that evaluates the JSS in relation to South African call centre staff and is further significant due to the tenuous similarity in sample to the present study. It is for this reason, that the current study will utilise Parker and DeCotiis' (1983) two factor structure during statistical analysis in order to make further inferences about the JSS.

### **3.3.3 Uncivil Workplace Behaviour Scale**

Conceptualised and developed by Martin and Hine (2005), the Uncivil Workplace Behaviour Questionnaire consists of 17 items that are further divided into four distinct subscales that assess four type of incivility, namely; exclusionary behaviour privacy invasion, gossiping and hostility. Within these four subscales, there are various items which measure each of these factors; examples are included on the following page:

- Exclusionary behaviour: "Did not consult a co-worker in reference to a decision they should have been involved in"
- Privacy invasion: "Took items from a co-worker's desk without prior permission"
- Gossiping: "Talked about a co-worker behind their back"

- Hostility: “Spoke to a co-worker in an aggressive tone”

Participants are required to indicate the frequency of uncivil workplace behaviour they exhibit towards their supervisors and colleagues. In answering the questionnaire, participants rate their responses on a 5-point Likert scale (1 = never, 2 = rarely, 3 = occasionally, 4 = often and 5 = very often); whereby, high scores on the questionnaire are indicative of frequent uncivil workplace behaviour.

After the construction of the scale, Martin and Hine (2005) found that the Cronbach alpha coefficient for the overall scale was 0.92, whereas the Cronbach alpha coefficients for all four subscales were over 0.80. Recent findings by Roberts et al. (2011), found that the overall scale had a high internal consistency ( $\alpha = 0.93$ ); moreover, there were acceptable levels of reliability found for each of the four subscales. Exclusionary behaviour showed a Cronbach alpha coefficient of 0.94, while privacy invasion had an alpha coefficient score of 0.84, gossiping was 0.85 and hostility had an alpha value of 0.86 (Roberts et al., 2011). Within the South African context, Setar, Buitendach and Kanengoni (2015) found that the Cronbach alpha coefficient for the overall scale was 0.91. Moreover, acceptable reliabilities were established for the subscales of the UWBS where Setar, Buitendach and Kanengoni (2015) found that the items loaded on two factors; Privacy Invasion and Exclusion showed a Cronbach alpha coefficient of 0.90 whereas the Hostility factor had an alpha coefficient score of 0.84 (Setar, Buitendach & Kanengoni, 2015).

Setar, Buitendach and Kanengoni (2015) conducted an exploratory factor analysis on the UWBS which offered a two-factor structure, in contrast to Martin and Hine’s (2005) four-factor structure. When the data was subjected to a PCA, numerous correlation coefficients



above 0.30 were found, which attested to the suitability of the data set to undergo factor analysis. Moreover, the Kaiser-Meyer-Olkin and Bartlett's Test of Sphericity values were 0.856 and 0.000 respectively, which indicated that the data set was suitable for further analysis. In their analysis, Setar, Buitendach and Kanengoni (2015) indicated that majority of the items that loaded onto factor one, originally belonged to the exclusionary behaviour and privacy invasion subscales; therein, these subscales were merged to make the 'privacy invasion and exclusionary behaviour' subscale which contributed 45.143% of the explained total variance (Setar, Buitendach & Kanengoni, 2016). Additionally, items that loaded on the second factor predominantly belonged to the hostility subscale and was consequently labelled the 'hostility' subscale, contributing 9.063% of the total explained variance. The two-factor solution therefore explained a total variance of 54.206% (Setar, Buitendach & Kanengoni, 2015).

It is imperative to note that both components did exhibit numerous convincing loadings, with all items significantly loading on either of the factors, except for item 1 ("Avoided consulting a co-worker when you would normally be expected to do so") which failed to significantly load on either of the factors, advocating for its exclusion from the scale in following analyses. As far as could be ascertained, Setar, Buitendach and Kanengoni's (2015) research is to date, the only studies that evaluates the UWBS in relation to South African call centre staff and is further significant due to the tenuous similarity in sample to the present study. It is for this reason, that the present study will utilise Martin and Hine's (2005) factor structure during statistical analysis in order to make further inferences about the UWBS.

### **3.3.4 Minnesota Satisfaction Questionnaire**

Developed by Spector (1997) the Minnesota Satisfaction Questionnaire (MSQ) is commonly utilised in research to measure levels of job satisfaction (Buitendach & Rothmann, 2009). The

short form of the questionnaire comprises of 20 items that measure both intrinsic and extrinsic factors of job satisfaction. In answering the questionnaire, participants are required to indicate their levels of job satisfaction by rating their responses on a 5-point Likert scale (1 = very dissatisfied, 2 = dissatisfied, 3 = neither satisfied nor dissatisfied, 4 = satisfied and 5 = very satisfied). Since the MSQ is further divided into two subscales (i.e intrinsic and extrinsic), items within the questionnaire were designed to measure both components; examples of items/statements that measure the intrinsic components of job satisfaction are those such as: “The chance to work alone on the job” and ‘Being able to keep busy all the time”. Items that measure extrinsic job satisfaction components are those such as: “The working conditions”, and “The way my boss handles his/her workers”.

According to Rothmann, Scholtz, Fourie and Rothmann (2002), the Cronbach alpha coefficient for the overall MSQ was 0.96 within the South African context, whereas the Cronbach alpha coefficients for both subscales were over 0.75 (Buitendach & Rothmann, 2009). Cronbach alphas coefficients were determined by Buitendach and Rothmann (2009) for each of the subscales as follows: intrinsic job satisfaction component ( $\alpha = 0.79$ ) and the extrinsic job satisfaction component ( $\alpha = 0.82$ ).

An exploratory factor analysis was conducted by Sibisi (2012) which established that the items from the MSQ loaded onto two factors, namely; intrinsic and extrinsic motivation subscales. The intrinsic motivation subscale contributed 68.028% of the explained total variance, whereas the extrinsic motivation subscale contributed 6.546% of the explained total variance (Sibisi, 2012). Sibisi’s (2012) findings within the South African context were consist with those factors recounted by Spector (1997) and later, Nel and Haycock (2005). Moreover, Sibisi (2012) advanced that both factors accounted for 74.57% of the variance in job satisfaction and

therefore, was seen to be a good measure of job satisfaction. Therein for the purposes of this study, both subscales are subjected to statistical analysis.

### **3.3.5 Psychological Capital Questionnaire**

The Psychological Capital Questionnaire (PCQ) was developed by Luthans, Youssef and Avolio (2007) and is used to assess various domains of psychological capital in participants who complete the questionnaire. In answering the questionnaire, participants rate their responses on a 6-point Likert scale (1 = strongly disagree, 2= disagree, 3 = somewhat disagree, 4 = somewhat agree, 5 = agree and 6 = strongly agree) for each of the 24-items. These 24-items are further divided into four subscales (each of which has 6 items) of psychological capital, namely; efficacy, hope, optimism and resilience (Luthans, Youssef & Avolio, 2007). Therefore, the division of the PCQ into 4 underlying constructs, allows for the gathering of information that provides an overall inclusive measure of the higher order construct of psychological capital.

Various studies (Luthans et al., 2007; Avey et al., 2009, Toor & Ofori, 2010; Appollis, 2010; Roberts et al., 2011; Simons & Buitendach, 2013) have found that the PCQ has good internal consistency with the Cronbach alpha coefficients for the overall scale exceeding 0.87. Luthans et al. (2007) established that the full PCQ scale had a Cronbach alpha coefficient of 0.91, whereas research conducted by Avey et al. (2010) found that the Cronbach alpha coefficient of 0.93. An alpha value of 0.88 was discovered by Toor and Ofori (2010) and an alpha value of 0.89 was found by Roberts et al. (2011). Within the South African context, a Cronbach alpha coefficient of 0.93 was discovered by Appollis (2010) for the overall scale, which was indicative of a high level of internal consistency for this instrument and thus suitable for use in South

Africa. Furthermore, within in the South African context, Pillay (2012) and Kesari (2012) both found alpha values of 0.88 and 0.82 respectively for the overall PCQ scale.

More recently, Simons and Buitendach (2013) confirmed an alpha value of 0.91 for the overall PCQ scale in South Africa, which is consistent with the original findings of Luthans, Youssef and Avolio (2007). Therefore, the multicultural applicability of the PCQ, especially in South Africa (Appolis, 2010; Simons & Buitendach, 2013), justifies the selection of this instrument in the present study as it has been proven to be both reliable and valid within the South African context. According to Avey et al. (2010), the subscales of the PCQ are drawn from previously established scales, they are as follows:

#### **3.3.5.1 Self-Efficacy**

The incorporation of Parker's (1998) 6-item Self-Efficacy scale into the PCQ provides a measure of the participant's self-efficacy through their responses to statements such as "I feel confident presenting information to a group of colleagues" and "I feel confident helping to set goals/targets in my work area". According to Axtell and Parker (1998), the Cronbach coefficient alpha for this measure is 0.96; whereas research by Luthans, Avey and Patera (2008) reported an alpha value of 0.92 for this self-efficacy scale. Studies conducted in South Africa by Herbert (2011) found that the self-efficacy scale computed a Cronbach alpha coefficient of 0.83, which is indicative of good internal consistency.

#### **3.3.5.2 Hope**

Developed by Snyder (1996), the 6-item Hope scale was incorporated into the PCQ as it provides a measure of the participant's hope through their responses to statements such as "At

the present time, I am energetically pursuing my goals” and “If I should find myself in a jam, I could think of many ways to get out of it”. Formative research by Luthans and Youssef (2004) computed a Cronbach alpha coefficient of 0.64 for this subscale; however, Roberts et al. (2011) discovered an alpha value of 0.80. The findings by Robert et al. (2011) were mirrored in South Africa by Herbert (2011) who discovered a Cronbach coefficient alpha value of 0.81 which is indicative of relatively good internal consistency for this subscale.

### **3.3.5.3. Hopeful Confidence**

An exploratory factor analysis conducted by Pillay (2012) indicated a two factor model of the PCQ with items representing self-efficacy and hope loading onto one factor, and items that represented resilience and optimism loading on factor two (Pillay, 2012). This finding is in contrast to Du Plessis and Barkhuizen’s (2011) study that suggested a three factor model being most representative of a South African sample from which data was gathered. Both Du Plessis and Barkhuizen (2011), and Pillay (2012) further postulate that items relating to self-efficacy and hope can be renamed the hopeful-confidence subscale, which looks at having the self-confidence in one’s ability to pursue challenging tasks and persevere in order to reach such goals (Pillay, 2012). A similar finding was advanced by Setar, Buitendach and Kanengoni (2015) within their study. The PCA in their study indicated multiple correlation coefficients above 0.30 in the correlation matrix, inferring the suitability of the data for factor analysis (Setar, Buitendach & Kanengoni, 2015). The Kaiser-Meyer-Olkin and Bartlett’s Test of Sphericity values for were 0.778 and 0.000 respectively, indicating that their data was suitable for analysis (Setar, Buitendach & Kanengoni, 2015). Further analysis indicated that items relating to self-efficacy (items 1-6) as well as hope (items 7-12) loaded onto one factor, which was also consequently named the hopeful-confidence subscale which contributed 27.664% of the total variance (37.228%) (Setar, Buitendach & Kanengoni, 2015). For purposes of the

present study, both the self-efficacy and hope subscales will be referred to from here on out, as the hopeful-confidence subscale.

#### **3.3.5.4 Resilience**

Developed by Block and Kremen (1996), the 6-item Resilience scale (known as the Ego-Resiliency Scale) was incorporated into the PCQ as it provides a measure of the participant's resiliency through their responses to statements such as "When I have a setback at work, I have trouble recovering from it, moving on" which is reversed scored; and "I usually manage difficulties one way or another at work". Formative research conducted by Luthans et al. (2008), indicated a Cronbach alpha value of 0.83 for the sub-construct of resilience; this finding is slightly higher than the alpha value of 0.81 computed by Roberts et al. (2011). The findings by Robert et al. (2011) were mirrored in South Africa by Du Plessis and Barkhuizen (2012) who discovered a Cronbach coefficient alpha value of 0.81 which is indicative of relatively good internal consistency for this subscale.

#### **3.3.5.5 Optimism**

The incorporation of Scheier and Carver's (1985) 6-item Optimism scale (LOT-R) into the PCQ provides a measure of the participant's optimism through their responses to statements such as "In this job, things never work out the way I want them to" and "There are lots of ways around any problems that I am facing now". Recent research conducted by Du Plessis and Barkhuizen (2012) in South Africa computed a Cronbach alpha value of 0.77 which is indicative of matrix internal consistency for this measure.

### **3.3.5.6 Positive Outlook**

An exploratory factor analysis conducted by Pillay (2012) indicated a two factor model of the PCQ with items representing self-efficacy and hope loading onto one factor whereas items that representing resilience and optimism loading on factor two (Pillay, 2012). The resilience subscale (items 13-18) as well as the optimism subscale (items 19-24) successfully loaded onto one factor, which according to Pillay (2012) can be renamed the positive outlook subscale, as it refers to being capable of bouncing back in the face of adversity and being optimistic about future success (Pillay, 2012). Similarly, Setar, Buitendach and Kanengoni's (2015) study also produced a two factor structure of which resilience and optimism loaded onto one factor that contributed 9.564% of the total variance (37.228%). It is important to note the results of Du Plessis and Barkhuizen (2011), Pillay (2012) and Setar, Buitendach and Kanengoni (2015) present a departure from Luthans' et al. (2007), Larson and Luthans' (2006) and Avey et al.'s (2006) findings of a four factor model that is indicative of each subscale of the PCQ loading onto separate factors. The four factor model, as indicated by Luthans et al. (2007) explains 51.4% of total variance, whereas the two structure model explains 37.6% of the total variance (Pillay, 2012).

### **3.4 Study Procedure**

The Emergency Control Unit was contacted by the researcher and an appointment was made with the manageress of the Control Unit. In preparation for the meeting, the researcher compiled a booklet for the manageress's perusal, which included: a letter requesting permission to conduct research, a copy of the research proposal as well as the questionnaires that will be used during the data collection phase. During the meeting, the researcher explained the purpose of the research to the manageress as well as ensured her that the participants' confidentiality and anonymity will be maintained throughout the study and moreover, the research will not

negatively impact any individuals/the organisation involved. Before approving the research request, the compiled booklet was forwarded both to the Human Resources department and the Head of Disaster Management & Emergency Control Unit for their approval. However, due to the intensive nature of the participants' work, the manageress could not grant the researcher access to the staff as it would be at the discretion of the supervisor of the respective shifts. In order to streamline the process, the manageress agreed for the researcher to distribute the 89 questionnaires to the supervisors of the respective shifts; upon doing so, the researcher explained to the supervisors what the purpose of the research was and assured them that the confidentiality and anonymity of all participants are guaranteed for the duration of the study. Following this, the researcher informed the supervisors that it is imperative for the participants to also be informed of the purpose of the research as well as the confidentiality and anonymity of the study. The supervisors, after explaining to the participants their rights and assuring them of the confidentiality of the study, distributed the questionnaires over a two-week period. After two weeks, the Emergency Control Unit informed the researcher that the completed questionnaires were ready and could be collected for data analysis.

### **3.5 Ethical Considerations**

The current study has made every endeavour to conform with the framework of ethics provided by the University of KwaZulu-Natal. Permission from the Head of Disaster Management & Emergency Control Unit was acquired as preliminary step to ensure that the study was feasible (refer to Appendix 8). Secondly, before conducting the research, permission to conduct the present study was conducted and requested from the by Ethics Committee of the Higher Degrees Committee of the Faculty of Humanities, Development and Social Sciences (see Appendix 9). Lastly, the objectives of the present research were clearly outlined to all the participants who partook in study; implicit in this, was that each of the participants were further



made knowledgeable of their rights as participants, as well as how/where the information gathered will be used and stored. Furthermore, participants were reassured their involvement is voluntary and that they can opt to withdraw from the study at any time. In addition to this, participants were informed that any and all information they provide is kept anonymous and confidential.

Above merely informing participants, they were requested to sign an informed consent document (see Appendix 2) that further provided an overall outlook on the nature of the study. Both the name and contact details of the university research officer and the research supervisor were included on the informed consent form in the event of any participant having a query or the need for clarification about their right as a participant. During both the data analysis and report writing processes, no identifying/signifying information was used and complete anonymity will be ensured when presenting the findings for academic presentation or publication purposes. Once the present study has concluded, all data is safely secured and stored in the Psychology department for a period of 5 years; once this period has expired, all relevant documentation is shredded and disposed of appropriately.

### **3.6 Data/Statistical Analysis**

Data collected during the data collection phase of the study was analysed using SPSS (Statistical Package for Social Sciences) program, version 24 (IBM SPSS Inc., 2016). The statistical methods utilised for analysing the data were selected owing to their suitability and consistency with the methodology of the present study. In this vein, the current study aimed at identifying and establishing relationships; therefore, the utilisation of statistical techniques would aid in the reaching this aim without the possible contamination of data through researcher bias. The present study made use of both descriptive and inferential statistics.

Firstly, Descriptive statistics were computed to describe the distribution of the results of the sample as they relate to the constructs (occupational stress, uncivil workplace behaviour, job satisfaction and psychological capital). Following this, inferential statistics were calculated to allow for the synthesis of inferences (conclusions based on logical reasoning) for the data collected to answer the specific research questions set out in the present study (Howell, 2008).

In order to effectively describe the results, the mean (statistical average), standard deviation (how the distribution of scores deviate from the snapshot), minimum and maximum score, kurtosis (peakedness) and skewness (establishes whether the results are negatively or positively skewed) for the distribution of scores for occupational stress, uncivil workplace behaviour, job satisfaction and psychological capital must be established. In order to determine the reliability (internal consistency) of the measuring instruments (i.e The Job Stress Scale, Uncivil Workplace Behaviour Scale, Minnesota Satisfaction Questionnaire and Psychological Capital Questionnaire), Cronbach alpha coefficients will be computed (Clark & Watson, 1995). Cronbach alpha coefficients that exceed 0.70 are considered reliable (Pallant, 2011). These descriptive statistics are invaluable as the description of the distribution of scores forms the foundation upon which inferential statistics are analysed.

Thereafter, the Pearson correlation coefficient is computed to determine the relationship between occupational stress, uncivil workplace behaviour, job satisfaction and psychological capital. The correlation coefficient ( $r$ ) provides an avenue to accurately measure the relationship between variables whereas the Pearson product-moment correlation coefficient is the most commonly used correlation coefficient (Howell, 2008). A correlation matrix was computed so that the Pearson correlation coefficients and significant levels were scrutinised for both statistically significant and practically significant values. Relationships that are

deemed practically significant see coefficients being interpreted as followed:  $r = .30-49$  (indicating a medium relationship); whereas  $r = .50 -1.0$  is indicative of a large relationship (Pallant, 2011). The strength of such a relationship was determined by the coefficient value as values less than or equal to 0.05 were considered statistically significant. The final step is to compute and examine the coefficient of determination to establish how much shared variance the relationships between the constructs/variables occupy.

Multiple regression analysis is then conducted to determine if a predictive relationship exists and ultimately, assesses the contribution of the predictor variable (occupational stress) on the outcomes of uncivil workplace behaviour and job satisfaction and the moderating role of psychological capital in this relationship (Howell, 2008). Lastly, hierarchical regression is conducted as it is able to determine whether psychological capital moderates the relationship between occupational stress and uncivil workplace behaviour as well as the relationship between occupational stress and job satisfaction. Baron and Kenny (1986) provide some elucidation as to what a moderating variable is by positing that “a moderator is a qualitative (e.g. sex, race, class) or quantitative (e.g. level of reward) variable that affects the direction and/or strength of the relation between an independent or predictor variable and a dependent or criterion variable” (p.1174). The requirement for this method of analysis see’s psychological capital (as our moderating variable) being partitioned into subgroups in order to establish its domains of maximal effectiveness in respect to the dependent variable. If statistically significant relationships are established, it is imperative to consider the practical significance of the relationship; a statically significant relationship does not always imply that the relationship is practically significant (Pallant, 2011). Therefore, in order to establish whether or not a relationship is practically significant, effect sizes were computed and utilised in conjunction to the statistical significance to determine the actual significance of a given

relationship (Cohen, 1998). The relevance of this to the researcher is that it aids in determining whether or not the results obtained after data analysis were only statistically significant or if they were also practically significant (Buitendach & Rothmann, 2009).

### **3.7 Chapter Summary**

The purpose of this chapter was to discuss the research methodology that was utilised in carrying out the present study. The research design, sample/sample size, procedure of the study, research instruments, ethical considerations and statistical analysis techniques in the present study was discussed. The research design for the current study offered an elucidation as to why the quantitative paradigm was selected for this research as well as why the cross-sectional survey design was most suitable herein. The present study has a sample of 89 Emergency call centre representatives, both male and female, that comprised of varying age, race and marital status groupings. The questionnaires used were The Job Stress Scale, the Uncivil Workplace Behaviour Scale, the Minnesota Satisfaction Questionnaire and the Psychological Capital Questionnaire; all of these instruments were standardised and indicated good internal reliability values. The procedure for the study involved the researcher meeting with the manageress of the Disaster Management & Emergency Control Unit to discuss the purpose of the research as well as forward the research documentation to the Head of Disaster Management & Emergency Control Unit and the Human Resources department for approval. After approval, a meeting was held with the supervisors to discuss the purpose of the research as well as to hand over 89 questionnaires for distribution to staff. Questionnaires were collected after a two-week period. The relevant ethical considerations during the data collection phase centred around explaining the purpose of the study to relevant parties, emphasising the voluntary nature of the study, reaffirming the confidentiality and anonymity of study as well as through the use of the Informed Consent form. Statistical analysis techniques used during the data analysis phase

included calculating descriptive statistics, Pearson-correlation examination, multiple regression analysis and lastly, hierarchical regression analysis.

## **CHAPTER 4**

### **RESULTS**

#### **4.1 Introduction**

This chapter presents the results that were obtained during the statistical analysis of the research data collected for this study. Firstly, an elucidation is given to the descriptive statistics as well as the subsequent reliabilities of the measures and their subscales. Moreover, inferential statistics were analysed in order to determine the relationships between variables, using the Pearson momentum-correlation analysis as well as multiple aggression analysis. Lastly, hierarchical regression was conducted in order to establish the moderating effect of Psychological Capital.

#### **4.2 Descriptive Statistics**

The descriptive statistics in addition to the alpha coefficients for all measures utilised in the study, are reported in Table 2. Herein, the descriptive statistics were examined to establish whether the scores were normally distributed. Moreover, the skewness and kurtosis scores of the data set were explored.

Table 2

*Descriptive Statistics of measuring instruments*

<b>Variable</b>	<b>N</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>SD</b>	<b>Skewness</b>	<b>Kurtosis</b>	<b><math>\alpha</math></b>
Job Stress Scale (JSS) Total	70	14	42	27.50	6.28	0.177	-0.295	0.88
Time-Stress	70	8	25	16.90	4.04	0.094	-0.264	0.83
Job-Anxiety	70	5	17	10.60	2.73	0.334	0.240	0.74
Uncivil Workplace Behaviour Scale (UWBS) Total	70	17	48	28.00	7.53	0.464	-0.254	0.87
Exclusionary Behaviour	70	5	14	8.01	2.43	0.541	-0.524	0.62
Gossiping	70	3	10	5.70	1.90	0.077	-0.858	0.63
Hostility	70	5	17	9.23	3.40	0.544	-0.600	0.71
Privacy Invasion	70	4	12	5.10	1.77	2.129	4.540	0.77
Minnesota Satisfaction Questionnaire (MSQ) Total	70	29	87	62.33	13.12	-0.518	-0.115	0.90
Intrinsic	70	13	46	33.30	6.70	-0.589	0.332	0.82
Extrinsic	70	12	44	29.03	7.33	-0.185	-0.420	0.85
Psychological Capital Questionnaire (PCQ) Total	70	42	134	100.60	17.30	-1.024	1.542	0.89
Hopeful-Confidence	70	12	72	48.76	12.30	-0.887	0.795	0.91
Positive Outlook	70	27	63	51.84	6.90	-1.094	1.952	0.65

According to Tabachnick and Fidell (2001), if the reported skewness and kurtosis values are smaller than one, then the distribution can be considered to be normally distributed. Upon closer inspection of the skewness and kurtosis values, it can be established that majority of the scores are lower one and thus, it can be concluded that the scores are normally distributed. It is imperative to note, however, that the Privacy Invasion, PCQ Total and Positive Outlook showed skewness and kurtosis scores over one, which necessitates a test of normality in order to further

verify the results. In order to do so, the Kolmogorov-Smirnov values were assessed, which suggested significance levels above 0.05 for the UWBS Total and PCQ Total; this is indicative of the scores were normally distributed. Moreover, inspection of the Kolmogorov-Smirnov for the JSS Total, UWBS factors, MSQ Total and Hopeful-Confidence presented significance values that were less than 0.05, which indicates the violation of the assumption of normality. Further, both the skewness and kurtosis scores for these variables were less than one, which are deemed acceptable scores to suppose the normality of the distribution (Pallant, 2011).

Pallant (2011) advances that the satisfactory statistical range for skewness is -2 and 2 whilst the satisfactory statistical range for kurtosis is -7 and 7. The negative skewness values identified on the MSQ Total and PCQ Total indicate that the scores on these measures tend to be clustered around the higher end of the distribution. Conversely, the positive skewness values of the JSS Total and UWBS Total are indicative of the scores on these measures being clustered around the lower end of the distribution. The positive kurtosis value for the PCQ Total is indicative of the distribution of scores for this measure being relatively peaked and can, therefore, be considered to clustered around the centre.

In order to determine the reliability of the measurement instruments, the Cronbach alpha coefficients were computed on the JSS, UWBS, MSQ and PCQ questionnaires as well as their corresponding factors. Pallant (2011) postulates that those measuring instruments that possess Cronbach alpha coefficients above 0.70 can be deemed statistically reliable and acceptable according to statistical guidelines; however, values that exceed 0.80 are preferable (Pallant, 2011). It can be concluded, upon brief examination of the table, that all four measures possess alpha coefficients that exceed the desired reliability level of 0.80 (JSS:  $\alpha = 0.88$ ; UWBS:  $\alpha = 0.87$ ; MSQ:  $\alpha = 0.90$ ; PCQ:  $\alpha = 0.89$ ) and thus, can be considered reliable and valid measures.



The Cronbach alpha coefficient for the JSS was  $\alpha = 0.88$  which is slightly lower than Almendra's (2010) study of which established an alpha coefficient of 0.91 for the total scale; this is indicative of high internal consistency. As the traditional two-factor advanced by Parker and DeCotiis (1983) was maintained in this study, the obtained alpha coefficient for the Time Stress subscale ( $\alpha = 0.83$ ) is slightly lower than that of Almendra's (2010) finding ( $\alpha = 0.86$ ). Further, the obtained alpha coefficient for the Job-related Anxiety subscale ( $\alpha = 0.74$ ) is consistent with Almendra's (2010) finding ( $\alpha = 0.74$ ).

The Cronbach alpha coefficient established for the UWBS was  $\alpha = 0.87$  which is slightly lower than alpha coefficient ( $\alpha = 0.92$ ) originally obtained by Martin and Hine (2005). More recently, however, both Roberts et al. (2011) and Setar, Buitendach and Kanengoni (2015) established an alpha coefficient value of 0.93 and 0.91 respectively, which is slightly higher than the obtained alpha value in the present study ( $\alpha = 0.87$ ). As the traditional four-factor structure advanced by Martin and Hine (2005) was maintained for the purposes of the current study, the obtained alpha value for the Exclusionary Behaviour subscale is 0.62, which is considerably lower than that of Robert et al.'s (2011) alpha value of 0.94. The obtained alpha coefficient for the Gossiping subscale ( $\alpha = 0.63$ ) is also substantially lower than the alpha value obtained by Roberts et al.'s (2011) study ( $\alpha = 0.85$ ). The Hostility subscale in this study, yielded an alpha value of 0.71, which is notably lower than the alpha coefficient obtained by Roberts et al. (2011) of 0.86. Lastly, the Privacy Invasion subscale of the present study indicated an alpha value of 0.77 which is lower than Roberts et al.'s (2011) alpha value finding of 0.84.

The MSQ yielded a Cronbach alpha coefficient of 0.90 for the total scale in the current study, which is slightly lower than the alpha value of 0.96 advanced by Rothmann et al. (2002) in the South African context. More recently, Subramoney (2015) established an alpha coefficient of

0.91 for the MSQ which is more consistent with the current findings. As the traditional two-factor structure developed by Spector (1997) was maintained for the purposes of the present study, the obtained alpha coefficient for the Intrinsic subscale was 0.82 which is slightly higher than the alpha value of 0.79 obtained by Buitendach and Rothmann (2009). The Extrinsic subscale obtained an alpha value of 0.85 which is also higher than the alpha coefficient of 0.82 obtained by Buitendach and Rothmann (2009).

The obtained Cronbach alpha coefficient of the PCQ is 0.89 which is consistent with both the findings of Roberts et al. (2011) and Setar, Buitendach and Kanengoni (2015). This obtained alpha value ( $\alpha = 0.89$ ) is negligibly higher than the alpha value of 0.88 obtained by Toor and Ofori (2010), and Pillay (2012), yet lower than the alpha coefficient of 0.93 obtained by both Appollis (2010), and Avey et al. (2010). As the present study adopted the two-factor structure proposed by both Pillay (2012), the Hopeful-Confident subscale yielded an alpha value of 0.91 which is slightly higher than Pillay's (2012), and Setar, Buitendach and Kanengoni's (2015) obtained alpha coefficients of 0.85 and 0.90, respectively. The Positive Outlook subscale obtained an alpha coefficient of 0.65 which is substantially lower than the alpha value of 0.81 obtained by Pillay (2012).

#### **4.3 Pearson Correlation Coefficients among measures**

The Pearson Product-moment correlation coefficients were computed in order to establish the relationship between occupational stress, uncivil workplace behaviour, job satisfaction and psychological capital. More implicitly, correlations for both the total and subscales for each of the variables as well as the inter-correlations between measures were examined. Table 3 represents the summarised results of the Pearson Product-moment coefficient analysis.

Table 3

## Pearson Product-Moment Correlation Coefficients

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Job Stress Scale Total	1	-	-	-	-	-	-	-	-	-	-	-	-	-
2. Time-Stress	0.952**+	1	-	-	-	-	-	-	-	-	-	-	-	-
3. Job-Anxiety	0.890**++	0.707**+	1	-	-	-	-	-	-	-	-	-	-	-
4. Uncivil Workplace Behaviour Scale Total	0.252*	0.225	0.247*	1	-	-	-	-	-	-	-	-	-	-
5. Exclusionary Behaviour	0.343**+	0.298*	0.347**+	0.805**+	1	-	-	-	-	-	-	-	-	-
6. Gossiping	0.196	0.183	0.178	0.777**+	0.489**+	1	-	-	-	-	-	-	-	-
7. Hostility	0.172	0.173	0.138	0.900**+	0.608**+	0.662*	1	-	-	-	-	-	-	-
8. Privacy Invasion	0.067	0.023	0.119	0.605**+	0.373**+	0.309*	0.385**	1	-	-	-	-	-	-
9. Minnesota Satisfaction Questionnaire Total	-0.278*	-0.248*	-0.272*	-0.199	-0.268*	-0.171	-0.160	0.006	1	-	-	-	-	-
10. Intrinsic	-0.249*	-0.243*	-0.213	-0.154	-0.252*	-0.088	-0.099	-0.026	0.928*	1	-	-	-	-
11. Extrinsic	-0.269*	-0.221	-0.292*	-0.216	-0.249*	-0.225	-0.195	0.035	0.941*	0.747*	1	-	-	-
12. Psychological Capital Questionnaire Total	-0.166	-0.088	-0.250	0.016	-0.113	0.071	0.053	0.048	0.613*	0.631*	0.520*	1	-	-
13. Hopeful-Confidence	-0.039	0.027	-0.131	-0.021	-0.129	0.057	0.021	-0.016	0.596*	0.636*	0.485*	0.947*	1	-
14. Positive Outlook	-0.345**+	-0.269*	-0.394**+	0.079	-0.053	0.075	0.094	0.148	0.474*	0.448*	0.439*	0.819*	0.591*	1

Note. \*\*Statistical significance at  $p \leq 0.01$ .

\*Statistical significance at  $p \leq 0.05$ .

++ Practically significant (large effect  $> 0.50$ )

+ Practically significant (medium effect  $> 0.30$ )

Table 3 indicates that occupational stress displayed positive statistically and practically significant relationships with time-stress ( $p \leq 0.01$ ) (medium effect) and job-anxiety ( $p \leq 0.01$ ) (large effect). Occupational stress further indicated a positive statistically significant relationship with uncivil workplace behaviour ( $p \leq 0.05$ ). Further, occupational stress displayed a positive statistically and practically significant relationship with exclusionary behaviour ( $p \leq 0.01$ ) (medium effect). In addition to this, occupational stress indicated negative statistically significant relationships with job satisfaction ( $p \leq 0.05$ ), intrinsic motivation ( $p \leq 0.05$ ) and extrinsic motivation ( $p \leq 0.05$ ). Lastly, occupational stress indicated a negative statistically and practically significant relationship with positive outlook ( $p \leq 0.01$ ) (medium effect).

Time-stress indicated a positive statistically and practically significant relationship with job anxiety ( $p \leq 0.01$ ) (large effect). Time-stress also yielded a positive statistically significant relationship with exclusionary behaviour ( $p \leq 0.05$ ). Moreover, time-stress displayed negative statistically significant relationships with job satisfaction ( $p \leq 0.05$ ) and intrinsic motivation ( $p \leq 0.05$ ). Lastly, time-stress indicated a negative statistically significant relationship with positive outlook ( $p \leq 0.05$ ).

Job-anxiety displayed a positive statistically and practically significant relationship with exclusionary behaviour ( $p \leq 0.01$ ) (medium effect). Additionally, job-anxiety yielded negative statistically significant relationships with job satisfaction ( $p \leq 0.05$ ) and extrinsic motivation ( $p \leq 0.05$ ). Job-anxiety also indicated a negative statistically and practically significant relationship with positive outlook ( $p \leq 0.01$ ) (medium effect).

Uncivil workplace behaviour displayed positive statistically significant relationships with its subconstructs of exclusionary behaviour ( $p \leq 0.01$ ) (large effect), gossiping ( $p \leq 0.01$ ) (large effect), hostility ( $p \leq 0.01$ ) (large effect) and privacy invasion ( $p \leq 0.01$ ) (large effect).

Exclusionary behaviour indicated positive statistically and practically significant relationships with gossiping ( $p \leq 0.01$ ) (medium effect), hostility ( $p \leq 0.01$ ) (large effect) and privacy invasion ( $p \leq 0.01$ ) (medium effect). Additionally, exclusionary behaviour displayed negative statistically significant relationships with job satisfaction ( $p \leq 0.05$ ), intrinsic motivation ( $p \leq 0.05$ ) and extrinsic motivation ( $p \leq 0.05$ ).

Gossiping yielded positive statistically and practically significant relationships with hostility ( $p \leq 0.01$ ) (large effect) and privacy invasion ( $p \leq 0.01$ ) (medium effect). Moreover, hostility displayed a positive statistically and practically significant relationship with privacy invasion ( $p \leq 0.01$ ) (medium effect).

Job satisfaction indicated positive statistically and practically significant relationships with its subconstructs of intrinsic motivation ( $p \leq 0.01$ ) (large effect) and extrinsic motivation ( $p \leq 0.01$ ) (large effect). Additionally, job satisfaction yielded positive statistically and practically significant relationships with psychological capital ( $p \leq 0.01$ ) (large effect), hopeful-confidence ( $p \leq 0.01$ ) (large effect) and positive outlook ( $p \leq 0.01$ ) (medium effect).

Intrinsic motivation yielded a positive statistically and practically significant relationship with extrinsic motivation ( $p \leq 0.01$ ) (large effect). Additionally, intrinsic motivation displayed positive statistically and practically significant relationships with psychological capital ( $p \leq$

0.01) (large effect), hopeful-confidence ( $p \leq 0.01$ ) (large effect) and positive outlook ( $p \leq 0.01$ ) (medium effect).

Extrinsic motivation displayed positive statistically and practically significant relationships with psychological capital ( $p \leq 0.01$ ) (large effect), hopeful-confidence ( $p \leq 0.01$ ) (medium effect) and positive outlook ( $p \leq 0.01$ ) (medium effect).

Psychological capital yielded positive statistically and practically significant relationships with hopeful-confidence ( $p \leq 0.01$ ) (large effect) and positive outlook ( $p \leq 0.01$ ) (large effect).

Lastly, hopeful-confidence displayed a statistically and practically significant relationship with positive outlook ( $p \leq 0.01$ ) (large effect).

Multiple regression was then conducted in order to establish whether occupational stress (time-stress and job-anxiety) and psychological capital (hopeful-confidence and positive outlook) predicts the outcomes of uncivil workplace behaviour (exclusionary behaviour, gossiping, hostility and privacy invasion) and job satisfaction (intrinsic and extrinsic motivation). The results were tabulated in Table 4.

#### **4.4 Multiple Regression Analysis**

In order to establish predictability, a multiple regression analysis was conducted in order to determine whether occupational stress and psychological capital holds any predictive value for uncivil workplace behaviour and job satisfaction. The results are tabulated on the following page in Table 4.

Table 4

*Multiple regression analyses with Time-Stress, Job-Anxiety, Hopeful-Confidence and Positive Outlook as Independent Variables and Uncivil Workplace Behaviour, Exclusionary Behaviour, Gossiping, Hostility, Privacy Invasion, Job Satisfaction, Intrinsic and Extrinsic motivation as Dependent Variables.*

<b>Variable</b>	<b>F</b>	<b>B</b>	<b>SE</b>	<b>R<sup>2</sup></b>	<b>p</b>
<b>Uncivil Workplace Behaviour</b>					
	2.276			0.123	0.70
<b>Constant</b>			9.603		0.722
<b>Time-Stress</b>		0.259	0.313		0.410
<b>Job-Anxiety</b>		0.695	0.475		0.149
<b>Hopeful-Confidence</b>		-0.113	0.091		0.220
<b>Positive Outlook</b>		0.353	0.172		0.044
<b>Exclusionary Behaviour</b>					
	3.331*			0.170	0.015*
<b>Constant</b>			3.020		0.674
<b>Time-Stress</b>		0.095	0.098		0.340
<b>Job-Anxiety</b>		0.271	0.149		0.074
<b>Hopeful-Confidence</b>		-0.048	0.029		0.098
<b>Positive Outlook</b>		0.089	0.054		0.105
<b>Gossiping</b>					
	1.112			0.064	0.358
<b>Constant</b>			2.491		0.676
<b>Time-Stress</b>		0.056	0.081		0.492
<b>Job-Anxiety</b>		0.115	0.123		0.354
<b>Hopeful-Confidence</b>		-0.006	0.024		0.792
<b>Positive Outlook</b>		0.054	0.045		0.231
<b>Hostility</b>					
	1.126			0.065	0.352
<b>Constant</b>			4.433		0.864
<b>Time-Stress</b>		0.146	0.144		0.315
<b>Job-Anxiety</b>		0.119	0.219		0.589
<b>Hopeful-Confidence</b>		-0.032	0.042		0.442
<b>Positive Outlook</b>		0.122	0.079		0.130
<b>Privacy Invasion</b>					
	1.548			0.087	0.199
<b>Constant</b>			2.300		0.883
<b>Time-Stress</b>		-0.037	0.075		0.620

<b>Job-Anxiety</b>		0.189	0.114	0.101
<b>Hopeful-Confidence</b>		-0.026	0.022	0.237
<b>Positive Outlook</b>		0.089	0.041	0.035*
<b>Job Satisfaction</b>				
	12.187*		0.429	0.000***
<b>Constant</b>			13.498	0.006**
<b>Time-Stress</b>		-0.795	0.439	0.075
<b>Job-Anxiety</b>		0.033	0.668	0.961
<b>Hopeful-Confidence</b>		0.591	0.128	0.000***
<b>Positive Outlook</b>		0.159	0.242	0.512
<b>Intrinsic</b>				
	14.949*		0.479	0.000***
<b>Constant</b>			6.582	0.002**
<b>Time-Stress</b>		-0.566	0.214	0.010**
<b>Job-Anxiety</b>		0.299	0.326	0.362
<b>Hopeful-Confidence</b>		0.353	0.062	0.000***
<b>Positive Outlook</b>		0.020	0.118	0.863
<b>Extrinsic</b>				
	7.206*		0.307	0.000***
<b>Constant</b>			8.307	0.046*
<b>Time-Stress</b>		-0.229	0.270	0.401
<b>Job-Anxiety</b>		-0.266	0.411	0.520
<b>Hopeful-Confidence</b>		0.237	0.079	0.004**
<b>Positive Outlook</b>		0.139	0.149	0.354

Note. \*\*\*Statistical significance at  $p \leq 0.001$

\*\*Statistical significance at  $p \leq 0.01$

\*Statistical significance at  $p \leq 0.05$

According to Table 4, both psychological capital and occupational stress express predictive value for exclusionary behaviour ( $F = 3.331$ ;  $p \leq 0.05$ ;  $R^2 = 0.170$ ).

Moreover, Table 4 indicates that positive outlook in particular, holds predictive value for privacy invasion ( $p \leq 0.05$ ).

Upon further inspection of Table 4, it becomes evident that both psychological capital and occupational stress exhibit a predictive value for job satisfaction ( $F = 12.187$ ;  $p \leq 0.001$ ;  $R^2 =$



0.429). Additionally, hopeful-confidence appears to hold predictive value for job satisfaction ( $p \leq 0.001$ ).

Table 4 also indicates that psychological capital and occupational stress exhibit predictive value for intrinsic motivation ( $F = 14.949$ ;  $p \leq 0.001$ ;  $R^2 = 0.479$ ). In addition to this, time stress holds predictive value for intrinsic motivation ( $p \leq 0.01$ ). Moreover, Table 4 also indicates that hopeful-confidence exhibited predictive value for intrinsic motivation ( $p \leq 0.001$ ).

Further, Table 4 indicated that psychological capital and occupational stress holds predictive value for intrinsic motivation ( $F = 7.206$ ;  $p \leq 0.001$ ;  $R^2 = 0.307$ ). In addition to this, hopeful-confidence exhibited predictive value for extrinsic motivation ( $p \leq 0.01$ ).

Following this, hierarchical regression was conducted insofar as determining whether or not the independent variables occupational stress and psychological capital held any predictive value for uncivil workplace behaviour and job satisfaction. In addition to this, the moderating role of psychological capital in the relationship between occupational stress and uncivil workplace behaviour, as well as occupational stress and job satisfaction was examined through an investigation of the interaction between occupational stress and psychological capital. Therein, results from the hierarchical regression are offered in Table 5.

#### 4.5 Hierarchical Regression

Table 5

*A hierarchical regression analysis to establish the predictive value of Job Stress and Psychological Capital as independent variables on Uncivil Workplace Behaviour (Test 1) and Job Satisfaction (Test 2) as dependent variables.*

Variable	Total Uncivil Workplace Behaviour							
	<i>F</i>	<i>B</i>	<i>SE</i>	<i>R</i>	<i>R</i> <sup>2</sup>	$\Delta R^2$	<i>t</i>	<i>p</i>
<i>Step 1</i>								
Constant							2.353	0.220
Job Stress		0.314	0.144				2.191	0.320
Psychological Capital	2.409	0.026	0.052	0.259	0.067	0.039	0.498	0.620
<i>Step 2</i>								
Constant							2.350	0.022*
Job Stress		0.329	0.152				2.163	0.034*
Psychological Capital		0.021	0.055				0.389	0.699
Interaction between Job Stress and Psychological Capital	1.615	0.002	0.007	0.262	0.068	0.026	0.304	0.762
Variable	Job Satisfaction							
	<i>F</i>	<i>B</i>	<i>SE</i>	<i>R</i>	<i>R</i> <sup>2</sup>	$\Delta R^2$	<i>t</i>	<i>p</i>
<i>Step 1</i>								
Constant							2.862	0.006*
Job Stress		-0.378	0.199				-1.899	0.062
Psychological Capital	23.047	0.442	0.072	0.638	0.408	0.390	6.114	0.000**
<i>Step 2</i>								
Constant							2.807	0.007*
Job Stress		-0.430	0.210				-2.048	0.045*
Psychological Capital		0.459	0.076				6.076	0.000**

<b>Interaction between Job Stress and Psychological Capital</b>	15.495	-0.008	0.010	0.643	0.413	0.387	-0.799	0.427
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Note. \*\*Statistical significance at  $p \leq 0.000$

\*Statistical significance at  $p \leq 0.05$ .

++ Practically significant (large effect  $> 0.50$ )

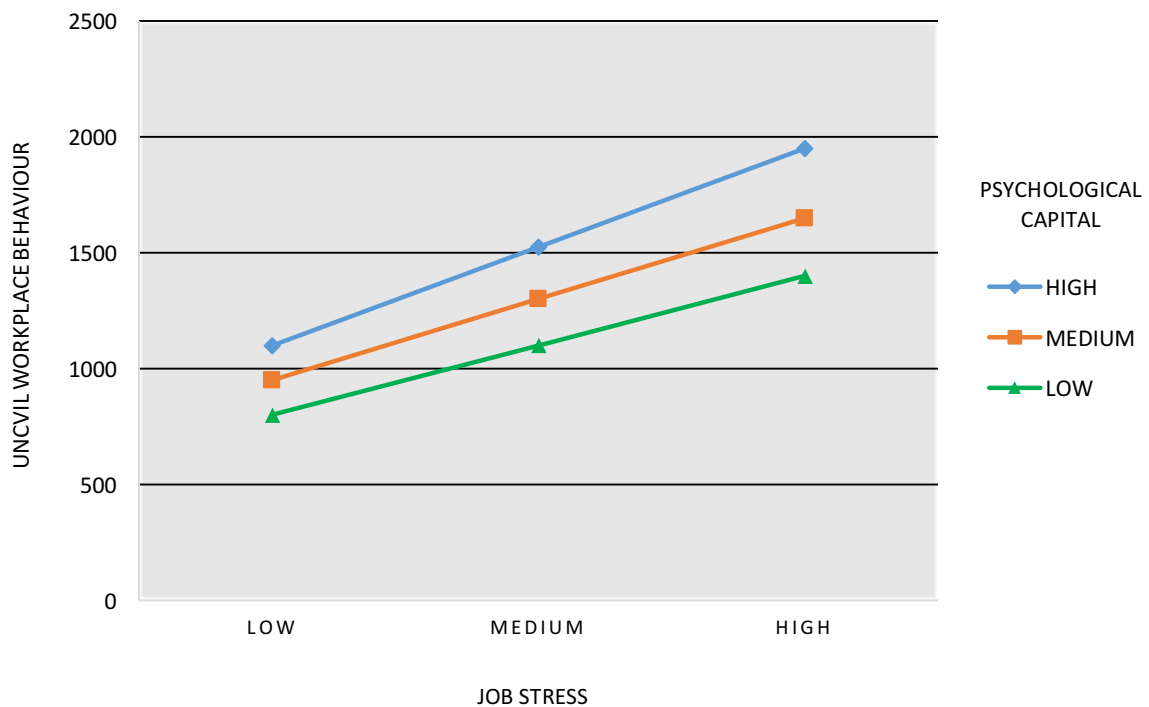
+ Practically significant (medium effect  $> 0.30$ )

Table 5 outlines the results obtained from the hierarchical regression that was used to establish whether occupational stress and psychological capital, as independent variables, were able to predict uncivil workplace behaviour as well as job satisfaction. Before doing so, a preliminary analysis was embarked upon in order to establish whether the various assumptions of normality, linearity, multicollinearity were met and not violated.

From Table 5, it can be seen that hierarchical regression was first conducted in order to establish the predictive value of occupational stress and psychological capital on uncivil workplace behaviour. In Step 1, the independent variables of occupational stress and psychological capital, were entered, explaining 6.7% of the variance in uncivil workplace behaviour. In Step 2, the calculated interaction term for occupational stress and psychological capital was entered, explaining 6.8% of the variance in uncivil workplace behaviour ( $F = 1.615$ ;  $p = 0.762$ ). The accompanying computed interaction term revealed no statistically significant difference within the model, which is suggestive of psychological capital not moderating the relationship between occupational stress and uncivil workplace behaviour.

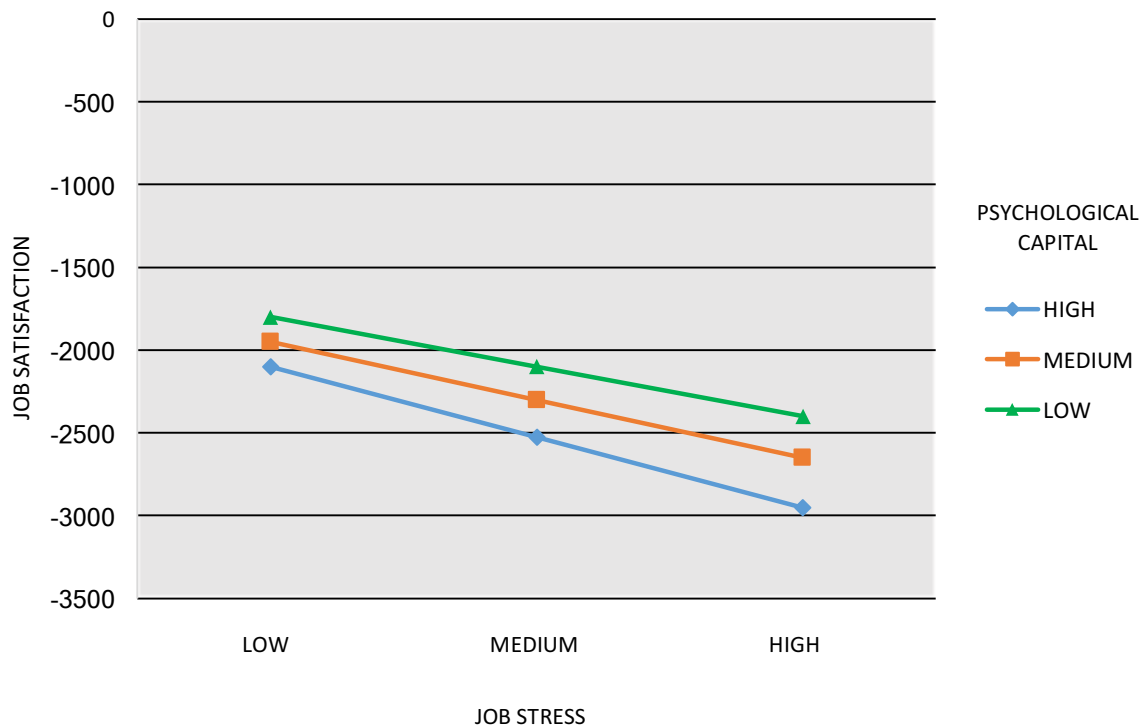
Further, hierarchical regression was conducted thereafter to establish the predictive value of occupational stress and psychological capital on job satisfaction. In Step 1, the independent variables of occupational stress and psychological capital, were entered, explaining 40.78% of the variance in job satisfaction. In Step 2, the calculated interaction term for occupational stress

and psychological capital was entered, explaining 41.3% of the variance in job satisfaction ( $F = 15.495$ ;  $p = 0.427$ ). The accompanying computed interaction term revealed no statistically significant difference within the model, which is suggestive of psychological capital not moderating the relationship between occupational stress and job satisfaction.



*Figure 2.* The Moderating Effect of Psychological Capital in the relationship between Job Stress and Uncivil Workplace Behaviour

Figure 2 above, provides an indication of the moderating effect psychological capital has on the relationship between occupational stress and uncivil workplace behaviour. Therein, it is observed that no significant interaction between these variables are exhibited. These findings further corroborate the results in Table 5, which established that the interaction term provided no predictive value for the outcome of uncivil workplace behaviour; thus, psychological capital did not moderate the relationship between occupational stress and uncivil workplace behaviour.



*Figure 3.* The Moderating Effect of Psychological Capital in the relationship between Job Stress and Job Satisfaction

Figure 2 above, provides an indication of the moderating effect psychological capital has on the relationship between occupational stress and job satisfaction. As in Figure 1, it is observed that no significant interaction between these variables are exhibited. These findings further corroborate the results in Table 5, which established that the interaction term provided no predictive value for the outcome of job satisfaction; thus, psychological capital did not moderate the relationship between occupational stress and job satisfaction.

#### 4.6 Chapter Summary

This chapter presented the empirical findings of the statistical analyses embarked upon in the present study. Implicit in this, was the representation of descriptive and inferential statistics as well as the results from the Pearson-product moment correlation analysis, multiple regression analysis and lastly, hierarchical regression analysis were presented.

## CHAPTER 5

### DISCUSSION OF RESULTS

#### 5.1 Introduction

The previous chapter strove to present the results that were obtained during statistical analyses embarked upon in this study; this chapter serves to provide an elucidation of these results within the context of the proposed study. Herein, results are presented in relation to the theoretical conceptualisations of occupational stress, uncivil workplace behaviour, job satisfaction and psychological capital. Moreover, the findings derived from the present study will be examined in relation to previously established research findings as well as within the proposed theoretical frameworks of the Broaden and Build Theory (Frederickson, 1998) and the Job Stress Model (Spector & Fox, 2002).

The primary objective of the present study was to determine the relationship between occupational stress, uncivil workplace behaviour, job satisfaction and psychological capital. In addition to this, the current study aims to investigate whether psychological capital and occupational stress hold any predictive value for outcomes of uncivil workplace behaviour and job satisfaction. Lastly, the present study aimed to determine the extent to which psychological capital moderates the relationship between occupational stress and uncivil workplace behaviour and job satisfaction.

Call centres have received negative publicity throughout South Africa with regards to how they are managed as well as coming under much criticism from researchers, advancing that managers are too focused on emphasizing efficiency goals and productivity targets; subjecting

employees to frequently high-levels of monitoring and creating stress-inducing working environments (Little & Dean, 2006; Setar, Buitendach & Kanengoni, 2015). Therein, with working environments already being considered 'toxic', low quality, highly monotonous with repetitive and demanding interpersonal and technical skills (Holman, Wood & Stride, 2005), the presence of such a high degree of performance monitoring and feedback would only function to further compound its known effect on occupational stress (Holman, Batt & Holtgrewe, 2007). Such sentiments provide an explanation as to why employees in South African call centres experience elevated levels of stress (Kazalarska, 2009; Oodith, 2012; Setar, Buitendach & Kanengoni, 2015). Factors such as high stress levels, high staff turnover and emotional burnout impact negatively on job satisfaction necessitating further investigation into occupational stress and uncivil workplace behaviour.

Benner, Lewis and Omar (2007) have illustrated that South African call centre representatives have displayed elevated levels of stress (Holman, Wood & Stride, 2005; Gordi, 2006; Kazalarska, 2009; Setar, Buitendach & Kanengoni, 2015) that has consequently seen employees react in an aggressive manner and engage in uncivil workplace behaviour (Van Zyl, 2002; Gordi, 2006; Oodith, 2012; Setar, Buitendach & Kanengoni, 2015). The limited research conducted on the relationship between the aforementioned constructs, in conjunction with the fundamental gap that remains within the realm of Emergency Services call centre research, exacerbates the need for research to be conducted on the relationship of the primary constructs of the present study. This will allow for the comparison of already established literature to that of the Emergency Services domain; in that, allowing for the examination and interpretation of differences in results to various mitigating factors, such as the nature of their work.

## 5.2 Discussion of Results

### 5.2.1 Reliability of measuring instruments

In order to evaluate the psychometric properties of the measuring instruments utilised in the present study, a Cronbach alpha reliability analysis was conducted. The Cronbach alpha coefficient ( $\alpha$ ) provides an estimate of the reliability of the measuring instruments. According to Pallant (2011), measuring instruments that possess Cronbach alpha coefficients that exceed 0.70 can be deemed statistically reliable and acceptable according to statistical guidelines; however, values above 0.80 are preferred. Based on the descriptive statistics findings, the results indicated that the overall measuring instruments had high levels of internal consistency as their alpha coefficient reliabilities were above 0.85.

The two-factor model of the Job Stress Scale indicated a Cronbach alpha reliability of 0.88 for the total JSS which is indicative of high internal consistency. The obtained alpha coefficient of 0.88 herein, is slightly lower than that of Almendra's (2010) study that produced an alpha coefficient of 0.91 for the total scale. Within the present study, Parker and DeCotiis' (1983) factor structure was maintained; therefore, the obtained alpha coefficients for the Time Stress subscale ( $\alpha = 0.83$ ) is slightly lower than that of Almendra's (2010) finding of  $\alpha = 0.86$ . Moreover, the obtained alpha coefficient in the present study for the Job-related Anxiety subscale ( $\alpha = 0.74$ ) is consistent with Almendra's (2010) finding ( $\alpha = 0.74$ ).

The four-factor model of the Uncivil Workplace Behaviour Scale presented a Cronbach alpha reliability of 0.87 for the total UWBS which is indicative of high internal consistency. The obtained alpha coefficient of 0.87 herein is slightly lower than the alpha coefficient ( $\alpha = 0.92$ ) that was originally obtained by Martin and Hine (2005). Recent literature advanced by studies



conducted by Roberts et al. (2011) and Setar, Buitendach and Kananegoni (2015) indicated alpha coefficients of 0.93 and 0.91 respectively, which is slightly higher than the alpha coefficient of 0.87 obtained in the present study. As the original four-factor structure proposed by Martin and Hine (2005) was maintained for the purposes of the current study the obtained alpha value for the Exclusionary Behaviour subscale is 0.62, which is considerably lower than that of Robert et al.'s (2011) alpha value of 0.94. Moreover, the obtained alpha coefficient for the Gossiping subscale ( $\alpha = 0.63$ ) is also substantially lower than the alpha value obtained by Roberts et al.'s (2011) study ( $\alpha = 0.85$ ). The Hostility subscale in this study, yielded an alpha value of 0.71, which is notably lower than the alpha coefficient obtained by Roberts et al. (2011) of 0.86. Lastly, the Privacy Invasion subscale of the present study indicated an alpha value of 0.77 which is lower than Roberts et al.'s (2011) alpha value finding of 0.84. Previous studies, such as that of Setar, Buitendach and Kanengoni (2015) have indicated a two-factor model for the UWBS, with an alpha reliability for the total UWBS of 0.91. Additionally, the extracted subscales of Privacy Invasion and Exclusion in Setar, Buitendach and Kananegoni's (2015) study possessed high reliability levels with 0.90 and 0.84 respectively.

The two-factor model of the Minnesota Satisfaction Questionnaire indicated a Cronbach alpha reliability of 0.90 for the total MSQ which is indicative of high internal consistency. The obtained alpha coefficient of 0.90 herein is slightly lower than the alpha value of 0.96 advanced by Rothmann et al.'s (2002) study in the South African context. Subramoney (2015) established an alpha coefficient of 0.91 for the MSQ which is more consistent with the current findings. As the traditional two-factor structure developed by Spector (1997) was maintained for the purposes of the present study, the obtained alpha coefficient for the Intrinsic subscale was 0.82 which is slightly higher than the alpha value of 0.79 obtained by Buitendach and

Rothmann (2009). Moreover, the Extrinsic subscale obtained an alpha value of 0.85 is also higher than the alpha coefficient of 0.82 obtained by Buitendach and Rothmann (2009).

The two-factor model of the Psychological Capital Questionnaire produced a Cronbach alpha reliability of 0.89 for the total PCQ which indicates a high internal consistency for the measure. The obtained alpha coefficient of 0.89 is consistent with both the findings of Roberts et al. (2011) and Setar, Buitendach and Kanengoni (2015). This obtained alpha value ( $\alpha = 0.89$ ) is negligibly higher than the alpha value of 0.88 obtained by both Toor and Ofori (2010), and Pillay (2012), yet lower than the alpha coefficient of 0.93 obtained by both Appollis (2010), and Avey et al. (2010). As the present study adopted the two-factor structure proposed by both Pillay (2012), and Setar, Buitendach and Kanengoni (2015), the Hopeful-Confident subscale yielded an alpha value of 0.91 which is slightly higher than Pillay's (2012), and Setar, Buitendach and Kanengoni's (2015) obtained alpha coefficients of 0.85 and 0.90, respectively. The Positive Outlook subscale obtained an alpha coefficient of 0.65 which is substantially lower than the alpha value of 0.81 obtained by Pillay (2012). Further, in the South African context, du Plessis and Barkhuizen (2012) proposed a suitable three-factor model that indicated acceptable reliabilities that exceeded 0.70 for both the overall measures as well as the three subscales. Similarly, Setar, Buitendach and Kanengoni (2015) have indicated a two-factor model for the PCQ as being suitable within the South African context, with an alpha reliability for the total PCQ of 0.89. Moreover, the extracted subscales of Hopeful-Confidence and Optimism in Setar, Buitendach and Kanengoni's (2015) study possessed high reliability levels with 0.90 and 0.73 respectively.

### 5.2.2 Pearson Product-Moment Correlation analysis

The primary objective of the present study was to establish the relationship between occupational stress, uncivil workplace behaviour, job satisfaction and psychological capital. This objective was achieved through the utilisation of a Pearson Product-Moment Correction analysis in order to establish the inter-correlations between the measures within the present study.

The results of the analysis indicate that Job Stress and Uncivil Workplace Behaviour were statistically significant ( $p \leq 0.05$ ) and positively related (see Table 3), which advocates for the notion that those individuals who experience high levels of stress may, and are more likely to, further display elevated levels of uncivil behaviour. These findings can be contextualised in relation to previous studies such as that of Penney and Spector (2005) which similarly found a strong relationship between occupational stress and uncivil workplace behaviour wherein those individuals to whom uncivil behaviour was directed at, experienced elevated levels of stress. Moreover, research advanced by Roberts et al. (2011) postulated that those individuals who experience great stress in their working life are more likely to engage and display uncivil behaviour. Based on these findings, in relation to the present study, it can be concluded that those individuals who experience elevated levels of stress due to negative affect or stressful situations, consequently retort through the engagement in uncivil workplace behaviour. Such sentiments resonate with the early contention presented by Lazarus and Folkman (1984) that those individuals when exposed to stressors in the working environment, appraise their situation in such a fashion that it necessitates a particular psychological or behavioural response which may have the propensity to manifest in counterproductive, uncivil behaviour. Further, Job Stress displayed a stronger statistically and practically significant ( $p \leq 0.01$ ) (medium effect) positive relationship with the Exclusionary Behaviour subscale (see Table 3). This

finding provides an elucidation to the notion that those individuals who experience elevated job stress may fail to liaise with other respective parties within the workplace, such as not consulting a co-worker in reference to a decision that they should have been involved in. This may not only result in appropriate parties not being consulted in decisions but in turn, has the propensity to isolate the individual from the rest of the workforce. Within the ambit of the present study, the positive relationship found between Job Stress and Uncivil Workplace Behaviour can be elucidated upon in reference to the theoretical framework of the Job Stress model (Spector & Fox, 2002). Herein, the Job Stress Model explains how an individual's appraisal of a stressful situation may instigate a particular response, such as that of uncivil behaviour in this instance. The utilisation the Job Stress Model as a theoretical framework is further appropriate in understanding the presence of uncivil workplace behaviour in this instance. Previous research conducted by Roberts et al. (2011) using Spector and Fox's (2002) adapted Job Stress Model yielded significant results in terms of providing evidence of a stress-incivility reciprocal relationship whereby displays of incivility resulted in increased levels of stress and inflated stress levels manifested in acts of incivility (Roberts et al., 2011).

A statistically significant ( $p \leq 0.05$ ) negative relationship exists between Job Stress and Job Satisfaction (see Table 3) which is indicative of a dynamic in which higher levels of occupational stress may result in lower levels of job satisfaction. A similar finding was established by Fairbrother and Warn (2003) wherein individuals who experienced elevated levels of work stress had lower levels of job satisfaction, with notably negative correlation to intrinsic motivation. This result is particularly interesting as within the present study, occupational stress has a slightly stronger statistically significant ( $p \leq 0.05$ ) negative relationship with extrinsic motivation, than that of intrinsic motivation (see Table 3). Extrinsic motivation herein refers to 'job dissatisfiers' which are associated with unfulfilled factors in

one's life that may pertain to issues around career progression or promotion (Herzberg, 1969). It must be noted, however, that the statistical differences of the outcome (i.e occupational stress' negative relationship to extrinsic/intrinsic motivation) may pertain to the distinguishable characteristics between the present sample and Fairbrother and Warns' (2003), which utilised a sample of navy trainees.

The findings of the Pearson Product-Moment Correlation analysis further indicated that PsyCap and Job Satisfaction had a statistically and practically significant ( $p \leq 0.01$ ) (large effect) positive relationship (see Table 3). This result mirrors that of both Appollis' (2010) and Naran's (2013) studies conducted within the South African context, which illustrated that there was a strong positive relationship between psychological capital and job satisfaction. Implicit in this, is that individuals who possessed higher levels of hope, resilience, self-efficacy and optimism, experienced greater levels of job satisfaction (Appollis, 2010). No statistically or practically significant relationship was found between PsyCap and Uncivil Workplace Behaviour. This finding is particularly interesting as Avey et al. (2010) and Roberts et al. (2011) established that individuals who possess higher levels of PsyCap are less inclined to engage in uncivil workplace behaviour, in contrast to those individuals with lower levels of PsyCap. More recently, Setar, Buitendach and Kanengoni (2015) have also indicated the existence of a negative relationship between PsyCap and Uncivil Workplace Behaviour. The findings of the present study, however, are incongruent with these established conclusions. Specifically, within the PsyCap dimension, the Hopeful-Confidence subscale presented a statistically and practically significant ( $p \leq 0.01$ ) (large effect) positive relationship with the job satisfaction subscale of Intrinsic motivation (see Table 3). The implied finding herein is that those individuals who possess or experience greater hope and self-efficacy in their lives, further experience and derive autonomy, confidence, value and motivation in their work

(Herzberg, 1966). The strong correlation between Hopeful-Confidence and Intrinsic motivation is further concretized by Hegney et al.'s (2006) suggestion that there is a direct decrease in the job satisfaction experienced by individuals when their intrinsic factors are unfulfilled and, vice versa.

The PsyCap dimension of Positive Outlook, in particular, displayed a statistically and practically significant ( $p \leq 0.01$ ) (medium effect) negative relationship with occupational stress (see Table 3). Such a finding is suggestive of a dynamic wherein an individual who is experiencing elevated levels of stress may consequently have a diminished positive outlook on their situation. The Optimism subscale of PsyCap forms one of the two dimensions which constitute Positive Outlook; therein, the research of Herbert (2011) is pertinent in providing an elucidation to the above findings. Herbert (2011) indicated that a negative relationship was established between Optimism subscale of PsyCap and Job Stress which is indicative of individuals with higher levels of optimism, reporting lower occupational stress. Within the context of the present study, occupational stress is posed as an antecedent rather than the outcome; implicitly then, the extrapolation made from the results of the present study, is that individuals who experience elevated levels of occupational stress reported having lowered levels of Positive Outlook and diminished positive expectations about future events. In relation to the underlying theoretical framework utilised in the current study, the employment of Frederickson's (1998) Broaden-and-Build Theory is cogitated appropriate as it pertains to positive emotions can be used to explain such findings. Therein the relationship between PsyCap and occupational stress, particularly that of Positive Outlook and occupational stress, can be understood as one in which the experience of positive states associated with optimism and resilience that constitute Positive Outlook, would result in a broadened and more

positively-inclined way of thinking. This would allow the individual to immerse themselves in their respective tasks so that it would bring about the best probable result for their future.

The findings of the Pearson Product-Moment Correlation analysis presented no statistically or practically significant relationship between the outcomes of Uncivil Workplace Behaviour and Job Satisfaction (see Table 3). This finding is incongruent with research advanced by Pearson and Porath (2009) who linked acts of uncivil workplace behaviour with decreased job satisfaction. Moreover, the prevalence of uncivil workplace behaviour has been identified as causing a massive chain-reaction for job satisfaction and consequently, employee turnover (Pearson & Porath, 2009). Tett and Meyer (1993) identified a significant negative relationship between levels of job satisfaction and turnover; these findings were corroborated by Delobelle et al. (2010) almost a decade and a half later. However, it must be noted that the Uncivil Workplace Behaviour subscale of Exclusionary Behaviour indicated a statistically significant ( $p \leq 0.05$ ) negative relationship with Job Satisfaction. This is suggestive of a dynamic in which individuals who experience exclusionary behaviour in the workplace, such as not being consulted reference to a decision that they should have been involved in, experiencing lower levels of job satisfaction. These findings in conjunction to conclusions advanced by Tett and Meyer (1993), Pearson and Porath (2009) and Delobelle et al. (2010), further exacerbates the importance of studying job satisfaction as a consequence of uncivil workplace behaviour and lays the foundation for broadening the scope of inquiry to examine employee turnover in future research.

### **5.2.3 Multiple Regression analysis to establish the predictive value of psychological capital and occupational stress for uncivil workplace behaviour and job satisfaction**

The secondary objective of the present study was to establish whether psychological capital and occupational stress held any predictive value for the outcomes of uncivil workplace behaviour and job satisfaction. In order to do so, multiple regression analysis was performed eight times with Time-Stress, Job-Anxiety, Hopeful-Confidence and Positive Outlook as independent variables in all of the analyses. The first analysis utilised Uncivil Workplace Behaviour as the dependent variable, whilst the second analysis employed Exclusionary Behaviour as the dependent variable, the third analysis used Gossiping as the dependent variable, the fourth analysis utilised Hostility as the dependent variable, the fifth analysis employed Privacy Invasion as the dependent variable, the sixth analysis used Job satisfaction as the dependent variable, whilst in the seventh analysis Intrinsic motivation was the dependent variable and lastly, in the eighth analysis Extrinsic motivation was the dependent variable.

The findings of the multiple regression analysis indicated that Time-Stress and Job-Anxiety, both of which are Job Stress subscales, held no predictive value for Uncivil Workplace Behaviour or any of its subscales (i.e Exclusionary Behaviour, Gossiping, Hostility and Privacy Invasion). Such a finding is congruent with Robert et al.'s (2011) research, which indicated that occupational stress is not a significant predictor of uncivil workplace behaviour; however, it is imperative to note that within the same study, psychological capital was considered a much better predictor for uncivil workplace behaviour. The high correlation and overlap between occupational stress and psychological capital within Roberts et al.'s (2011) study consequently saw one construct - psychological capital, being a better predictor for uncivil workplace behaviour, than that of occupational stress. Contrastingly Setar, Buitendach and Kanengoni's



(2015) research indicated that occupational stress did, in fact, have predictive value for uncivil workplace behaviour, whereas psychological capital held no predictive value for uncivil workplace behaviour. The multiple regression analysis additionally indicated that the PsyCap subscale of Positive Outlook held predictive value for Uncivil Workplace Behaviour subscale of Privacy Invasion. This finding is suggestive of a dynamic in which individuals who are resilient and optimistic of the future are less likely to engage in conduct that invades the privacy of others.

Findings from the multiple regression analysis indicated that the PsyCap subscale of Hopeful-Confidence held strong predictive value for Job Satisfaction, as well as its subscales of Intrinsic and Extrinsic motivation. Such a finding suggests that self-efficacious and hopeful employees who are confident about their abilities, driven and aware of the steps required to achieve their goals, derive and experience greater satisfaction with the work they engage in. Lastly, the multiple regression analysis indicated that Time-Stress, the Job Stress subscale, is a strong predictor of Job Satisfaction's subscale of Intrinsic motivation. This suggests that individuals exposed to a great deal of time-related work stress would experience lowered levels of job satisfaction, particularly autonomy, confidence, motivation and value in their work due to the negative impact that stringent time constraints would have on the satisfaction they would get from their work. Such a finding can be contextualised in relation to Spector and Fox's (2002) Job Stress Model that elucidates upon the notion that the manner in which individuals experience occupational stress is highly contingent on their appraisal of the stressful situation. Therein, individuals who possess or experience greater hope and self-efficacy in their lives, further experience and derive autonomy, confidence, value and motivation in their work would appraise stressful situations as being less severe than those who don't possess such attributes.

The perceived nature of work, such as that of time-constrained work, is perceived as less stress due to their self-efficacy, hope and resilience.

#### **5.2.4 Determining the moderating role of psychological capital through Hierarchical Regression analysis**

The last objective of the present study was to establish the extent to which psychological capital moderates the relationship between occupational stress and the outcomes of uncivil workplace behaviour and job satisfaction. In order to achieve this objective, hierarchical regression analysis was employed twice with occupational stress and psychological capital as the independent variable, and uncivil workplace behaviour and job satisfaction as the dependent variables.

The results of the hierarchical regression suggested that whilst occupational stress and psychological capital possessed significant predictive value for uncivil workplace behaviour and job satisfaction, the interaction term (job stress x psychological capital) indicated no significant interaction effect in the second step of each analysis; thus, this results in no significant interaction with uncivil workplace behaviour and job satisfaction. Therein, it is elementary to deduce that psychological capital did not moderate the relationship between occupational stress and uncivil workplace behaviour nor did it moderate the relationship between occupational stress and job satisfaction. The findings of the hierarchical regression were further confirmed by the utilisation of moderation graphs (pages 80 and 81).

### **5.3 Chapter Summary**

This chapter provided a detailed discussion of the obtained results of the current study. Herein, the obtained results from the statistical analyses were explored insofar as making conclusions about the relationship between constructs as well as contextualising these findings in relation to relevant literature that refute or support the obtained outcomes. The following chapter will outline the conclusions of the empirical study in relation to previous research, present the limitations of the current study as well as suggest recommendations for both the organisation and the future trends of research.

## **CHAPTER 6**

### **CONCLUSIONS, LIMITATIONS, RECOMMENDATIONS AND CONTRIBUTIONS OF THE CURRENT STUDY**

#### **6.1 Introduction**

In this chapter, conclusions are offered based on the literature findings of previous research as well as the findings of the empirical results in the present study. Additionally, specific limitations pertaining to the present study are reviewed and possible recommendations for the organisation and future research are discussed. Lastly, the contribution of the current study is conferred.

#### **6.2 Conclusions**

The conclusions conferred below are in accordance with the research objectives and the empirical findings of the current study.

##### **6.2.1 Conclusions in accordance with the empirical results and research objectives of the present study**

The subsequent conclusions are advanced in regard to the constructs of occupational stress, uncivil workplace behaviour, job satisfaction and psychological capital. Below, the empirical findings of the present study are summarised in accordance with the research objectives:

### **6.2.1.1 To determine the psychometric properties of the various measuring instruments.**

All four instruments as well as their subscales utilised in the present study displayed high levels of internal consistency. Therefore, the suitability, as well as the reliability of the measuring instruments the measuring instruments, were proven based on the established reliability levels.

The Cronbach alpha coefficient established for the UWBS was  $\alpha = 0.87$  which is slightly lower than alpha coefficient ( $\alpha = 0.92$ ) originally obtained by Martin and Hine (2005). More recently, however, both Roberts et al. (2011) and Setar, Buitendach and Kanengoni (2015) established an alpha coefficient value of 0.93 and 0.91 respectively, which is slightly higher than the obtained alpha value in this study ( $\alpha = 0.87$ ). As the traditional four-factor structure advanced by Martin and Hine (2005) was maintained for the purposes of the current study, the obtained alpha value for the Exclusionary Behaviour subscale is 0.62, which is considerably lower than that of Robert et al.'s (2011) alpha value of 0.94. The obtained alpha coefficient for the Gossiping subscale ( $\alpha = 0.63$ ) is also substantially lower than the alpha value obtained by Roberts et al.'s (2011) study ( $\alpha = 0.85$ ). The Hostility subscale in this study, yielded an alpha value of 0.71, which is notably lower than the alpha coefficient obtained by Roberts et al. (2011) of 0.86. Lastly, the Privacy Invasion subscale of the present study indicated an alpha value of 0.77 which is lower than Roberts et al.'s (2011) alpha value finding of 0.84.

The MSQ yielded a Cronbach alpha coefficient of 0.90 for the total scale in the current study, which is slightly lower than the alpha value of 0.96 advanced by Rothmann et al. (2002) in the South African context. More recently, Subramoney (2015) established an alpha coefficient of 0.91 for the MSQ which is more consistent with the current findings. As the traditional two-factor structure developed by Spector (1997) was maintained for the purposes of the present

study, the obtained alpha coefficient for the Intrinsic subscale was 0.82 which is slightly higher than the alpha value of 0.79 obtained by Buitendach and Rothmann (2009). The Extrinsic subscale obtained an alpha value of 0.85 which is also higher than the alpha coefficient of 0.82 obtained by Buitendach and Rothmann (2009).

The obtained Cronbach alpha coefficient of the PCQ is 0.89 which is consistent with both the findings of Roberts et al. (2011) and Setar, Buitendach and Kanengoni (2015). This obtained alpha value ( $\alpha = 0.89$ ) is negligibly higher than the alpha value of 0.88 obtained by Toor and Ofori (2010), and Pillay (2012), yet lower than the alpha coefficient of 0.93 obtained by both Appollis (2010), and Avey et al. (2010). As the present study adopted the two-factor structure proposed by both Pillay (2012), and Setar, Buitendach and Kanengoni (2015), the Hopeful-Confident subscale yielded an alpha value of 0.91 which is slightly higher than Pillay's (2012), and Setar, Buitendach and Kanengoni's (2015) obtained alpha coefficients of 0.85 and 0.90, respectively. The Positive Outlook subscale obtained an alpha coefficient of 0.65 which is substantially lower than the alpha value of 0.81 obtained by Pillay (2012).

#### **6.2.1.2 To determine the relationship between occupational stress, uncivil workplace behaviour, job satisfaction and psychological capital.**

The research objective of determining the relationship between occupational stress, uncivil workplace behaviour, job satisfaction and psychological capital was achieved.

Findings indicated that occupational stress was statistically significant and positively correlated within uncivil workplace behaviour ( $p \leq 0.05$ ) which is indicative of the notion that those individuals who experience high levels of stress may, and are more likely to, further display high levels of uncivil behaviour in the workplace. Such a dynamic is supported by

Roberts et al. (2011) who postulates that individuals who experience greater stress or negative affect in their working life, are more likely to engage and display uncivil behaviour. The findings of the present study, as well as that of Roberts et al. (2011), resonates with the earlier contentions advanced by Lazarus and Folkman (1984), in which it is postulated that those individuals who have been exposed to stressors in their working environment, may consequently appraise their stressful situation in such a fashion, that it necessitates a particular psychological or behavioural response which has the propensity to manifest in counterproductive, uncivil behaviour. The positive relationship between occupational stress and uncivil workplace behaviour determined in the present study can be elucidated upon by Spector and Fox's (2002) Job Stress Model. Herein, the Job Stress Model is appropriate in understanding how the appraisal of a stressful situation may oblige a particular response, that in this case, may be uncivil in nature. Previous research conducted by Roberts et al. (2011) using Spector and Fox's (2002) adapted Job Stress Model yielded significant results in terms of providing evidence of a stress-incivility reciprocal relationship whereby displays of incivility resulted in increased levels of stress and inflated stress levels manifested in acts of incivility. Lastly, occupational stress was found to be statistically negatively correlated with job satisfaction ( $p \leq 0.05$ ), indicating that individuals who experienced higher levels of occupational stress, may consequently experience lowered levels of job satisfaction.

Psychological capital was found to be statistically and practically positively correlated to job satisfaction ( $p \leq 0.01$ ) (large effect), which is indicative of a dynamic in which individuals who possessed higher levels of hope, resilience, self-efficacy and optimism, experienced greater levels of job satisfaction. The findings of the present study herein, are mirrored by that of Appollis' (2010) and Naran's (2013) studies that were conducted in the South African context, which further illustrated the strong positive relationship that exists between psychological

capital and job satisfaction. Furthermore, psychological capital yielded no statistically and practically significant relationship with uncivil workplace behaviour.

The present study did not endeavour to examine the relationship between the outcomes of uncivil workplace behaviour and job satisfaction as a research objective. However, within the current study, it is noteworthy to mention that uncivil workplace behaviour presented no statistically or practically significant relationship with job satisfaction. Such a finding is incongruent with research advanced by Pearson and Porath (2009) who linked acts of uncivil workplace behaviour with decreased job satisfaction. Moreover, the prevalence of uncivil workplace behaviour has been identified as causing a massive chain-reaction for job satisfaction and consequently, employee turnover (Pearson & Porath, 2009).

#### **6.2.1.3 To determine the relationship between occupational stress and psychological capital constructs**

Occupational stress displayed no statistically or practically significant relationship with psychological capital; however, the PsyCap subscale of Positive Outlook indicated a statistically and practically positively correlated relationship with Job Stress ( $p \leq 0.01$ ) (medium effect). Such a finding is suggestive of a dynamic wherein an individual who is experiencing elevated levels of stress may consequently have a diminished positive outlook on their situation. The Optimism subscale of PsyCap forms one of the two dimensions which constitute Positive Outlook; therein, the research of Herbert (2011) is pertinent in providing an elucidation to the above findings. Herbert (2011) indicated that a negative relationship was established between Optimism subscale of PsyCap and Job Stress which is indicative of individuals with higher levels of optimism, reporting lower occupational stress. Within the context of the present study, occupational stress is posed as an antecedent rather than the



outcome; implicitly then, the extrapolation made from the results of the present study, is that individuals who experience elevated levels of occupational stress reported having lowered levels of Positive Outlook and diminished positive expectations about future events. In relation to the underlying theoretical framework utilised in the current study, the employment of Frederickson's (1998) Broaden-and-Build Theory is cogitated appropriate as it pertains to positive emotions that can be used to explain such findings. Therein the relationship between PsyCap and occupational stress, particularly that of Positive Outlook and occupational stress, can be understood as one in which the experience of positive states associated with optimism and resilience that constitute Positive Outlook, would result in a broadened and more positively-inclined way of thinking.

#### **6.2.1.4 To determine the relationship between uncivil workplace behaviour and psychological capital constructs**

Uncivil workplace behaviour yielded no statistically and practically significant relationship with psychological capital. The obtained finding is particularly interesting as Avey et al. (2010) and Roberts et al. (2011) established that individuals who possess higher levels of PsyCap are less inclined to engage in uncivil workplace behaviour, in contrast to those individuals with lower levels of PsyCap. More recently, Setar, Buitendach and Kanengoni (2015) have also indicated the existence of a negative relationship between PsyCap and Uncivil Workplace Behaviour. The findings of the present study, however, are incongruent with these established conclusions.

### **6.2.1.5 To determine the relationship between job satisfaction and psychological capital constructs**

Job satisfaction was found to be negatively statistically and practically correlated with psychological capital ( $p \leq 0.01$ ) (large effect). Appollis (2010) thus maintains that individuals that possess higher levels of hope, resilience, self-efficacy and optimism, experience greater levels of job satisfaction; as evidenced in the obtained findings of the current study. Additionally, the Job Satisfaction subscale of Extrinsic motivation indicated a statistically and practically positive correlation to psychological capital ( $p \leq 0.01$ ) (large effect). This finding implies that as an individual's PsyCap levels increase, so does the employees' extrinsic job satisfaction. The scarcity of literature pertaining to the relationship between extrinsic job satisfaction and psychological capital affords the present study into postulating further insight into the relationships between these constructs. According to Herzberg (1969), and Buitendach and Rothmann (2009), extrinsic job satisfaction refers to notions around employee's dissatisfaction with varying elements of their job, such as promotion and career progression; thus, an increase in psychological capital may see employees having amended views on career progression, remuneration and other work characteristics.

Specifically, within the PsyCap dimension, the Hopeful-Confidence subscale presented a statistically and practically significant ( $p \leq 0.01$ ) (large effect) positive relationship with the Job Satisfaction subscale of Intrinsic motivation. The implied finding herein is that those individuals who possess or experience greater hope and self-efficacy in their lives, further experience and derive autonomy, confidence, value and motivation in their work (Herzberg, 1966). The strong positive statistically and practically correlation between Hopeful-Confidence and Intrinsic motivation ( $p \leq 0.01$ ) (large effect) is further concretised by Hegney et al.'s (2006) suggestion that there is a direct decrease in the job satisfaction experienced by

individuals when their intrinsic factors are unfulfilled and, vice versa. Moreover, job satisfaction also displayed a statistically and practically significant positively correlated relationship with the PsyCap dimension of Positive Outlook ( $p \leq 0.01$ ) (medium effect).

#### **6.2.1.6 To determine the relationship between occupational stress and uncivil workplace behaviour constructs**

Occupational stress presented a statistically significant positively correlated relationship with uncivil workplace behaviour ( $p \leq 0.05$ ). Such a finding is indicative of the notion that those individuals who experience high levels of stress may, and are more likely to, further display high levels of uncivil behaviour in the workplace. Further, Job Stress displayed a stronger statistically and practically significant ( $p \leq 0.01$ ) (medium effect) positive relationship with the Exclusionary Behaviour subscale. This finding provides an elucidation to the notion that those individuals who experience elevated job stress may fail to liaise with other respective parties within the workplace, such as not consulting a co-worker in reference to a decision that they should have been involved in. This may not only result in appropriate parties not being consulted in decisions but in turn, has the propensity to isolate the individual from the rest of the workforce. If these findings are to be seen in relation to Spector and Fox's (2002) Job Stress Model, then it can be understood that the positive relationship between occupational stress and uncivil workplace behaviour, as well as exclusionary behaviour, posits emphasis on a dynamic in which individuals that experience heightened levels of stress within the workplace may negatively appraise a situation, consequently leading to the adoption of a negative, exclusionary demeanour towards others in the work setting.

### **6.2.1.7 To determine the relationship between occupational stress and job satisfaction constructs**

Occupational stress presented a negative statistically significant relationship with job satisfaction ( $p \leq 0.05$ ). Such a finding indicates that when higher levels of occupational stress are experienced, the result may be lowered levels of job satisfaction. Moreover, occupational stress indicated a statistically significant negative relationship with the Extrinsic motivation subscale ( $p \leq 0.05$ ). Since Extrinsic motivation herein refers to 'job dissatisfiers' which are associated with unfulfilled factors in one's life that may pertain to issues around career progression or promotion, it can be postulated that when individuals experience high level of occupational stress, there may be a decrease in the potential of extrinsic factors such as remuneration or promotion, influencing the individual's satisfaction with work. According to Hegney et al. (2006), such extrinsic motivation may also have a bearing on employee turnover in the organisation.

### **6.1.2.8 To determine the relationship between uncivil workplace behaviour and job satisfaction constructs**

The findings of the present study awarded no statistically or practically significant relationship between the outcomes of Uncivil Workplace Behaviour and Job Satisfaction. Such a finding is seemingly incongruent with research advanced by Pearson and Porath (2009), in which acts of uncivil workplace behaviour with decreased job satisfaction. Additionally, it is noted that the prevalence of uncivil workplace behaviour has been singled-out as instigating a massive chain-reaction for job satisfaction and consequently, employee turnover (Pearson & Porath, 2009). The Uncivil Workplace Behaviour subscale of Exclusionary Behaviour indicated a statistically significant negative relationship with Job Satisfaction ( $p \leq 0.05$ ). This is suggestive of a

dynamic in which individuals who experience exclusionary behaviour in the workplace, such as not being consulted in reference to a decision that they should have been involved in, experiencing lower levels of job satisfaction.

#### **6.2.1.9 To determine the predictive value of psychological capital and occupational stress on uncivil workplace behaviour and job satisfaction**

Time-Stress and Job-Anxiety, both of which are Job Stress subscales, held no predictive value for Uncivil Workplace Behaviour or any of its subscales (i.e Exclusionary Behaviour, Gossiping, Hostility and Privacy Invasion). Such a finding is congruent with Robert et al.'s (2011) research, which indicated that occupational stress is not a significant predictor of uncivil workplace behaviour; however, it is imperative to note that within the same study, psychological capital was considered a much better predictor for uncivil workplace behaviour. The high correlation and overlap between occupational stress and psychological capital within Roberts et al.'s (2011) study consequently saw one construct - psychological capital, being a better predictor for uncivil workplace behaviour, than that of occupational stress. Contrastingly Setar, Buitendach and Kanengoni's (2015) research indicated that occupational stress did, in fact, have predictive value for uncivil workplace behaviour, whereas psychological capital held no predictive value for uncivil workplace behaviour. The multiple regression analysis additionally indicated that the PsyCap subscale of Positive Outlook held predictive value for Uncivil Workplace Behaviour subscale of Privacy Invasion. This finding is suggestive of a dynamic in which individuals who are resilient and optimistic about the future are less likely to engage in conduct that invades the privacy of others.

Findings from the multiple regression analysis indicated that the PsyCap subscale of Hopeful-Confidence held strong predictive value for Job Satisfaction, as well as its subscales of Intrinsic

and Extrinsic motivation. Such a finding suggests that self-efficacious and hopeful employees who are confident about their abilities, driven and aware of the steps required to achieve their goals, derive and experience greater satisfaction with the work they engage in. Lastly, the multiple regression analysis indicated that Time-Stress, the Job Stress subscale, is a strong predictor of Job Satisfaction's subscale of Intrinsic motivation. This suggests that individuals exposed to a great deal of time-related work stress would experience lowered levels of job satisfaction, particularly autonomy, confidence, motivation and value in their work due to the negative impact that stringent time constraints would have on the satisfaction they would get from their work. Such a finding can be contextualised in relation to Spector and Fox's (2002) Job Stress Model that elucidates upon the notion that the manner in which individuals experience occupational stress is highly contingent on their appraisal of the stressful situation. Therein, individuals who possess or experience greater hope and self-efficacy in their lives, further experience and derive autonomy, confidence, value and motivation in their work would appraise stressful situations as being less severe than those who don't possess such attributes. The perceived nature of work, such as that of time-constrained work, is perceived as less stressful due to their self-efficacy, hope and resilience.

**6.2.1.10 To investigate whether psychological capital moderates the relationship between occupational stress and uncivil workplace behaviour, and occupational stress and job satisfaction**

Whilst occupational stress and psychological capital possessed significant predictive value for uncivil workplace behaviour and job satisfaction, the interaction term (job stress x psychological capital) indicated no significant interaction effect in the second step of each analysis; thus, this results in no significant interaction with uncivil workplace behaviour and job satisfaction. Therein, it is elementary to deduce that psychological capital did not moderate

the relationship between occupational stress and uncivil workplace behaviour nor did it moderate the relationship between occupational stress and job satisfaction. These findings, however, are in contrast to that purported by Robert et al. (2011), in which psychological capital moderated the relationship between occupational stress and uncivil workplace behaviour.

### **6.3 Limitations of the present study**

Within the present study, a number of noteworthy limitations are identifiable. The current study utilised a relatively small sample size ( $n = 70$ ) which presents problems with regard to the generalisability of the study. Moreover, the current sample further lacks generalisability to other call centres in South Africa, due to the nature of work varying from that of traditional call centres. Additionally, the small sample size encumbers the utilisation of factor analysis, as a recommended minimum sample size of 100 is required in order to produce reliable and valid factor loadings (MacCallum, Widaman, Zhang & Hong, 1999; Garson, 2008). The employment of a cross-sectional survey design within the current study provides a limitation in that the researcher was not able to go back and survey the same participants again (Mendelhall, Beaver, & Beaver, 2009). Moreover, the application of the cross-sectional survey design implicitly highlights the inability of the current study to determine the causality between variables. Therein, although significant relationships between variables are identified, the causality of such relationships cannot be proven. The utilisation of a longitudinal research design is recommended for future results insofar as ensuring that more definitive results can be attained.

Additionally, the use of self-reported questionnaires presents a primary limitation within the present study. Even though self-reported questionnaires are a popularised form of data gathering in social sciences (Babbie & Mouton, 2002), there is a possibility of respondents

engaging in response bias (Goodwin, 2016). Therefore, this further exacerbates the fact that causal inferences cannot be made, but also that participants may have responded to questions in a socially desired manner, which may not reflect a true and accurate feeling or opinion.

Despite that aforementioned limitations, the present study has produced significant findings which in itself, offers a valuable contribution to academic literature, predominantly within the domain of positive psychology and call centre research in the South African context.

#### **6.4 Recommendations for the Organisation**

The findings of the current research study indicated a positive relationship between Job Stress and Uncivil Workplace Behaviour, which indicates that individuals who experience high levels of occupational stress may, and are more likely to, further display high levels of uncivil workplace behaviour; thus, organisations must employ methods to reduce occupational stress in order to reduce the risk of uncivil behaviour. Additionally, a negative relationship between Job Stress and Job Satisfaction was found which indicates that high levels of occupational stress may result in lower levels of job satisfaction. The Job Stress subscale of Time-Stress further indicated predictive value for Job Satisfaction's subscale of Intrinsic motivation. This suggests that organisations need to renegotiate ways to reduce time-related work stress in order to help employees experience confidence, autonomy, motivation and value in their work despite stringent time constraints that would otherwise negatively impact the satisfaction they would receive from engaging in work.

Moreover, findings from the current research indicated a positive relationship between Psychological Capital and Job Satisfaction. Such findings indicated that high levels of psychological capital are directly associated with high levels of job satisfaction, which suggests



that organisations should invest in development and training programmes for employees insofar as improving their psychological capital to increase their job satisfaction. Specifically, the PsyCap subscale of Hopeful-Confidence held strong predictive value for Job Satisfaction, as well as its subscales of Intrinsic and Extrinsic motivation. Such a finding suggests that organisations further finance interventions geared toward the development and training of employees to improve their psychological capital as well as nurture employees who are self-efficacious, hopeful, who are confident about their abilities, driven and aware of the steps required to achieve their goals, derive and experience greater satisfaction with the work they engage in (Avey, et al., 2010). Luthans et al. (2006) purported that the creation of micro-interventions geared towards the state-like construct of psychological capital has seen the subsequent improvement in participants' personal resources.

## **6.5 Recommendations for Future Research**

Pondering the limitations of the present study, it is suggested that a longitudinal study be conducted in order to establish the causality and to further provide support of the findings of the current study. Therein, it would be beneficial for future studies to consider establishing the levels of occupational stress, uncivil workplace behaviour, job satisfaction and psychological capital at varying times during the research. Moreover, it is apparent that more research needs to be conducted on uncivil workplace behaviour within in the South African context as it constitutes a substantial research gap within academic literature.

It is recommended that future studies attempt to collect data from a variety of different samples across South Africa insofar as determining whether the relationships discovered within the present study are not established as result of the size of the sample or the nature of the Emergency Services Control Unit in which the present study is conducted. Therein, to establish

the generalisability of the current findings, future research may endeavour to replicate the present research with a larger representative sample.

## **6.6 Contributions of the study**

The present research study has contributed to existing literature by widening the scope of research within both the domains of Positive Psychology and call centre research. Additionally, the present study provided an understanding of how Emergency Services Control Unit staff perceive and utilise their positive capacities. Moreover, the present research has examined occupational stress, uncivil workplace behaviour, job satisfaction and psychological capital among Emergency Services Control Unit sample which directly addresses the evident gap in academic literature.

The present study further has provided practical value and insight into psychological capital and its subconstructs in relation to occupational stress, uncivil workplace behaviour and job satisfaction insofar as aiding in the development of interventions, frameworks and policies that can be used to assist Emergency Services Control Unit staff to mobilise their strengths to their fullest capacity in order to promote, regulate and counteract occupational stress and uncivil workplace behaviour.

## **6.7 Chapter Summary**

This chapter comprised of a concluding discussion based on both the theoretical and empirical findings of the present study. Moreover, this chapter presented the possible limitations, recommendations for organisations and future research as well as the contributions of the present study.

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## Appendix 1: Letter to the Organisation

20 May 2017

Disaster Management and Emergency Control Unit

3 Jelf Taylor Crescent

Durban

4025

Mr. BC Heylen  
1 Blazeway Road  
Amanzimtoti  
4126  
Tel: 0835700426

For attention: Mr. VB Ngubane (Head of Department: Disaster Management and Emergency Control Unit)

### **REQUEST FOR PERMISSION TO CONDUCT RESEARCH IN THE EMERGENCY CONTROL UNIT**

Dear Mr. VB Ngubane

My name is Byron Heylen, and I am a Masters Industrial Psychology student at the University of KwaZulu-Natal in Durban. The research I wish to conduct for my Masters dissertation involves investigating the relationship between stress, workplace incivility and job satisfaction with the moderating role of psychological capital among staff in Emergency Services control unit. This project will be conducted under the supervision of Prof. Joey Buitendach (UKZN, South Africa).

I am hereby seeking your consent to conduct this study within the Emergency Control Unit among the 3 Control centres in the eThekweni region. I would appreciate your co-ordination and assistance in allowing me to distribute questionnaires amongst the Control Unit staff for completion during June 2017. The participation of the staff is voluntary, and their responses will be treated in a confidential manner. The anonymity of all Emergency Control Unit staff is guaranteed.

I have provided you with a copy of my thesis proposal which includes copies of the measure and consent and assent forms to be used in the research process. Please note however, my ethical

clearance is still pending with the UKZN Research Ethics Committee (Human). As soon as it is in my possession, I will forward it to you.

Upon completion of the study, I undertake to provide the Disaster Management and Emergency Control Unit with a bound copy of the full research report. If you require any further information, please do not hesitate to contact me on 0835700426 or via email, at: byronheylen@gmail.com. Alternatively, if you have any further questions regarding the research, please contact the project supervisor, Professor Joey Buitendach on (031) 260 2022 or email her at buitendach@ukzn.ac.za.

Thank you for your time and consideration in this matter.

Yours sincerely,

Byron Heylen  
University of KwaZulu-Natal

## Appendix 2: Letter of Informed Consent

Dear participant,

My name is Byron Heylen and I am an Industrial Psychology Masters student at the University of KwaZulu-Natal. I am required to conduct a research study this year in order to obtain my Masters degree. I am conducting research on the relationship between occupational stress, workplace incivility and job satisfaction with the moderating role of psychological capital among staff in Emergency Services Control Unit. I, the researcher would appreciate your participation in this research study by completing the questionnaires.

Your participation in the study will be voluntary, and confidentiality and anonymity is guaranteed. In no way will your responses impact on your job at the organization. You have the right to not participate in the study, and you are free to withdraw from the research at any time without any negative consequences. The collection of data is primarily for the purpose of this research, and will not be used for any other purpose that has not been specified. Only the researcher on this project have access to the data that is collected. The results of the research will be kept in locked cabinet for a period of five years and thereafter will be disposed of by shredding of the questionnaires.

If you have any queries, please do not hesitate to contact me or my supervising researcher:

Byron Heylen 083 570 0426

Prof Joey Buitendach 031 260 2407

Thank you for your participation.

**If you wish to obtain information on your rights as a participant, please contact Ms Phumelele Ximba, Research Office, UKZN, on 031 260 3587.**

I..... (Full names of participant) hereby confirm that I understand the contents of this document and the purpose of the research project, and I consent to participating in the research project. I understand that I may withdraw from the project at any time, and that participation is voluntary.

### Appendix 3: Biographical Data Sheet

#### GENDER

Male	<input type="checkbox"/>	Female	<input type="checkbox"/>
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#### AGE GROUP

24 years and younger	<input type="checkbox"/>	23-35 years	<input type="checkbox"/>
36-45 years	<input type="checkbox"/>	46-55 years	<input type="checkbox"/>
56 years and older	<input type="checkbox"/>		

#### RACE GROUP

African	<input type="checkbox"/>	Indian	<input type="checkbox"/>
Coloured	<input type="checkbox"/>	White	<input type="checkbox"/>

#### MARITAL STATUS

Single	<input type="checkbox"/>	Divorced	<input type="checkbox"/>
Widowed	<input type="checkbox"/>	Married	<input type="checkbox"/>
Living with a spouse	<input type="checkbox"/>		

#### TENURE

Less than 5 years	<input type="checkbox"/>	6 – 10 years	<input type="checkbox"/>
11 – 20 years	<input type="checkbox"/>	More than 20 years	<input type="checkbox"/>

#### HIGHEST ATTAINED QUALIFICATION

Matric Certificate	<input type="checkbox"/>	Diploma	<input type="checkbox"/>
Degree	<input type="checkbox"/>	Postgraduate degree	<input type="checkbox"/>

## Appendix 4: The Job Stress Scale

### Instructions:

Please circle the relevant number in the right hand column

	Strongly disagree	Disagree	Agree	Strongly agree
1. Working here makes it hard to spend enough time with my family.	1	2	3	4
2. I spend so much time at work, I can't see the forest for the trees.	1	2	3	4
3. Working here leaves little time for other activities.	1	2	3	4
4. I frequently get the feeling I am married to the company.	1	2	3	4
5. I have too much work and too little time to do it in.	1	2	3	4
6. I sometimes dread the telephone ringing at home because the call might be job-related.	1	2	3	4
7. I feel like I never have a day off.	1	2	3	4
8. Too many people at my level in the company get burned out by job demands.	1	2	3	4
9. I have felt fidgety or nervous as a result of my job.	1	2	3	4
10. My job gets to me more than it should.	1	2	3	4
11. There are lots of times when my job drives me right up the wall.	1	2	3	4
12. Sometimes when I think about my job I get a tight feeling in my chest.	1	2	3	4
13. I feel guilty when I take time off from job.	1	2	3	4

## Appendix 5: Uncivil Workplace Behaviour Scale

During the past twelve months, or as long as you have been with your current organization, how often have you been in a situation where you displayed the following behaviour towards a supervisor or co-worker:

**(please circle the relevant number in the right hand column)**

	Never	Rarely	Occasionally	Often	Very often
1. Avoided consulting a co-worker when you would normally be expected to do so.	1	2	3	4	5
2. Talked about a co-worker behind their back.	1	2	3	4	5
3. Was excessively slow in returning a co-worker's phone messages or emails without good reason for the delay.	1	2	3	4	5
4. Used an inappropriate tone when speaking to a co-worker.	1	2	3	4	5
5. Was unreasonably slow in dealing with matters that were important to a co-worker's work.	1	2	3	4	5
6. Gossiped behind a co-worker's back.	1	2	3	4	5
7. Opened a co-worker's desk drawers without prior permission.	1	2	3	4	5
8. Publicly discussed a co-worker's confidential personal information.	1	2	3	4	5
9. Took items from a co-worker's desk without prior permission.	1	2	3	4	5
10. Spoke to a co-worker in an aggressive tone of voice.	1	2	3	4	5
11. Intentionally failed to pass on information that a co-worker should have been made aware of.	1	2	3	4	5
12. Made snide remarks about a co-worker.	1	2	3	4	5
13. Took stationery from a co-worker's desk without later returning it.	1	2	3	4	5
14. Read communications addressed to a co-worker, such as emails and faxes.	1	2	3	4	5
15. Raised your voice while speaking to a co-worker.	1	2	3	4	5
16. Did not consult a co-worker in reference to a decision they should have been involved in.	1	2	3	4	5
17. Rolled your eyes at a co-worker.	1	2	3	4	5



## Appendix 6: Minnesota Satisfaction Questionnaire

Please rate the extent to which you feel (dis)satisfied with the following statements by crossing the appropriate number on the 1-5 point scale. **1 = very dissatisfied, 2 = dissatisfied, 3 = neither satisfied nor dissatisfied, 4 = satisfied, 5 = very satisfied**

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

## Appendix 7: Psychological Capital Questionnaire

### Instructions:

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 = agree)**

	Strongly disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree
1. I feel confident analyzing a long-term problem to find a solution.	1	2	3	4	5	6
2. I feel confident representing my work area in meetings with management .	1	2	3	4	5	6
3. I feel confident contributing to discussions about the company's strategy.	1	2	3	4	5	6
4. I feel confident helping to set targets/goals in my work area.	1	2	3	4	5	6
5. I feel confident contacting people outside the company (e.g. suppliers, customers) to discuss problems.	1	2	3	4	5	6
6. I feel confident presenting information to a group of colleagues.	1	2	3	4	5	6
7. If I should find myself in a jam, I could think of ways to get out of it.	1	2	3	4	5	6
8. At the present time, I am energetically pursuing my goals.	1	2	3	4	5	6
9. There are lots of ways around any problem that I am facing now.	1	2	3	4	5	6
10. Right now, I see myself as being pretty successful.	1	2	3	4	5	6
11. I can think of many ways to reach my current goals.	1	2	3	4	5	6
12. At this time, I am meeting the goals that I have set for myself.	1	2	3	4	5	6
13. When I have a setback at work, I have trouble recovering from it, moving on ®	1	2	3	4	5	6
14. I usually manage difficulties one way or another at work.	1	2	3	4	5	6

15. I can be 'on my own', so to speak, at work if I have to be.	1	2	3	4	5	6
16. I usually take stressful things at work in stride.	1	2	3	4	5	6
17. I can get through difficult times at work because I've experience difficulty before.	1	2	3	4	5	6
18. I feel I can handle many things at a time at this job.	1	2	3	4	5	6
19. When things are uncertain for me at work, I usually expect the best.	1	2	3	4	5	6
20. If something can go wrong for me work-wise, it will. ®	1	2	3	4	5	6
21. I always look on the bright side of things regarding my job.	1	2	3	4	5	6
22. I'm optimistic about what will happen to me in the future as it pertains to work.	1	2	3	4	5	6
23. In this job, things never work out the way I want them to. ®	1	2	3	4	5	6
24. I approach this job as if 'every cloud has a silver lining'.	1	2	3	4	5	6

## Appendix 8: Permission to conduct research



### COMMUNITY AND EMERGENCY SERVICES Disaster Management and Emergency Control Unit

Disaster Management Building, 3 Jelf Taylor Crescent, Durban, 4001 PO Box 3965, Durban, 4000

Tel: 031 367 0001, Fax 031 307 3744

www.durban.gov.za

30 May 2017

Mr BC Heylen  
1 Blazeway Road  
Amanzimtoti  
4126

Tel: 083 5700 426  
Email: byronheylen@gmail.com

Attention: Mr Heylen

#### **RE: PERMISSION TO CONDUCT RESEARCH IN EMERGENCY CONTROL CENTRE**

Kindly be advised that your request to conduct research has been approved.

You will report to Ms Brenda Ndlovu, Acting Manager: Emergency Control.

As per your request letter, you are to provide the Unit a full research report.

Thanking you kindly and wish you well.

Yours Sincerely,

  
**MR VB NGUBANE**  
**HEAD: DISASTER MANAGEMENT & EMERGENCY CONTROL UNIT**

CC – Ms B Ndlovu

Acting Manager: Emergency Control

## Appendix 9: Humanities & Social Sciences Research Ethics Committee Approval Letter



31 May 2017

Mr Byron Clyde Heylen (213513322)  
School of Applied Human Sciences – Psychology  
Howard College Campus

Dear Mr Heylen,

**Protocol reference number: HSS/0568/017M**

**Project title:** Occupational stress, workplace incivility and job satisfaction with the moderating role of psychological among staff in an Emergency Services Control Unit

### Approval Notification – Expedited Application

With regards to your response received on 30 May 2017 to our letter of 23 May 2017, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted **FULL APPROVAL**.

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 discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

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

Yours faithfully

Dr Shenuka Singh (Chair)

/ms

cc Supervisor: Professor JH Buitendach  
cc Academic Leader Research: Dr Jean Steyn  
cc School Administrator: Ms Ayanda Ntuli

Humanities & Social Sciences Research Ethics Committee  
Dr Shenuka Singh (Chair)

Westville Campus, Govan Mbeki Building

Postal Address: Private Bag X54001, Durban 4000

Telephone: +27 (0) 31 260 3587/8350/4557 Facsimile: +27 (0) 31 260 4609 Email: [ximbap@ukzn.ac.za](mailto:ximbap@ukzn.ac.za) / [snymarim@ukzn.ac.za](mailto:snymarim@ukzn.ac.za) / [mohunp@ukzn.ac.za](mailto:mohunp@ukzn.ac.za)

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