The moderating role of Psychological Capital in the relationship between Job Stress and
the outcomes of Incivility and Job Involvement among Call Centre employees

By

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Declaration

I hereby declare that this research dissertation, submitted in partial fulfillment of the requirements for the qualification of Master of Social Science in Industrial Psychology at the University of KwaZulu-Natal, is entirely my own work. All sources consulted during the course of research for this dissertation have been duly acknowledged and referenced at the end of this dissertation. This dissertation is being submitted for the degree of Master of Social Science in the School of Applied Human Sciences, University of KwaZulu-Natal, Durban, South Africa. This dissertation has not previously been submitted for a qualification at another university or another faculty at an academic institution.

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Abstract

The current study was interested in determining the moderating role of psychological capital in the relationship between job stress and the outcomes of incivility and job involvement among employees at a call centre in Durban, KwaZulu-Natal. A quantitative research design was adopted in conducting this study. The relationships between psychological capital, job stress, incivility and job involvement were examined using two theoretical frameworks, namely, the Broaden-and-Build Theory of positive emotions (Fredrickson, 1998) and the Job Stress Model (Spector & Fox, 2002). The research aimed to determine the relationship between psychological capital, job stress, incivility and job involvement, whether psychological capital and job stress held predictive value for the outcomes of incivility and job involvement, and the extent to which psychological capital moderated the relationship between job stress and incivility and job stress and job involvement. The sample consisted of 104 call centre agents, 28 male and 76 female employees, who were required to complete questionnaires measuring each of the constructs under study. Data was analysed using exploratory factor analysis, descriptive statistics, Pearson product-moment correlations, multiple regression analysis and hierarchical regression analysis. The findings of the study indicated that high levels of psychological capital correlated with low levels of incivility and high job involvement. Additionally, a high level of job stress was associated with high incivility and low job involvement. The findings of the study further indicated that job stress predicted incivility and job involvement, while the optimism dimension of psychological capital also predicted job involvement. Additionally, psychological capital did not moderate the relationship between job stress and incivility nor did it moderate the relationship between job stress and job involvement. The study contributes to the existing literature on psychological capital, job stress, incivility and job involvement while adding a new
dimension to the existing literature available on each of these constructs, by determining the relationships between the constructs.
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CHAPTER ONE

INTRODUCTION

1.1. Introduction

Positive psychology is an area of study which emerged as a result of criticisms leveled against the discipline of psychology for its preoccupation with diagnosing and removing the negative aspects of human thinking and behaviour—human pathology—rather than identifying and enhancing the positive aspects, or strengths, of individuals (Seligman & Csikszentmihalyi, 2000). In keeping with this idea of seeking to enhance the positive aspects of human behaviour, research in the area of positive psychology has increased considerably in recent years. Along with the area of positive psychology, the literature in the area of positive organisational behaviour—the application of positive psychology in the workplace—has also grown considerably (Luthans, 2002a).

A fairly new concept, originating in the field of positive organisational behaviour, which has not received enough attention amongst researchers but has shown much promise for the future of positive psychology, is psychological capital. Psychological capital is a positive psychological state which can be developed and enhanced within individuals at any point in their life due to its state-like nature (Luthans, Youssef, & Avolio, 2007b; Lewis, 2011). It is characterised by the possession of these four qualities in an individual: self-efficacy (a sense of competence in one’s ability to carry out a particular task), resilience (the ability to bounce back from difficulty), hope (positive expectations for the future) and optimism (forming positive attributions for negative outcomes). These four qualities can be developed within an individual at any time. These four constructs have been shown to have beneficial effects both individually and as the combined
construct of psychological capital. Despite the increasing body of research in the area of positive psychology and positive organisational behaviour (Luthans, 2002a; Luthans & Youssef 2007; Donaldson & Ko, 2010), research findings have not entirely succeeded in helping organisations overcome the negative aspects of work, such as the experience of job stress and the display of incivility within the workplace, as well as enhancing the positive aspects of work, such as job involvement. In this regard, the current study attempted to examine these constructs in relation to psychological capital with the aim of improving the understanding of these constructs and the relationships among them, while also seeking to determine the role played by psychological capital in the relationships among these constructs.

1.2. Background and Motivation for the Study

Call centres are regarded as providing particularly stressful work conditions for employees, mainly due to increased demands for performance and through the implementation of performance monitoring mechanisms which serve to increase tension between managers and employees (Benner, Lewis & Omar, 2007). These performance monitoring mechanisms have been linked to high levels of stress and increased staff turnover in many call centres, especially when very little discretion is exercised in providing feedback to employees (Benner, Lewis & Omar, 2007). South African call centres were found to rank amongst those with the highest degree of performance monitoring and feedback, exceeded only by South Korean and Indian call centres (Holman, Batt, & Holtgrewe, 2007). This high degree of performance monitoring and feedback and its known effect of increasing job stress, suggests that South African call centre employees may experience a high level of stress within the workplace.
Although previous research has examined the effects of incivility within a call centre setting, such as the study conducted by van Jaarsveld, Walker and Skarlicki (2010), such research has focused on the spiraling effect of incivility as proposed by Andersson and Pearson (1999) in which customer incivility provoked uncivil responses from call centre employees. This study, however, sought to examine the relationship between job stress and the display of uncivil behaviours among call centre employees, while also studying the role of psychological capital in this relationship. Similarly, this study attempted to determine the relationship between job stress and job involvement among this sample and the potential moderating role of psychological capital in this relationship. In doing so, the job stress model developed by Spector and Fox (2002) which explains the relationship between job stress and counterproductive work behaviours (CWB), which is closely related to, but distinct from, incivility was used. Their model explains the relationship between job stress and CWB, stating that an employee’s appraisal of a threatening situation as being stressful results in an emotional reaction which results in them acting out through the display of CWB.

Despite the concept of incivility overlapping with that of CWB, few studies have examined the relationship between job stress and incivility, with Penney and Spector’s (2005) study being the first to study both constructs in relation to each other, followed by the study conducted by Roberts et al. (2011) which assessed the moderating role of psychological capital in this relationship.

As far as could be ascertained, although previous studies have examined the relationship between stress and job involvement (Ouyang, 2009; López-Araújo, Segovia, & Peiró, 2007; Lata Juyal, 2012), no studies have been conducted examining the role of psychological capital in this relationship. Importantly, no previous study has examined this relationship in a sample of call
centre employees. Considering the fact that concerns have been expressed regarding the high levels of stress faced by South African call centre employees (Benner, Lewis, & Omar, 2007) and the known outcome of employees engaging in unhealthy competition with co-workers as a result of stress, effectively resulting in the display of aggressive and uncivil behaviour at work (Van Zyl, 2002), it is important that the relationship between job stress and incivility is studied among a sample of South African call centre employees. Additionally, the scarcity of South African research in the area of psychological capital (Rothmann & Cilliers, 2007) and the small number of studies conducted on job involvement, none of which study job involvement in relation to psychological capital, job stress or incivility, suggests a need for such research to be conducted. This study attempted to address this gap in the existing literature by studying the relationships between job stress and the outcomes of incivility and job involvement, and the moderating role of psychological capital in this relationship, using a sample of South African call centre employees. In doing so, the Job Stress Model (Spector & Fox, 2002) and the Broaden-and-Build Theory of positive emotions (Fredrickson, 1998) were used as the theoretical frameworks through which each of these relationships were examined.

The job stress model, as mentioned previously, states that an employee’s appraisal of a situation as being stressful results in an emotional reaction which may cause them to act out through the display of CWB- or, in this case, incivility. The job stress model was, therefore, used to study the relationship between job stress and incivility and the moderating role of psychological capital in this relationship.

The broaden-and-build theory of positive emotions states that an individual’s experience of positive emotions tends to broaden their momentary thought-action repertoire and build their enduring personal resources (Fredrickson, 2004). Positive emotions play a significant role in
helping individuals adopt broader ways of thinking and behaving, and the personal resources gained during the experience of these positive emotion states are durable (Fredrickson, 2001). The broaden-and-build theory of positive emotions was, therefore, used to study the relationship between psychological capital and job involvement, as it is believed that an individual’s possession of the positive traits underlying psychological capital (self-efficacy, hope, optimism and resilience) may result in the broadening and building upon of these positive psychological resources in the workplace to achieve the positive outcome of job involvement.

1.3. Research Aims and Objectives

Taking into consideration the background and motivation for this study, the primary objective of this study was to determine the relationship between psychological capital, job stress, incivility and job involvement, and to determine whether psychological capital and job stress hold any predictive value for the outcomes of incivility and job involvement. The general objective of this study was to determine whether psychological capital played a moderating role in this relationship. In order to address the general objective, the following research questions were asked:

1. What is the relationship between psychological capital, job stress, incivility and job involvement?

2. Are job stress and psychological capital predictors of incivility?

3. Are job stress and psychological capital predictors of job involvement?
4. To what extent does psychological capital moderate the relationship between job stress and incivility and/or job involvement?

In order to answer the abovementioned research questions, the research objectives of this study were:

1. To determine the relationship between psychological capital, job stress, incivility and job involvement.

2. To determine whether job stress and psychological capital are predictors of incivility.

3. To determine whether job stress and psychological capital are predictors of job involvement.

4. To determine the extent to which psychological capital moderates the relationship between job stress and incivility and/or job involvement.

1.4. Structure of the study

CHAPTER ONE: INTRODUCTION

This chapter introduces the topic under study by discussing the background and motivation for the study. It also outlines the objectives of the study and the research questions that the study has attempted to address.
CHAPTER TWO: LITERATURE REVIEW

This chapter defines the four main constructs under study. It also provides a review of the existing literature in the broad area of positive psychology, as well as the literature on the four main constructs of job stress, psychological capital, incivility and job involvement. Additionally, it discusses the theoretical frameworks adopted in studying these relationships, namely, the Job Stress Model (Spector & Fox, 2002) and the Broaden-and-Build Theory of positive emotions (Fredrickson, 1998).

CHAPTER THREE: METHODOLOGY

This chapter discusses the research method used in carrying out the study. This involves an explanation of the research design, sample and sampling method, the research instruments used and the ethical considerations of the study. Additionally, the specific procedure followed in conducting the research as well as the choice of statistical methods used for the purpose of analysing data is discussed.

CHAPTER FOUR: RESULTS

This chapter provides the results of the statistical analyses conducted on the data. Both descriptive and inferential statistics are provided. The results of exploratory factor analysis conducted on the four measures used in this study (Job Stress Scale, Psychological Capital Questionnaire, Uncivil Workplace Behaviour Scale and Job Involvement Scale) will be outlined in this chapter. Descriptive statistics and Cronbach alpha coefficients for each of the measures
will be reported. The results of Pearson product-moment correlation which is used to determine the relationships between variables will be shown. Multiple regression analysis results will also be displayed. The results of hierarchical regression analysis, conducted to determine whether Psychological Capital played a moderating role in the relationship between Job Stress and Incivility and Job Stress and Job Involvement, will also be displayed.

CHAPTER FIVE: DISCUSSION OF RESULTS

This chapter discusses the results presented in the previous chapter, by determining how it answers the research questions proposed. It also discusses the results obtained in the current study in relation to previous research findings as discussed in the literature review.

CHAPTER SIX: CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

This chapter discusses the conclusions that can be drawn from the findings of the study. It also reflects on the limitations of the study and makes recommendations for future research conducted in the area.

1.5. Summary

This chapter introduced the topic under study by providing a background to it and motivating for the choice of study. It also outlined the main objectives of the study and the research questions that the study set out to address. The objective of the study was to determine the relationship between job stress, psychological capital, incivility and job involvement, and whether job stress and psychological capital held any predictive value for the outcomes of incivility and job
involvement. Additionally, it sought to determine the extent to which psychological capital moderated this relationship. The structure of the study and the breakdown of chapters, along with an outline of what each chapter discusses, were provided at the end of the chapter. The next chapter provides a review of the existing literature in the area of positive psychology, as well as previous research on job stress, psychological capital, incivility and job involvement. It also includes a discussion of the theoretical frameworks adopted in the study.
CHAPTER TWO

REVIEW OF LITERATURE

2.1. Introduction

This chapter defines the four main constructs under study. It also reviews the existing literature in the area of positive psychology, as well as the literature on the four main constructs of psychological capital, job stress, incivility and job involvement. Additionally, it discusses the theoretical frameworks adopted in studying these relationships, namely, the Job Stress Model (Spector & Fox, 2002) and the Broaden and Build Theory of positive emotions (Fredrickson, 1998).

2.2. Positive Psychology

The discipline of psychology has been increasingly criticised for its preoccupation with human weakness, pathology and illness, while neglecting to identify human strengths, positive emotions and positive traits. Positive psychology, therefore, aims to build competency in individuals by identifying their strengths and virtues and nurturing that which is best in them so that they may thrive, flourish and prosper (Seligman & Csikszentmihalyi, 2000). It is important that positive aspects of human nature are identified, so that they may be built upon and developed within individuals to achieve positive psychological outcomes (Seligman & Csikszentmihalyi, 2000).

Positive psychology was extended to the work place through the work of Luthans (2002a) under the title of positive organisational behaviour. Positive organisational behaviour refers to “the study and application of positively oriented human resource strengths and psychological
capacities that can be measured, developed, and effectively managed for performance improvement in today’s workplace” (Luthans, 2002b, p.59).

Positive organisational behaviour is distinguished from other popular positive organisational psychology and self-help literature based on its requirement that knowledge be theory- and research-based, measurable and, therefore, scientific in nature (Youssef & Luthans, 2007). More importantly, positive organisational behaviour is distinguished from positive psychology, the field of positive organisational scholarship and other positive constructs by the fact that positive organisational behaviour focuses solely on psychological resource capacities that are state-like, leaving the positive organisational behaviour capacity flexible and open to change (Luthans et al., 2007b).

2.3. Psychological Capital

The concept of psychological capital, originating in the field of positive organisational behaviour, is defined as: “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 toward goals, and when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success” (Luthans, Youssef, & Avolio, 2007b, p. 3). Important to note, is that psychological capital is regarded as a psychological state. Psychological states are transient human phenomena, meaning that they are changeable and can be developed within individuals, thereby suggesting that psychological capital can be developed in an individual at any time during the progression of their life (Lewis, 2011).
Psychological capital adheres to the basic premise of positive psychology, which seeks to encourage and develop positive qualities within individuals (Seligman & Csikszentmihalyi, 2000). Psychological capital consists of four positive psychological constructs which can be developed in individuals, namely, self-efficacy, hope, optimism and resilience (Luthans, Avolio, Avey, & Norman, 2007a). The combined motivational effects of these four constructs, as suggested by the findings of Luthans et al. (2007a), can have a more significant impact on the overall well-being of a person than any individual construct.

2.3.1. Self-Efficacy

Self-efficacy, according to Wood and Wood (1996, p.456), can be regarded as “A person’s belief in his or her ability to perform competently in whatever is attempted”. Self-efficacy is, therefore, a state of self-belief (Lewis, 2011). In an organisational context, self-efficacy refers to an “employee’s conviction or confidence about his or her abilities to mobilize the motivation, cognitive resources or courses of action needed to successfully execute a specific task within a given context.” (Stajkovic & Luthans, 1998, p.66). An individual possessing a high level of self-efficacy would, therefore, approach tasks with greater confidence as a greater likelihood of success would be perceived. An individual with low self-efficacy, however, would not expect to succeed at a task and, therefore, would not exert much effort in performing the task (Cole, 2007).

Essentially, self-efficacy is about an individual having enough confidence to know that despite the anxiety they experience when faced with a task, they are still capable of doing it (Lewis, 2011). Individuals high on self-efficacy thrive on challenge, are self-motivated, set high goals for themselves and persevere in the face of difficulty (Lewis, 2011). Self-efficacy is generally
developed as a result of attaining experience and mastery over certain tasks or areas of knowledge. It is also achieved through learning and vicarious modeling, i.e. by watching others succeed at a task or in a particular area (Lewis, 2011).

2.3.2. Resilience

Resiliency, according to Masten and Reed (2002, p.75), is defined as “characterized by patterns of positive adaptation in the context of significant adversity or risk.” As a psychological capital construct, Luthans (2002a, p.702) defines resilience as the “positive psychological capacity to rebound, to ‘bounce back’ from adversity, uncertainty, conflict, failure, or even positive change, progress and increased responsibility”. While self-efficacy, hope and optimism are typically expressed proactively, resilience is usually exhibited as a response or reaction to a setback (Avey, Luthans, & Youssef, 2006).

Resilience enables individuals to overcome adversity, uncertainty and conflict. Common characteristics of resilient individuals include a staunch acceptance of reality, a deep belief in the meaningfulness of life and an ability to adapt and improvise in the face of significant change (Coutu, 2002). Resilient people are adaptable and tend to bounce back from setbacks stronger and more resourceful than they previously may have been. Resilience can be developed through individuals being repeatedly exposed to increasingly difficult situations and learning from these situations in a productive way (Lewis, 2011).
2.3.3. Hope

Hope, according to Lewis (2011), is regarded as a state of mind. It is defined as a “positive emotional state that is based on an interactively derived sense of successful (a) agency (goal directed energy) and (b) pathways (planning to meet goals).” (Snyder, Irving, & Anderson, 1991, p.287). Therefore, hope can be regarded as based on three major conceptual foundations, namely, agency, pathways, and goals (Luthans, 2007a). Agency, in this case, refers to an individual possessing the will to achieve a desired effect (Snyder, 2000).

Individuals in possession of high levels of hope are able to foresee possible obstacles to achieving their goals and, therefore, adopt a contingency planning strategy by identifying a range of alternate pathways through which their goals may be achieved (Snyder, 2000). Stated simply, hope can be regarded as possessing not only the will to succeed, but also having an idea of the way in which to achieve that success (Snyder, 2000). This suggests that hope requires the ability to effectively plan and set goals for the future so that one’s sense of hope is regarded as realistic and the things that one hopes for may be attained.

2.3.4. Optimism

An optimistic individual does not view a setback as a failure, but rather as a challenge or opportunity to improve upon their previous strategy to ensure future success (Luthans, Avolio, Walumbwa, & Li, 2005). Optimistic individuals maintain positive expectations of obtaining successful outcomes, regardless of the extent of their capabilities. Optimism, according to Tiger (1971, p.18), is regarded as “a mood or attitude associated with an interpretation about the social and material - one which the evaluator regards as socially desirable to his [or her] advantage, or
for his [or her] pleasure”. Seligman (1998) defines optimism as an attributional style in which an individual regards positive events as being caused by internal, permanent and pervasive factors while negative events are viewed as occurring due to external, temporary and situation-specific factors. Optimism is, therefore, regarded as a state of explanation (Lewis, 2011). Optimism is also a potentially dangerous state as being overly optimistic about achieving a positive outcome and refusing to accept that there are certain factors beyond one’s control could lead to exposure to unnecessary risks and the potential for failure (Lewis, 2011). Individuals with “realistic” or flexible optimism are likely to show high levels of commitment toward their organisations (Peterson, 2000) which, in turn, could lead to heightened performance (Luthans & Youssef, 2004).

Previous research findings indicate positive relationships between psychological capital and various positive psychological outcomes such as wellbeing, performance, satisfaction and commitment (Avey, Luthans, Smith, & Palmer, 2010; Luthans, et al., 2005). Psychological capital and positive emotions were found to combat the negative reactions typically associated with organisational change (such as deviance and cynicism) and increase engagement and the display of positive organisational citizenship behaviours on the part of employees (Avey, Wernsing & Luthans, 2008). Avey, Luthans, and Youssef (2010) found that high levels of psychological capital were associated with a decrease in the display of counterproductive work behaviours (such as incivility). Avey, Luthans and Jensen (2009) studied psychological capital in relation to job stress and found a significant negative relationship, suggesting that employees with high levels of psychological capital experienced lower levels of stress. Previous research on psychological capital has also studied each of the four underlying constructs of psychological capital individually in relation to stress, with Bandura (2008) looking at the relationship between
coping self-efficacy and stress, Totterdell, Wood, and Wall (2006) studying optimism and stress, Snyder (2000) hope and its relationship with various symptoms associated with stress and Tugade and Fredrickson (2004) providing support for the positive influence of resilience in helping individuals adapt and maintain emotional stability within the workplace. This indicates the importance of each of the four constructs underlying psychological capital in attempting to overcome the negative effects of stress.

Psychological capital has been researched previously in South Africa. However, there are a small number of studies which have been conducted in this area. Rothmann and Cilliers (2007) have suggested that further research needs to be conducted on the strengths and psychological capabilities (such as self-efficacy, hope, optimism and resilience) which contribute to effective performance within the workplace. Additionally, Rothmann and Cilliers (2007) have recommended that research in South Africa should focus on the development and measurement of psychological capital, stating that the cross-cultural equivalence of the measures used for examining this and other positive psychology constructs needs to be studied.

The most recent research study conducted on psychological capital in South Africa examined the applicability of psychological capital and positive organisational behaviour theory to the South African context, using a sample of 131 HR practitioners (Du Plessis & Barkhuizen, 2012). It was found that psychological capital is relevant and applicable to the unique South African work context and that the HR practitioners who were studied possessed high levels of psychological capital, which bodes well for the fulfillment of their role in the increasingly diverse South African workplace (Du Plessis & Barkhuizen, 2012).
Earlier research in South Africa studied psychological capital in relation to the intention to quit and job satisfaction of individuals working in the tourism industry (Appollis, 2010). It was found that employees who reported high levels of psychological capital, showed less intention to quit than individuals with low levels of psychological capital. Additionally, a strong relationship was found between psychological capital and job satisfaction, suggesting that individuals possessing high levels of self-efficacy, hope, optimism and resilience are likely to display greater job satisfaction (Appollis, 2010). Herbert (2011) explored the relationships between psychological capital and each of its four constructs (self-efficacy, hope, optimism and resilience) and occupational stress, burnout and employee engagement. It was found that a negative relationship existed between psychological capital and occupational stress, suggesting that individuals possessing high levels of psychological capital are more likely to experience low levels of occupational stress (Herbert, 2011). Although Herbert’s (2011) study examined occupational stress and the current study focused on job stress, the terms occupational stress and job stress can be used interchangeably according to Dollard (2003) as there appears to be no significant difference in the definitions of each of these constructs. As far as could be ascertained, no further studies have assessed the relationship between psychological capital and job stress in a South African sample.

2.4. Job Stress

Stress refers to the mental and physical condition experienced when individuals adjust or adapt to the environment (Coon & Mitterer, 2007). Job stress, according to Beehr and Newman (1998), refers to “any aspects due to which employees feel uneasiness in a workplace”. Job stress is
understood to be subjective in nature, as its assessment is based on the perceptions of individuals and whether they believe that they can manage and cope with the various physical, environmental and psychosocial stressors prevalent within the workplace (Herbert, 2011). Therefore, the assessment of job stress cannot be viewed as objective, due to perceptual differences amongst individuals in the evaluation of stress (Herbert, 2011; Roberts, Scherer, & Bowyer, 2011).

According to Lazarus and Folkman (1984), job stress arises as a result of an imbalance between the particular demands of a job and the resources possessed by an employee to meet those demands. Such an imbalance places a great deal of strain on an individual and can severely hinder an individuals’ functioning in the work place and in their personal lives. Additionally, such stress can have various negative health outcomes for an individual. This makes job stress an important area of study as it would prove beneficial to identify further negative outcomes of job stress (such as incivility) and possible moderating factors (such as psychological capital) in this relationship.

Despite the common experience of stress amongst workers, stress tends to occur at varying degrees for different individuals. An excess of stress in one’s life, it is commonly agreed, can have harmful repercussions for an individual. However, not all stress is negative and harmful as, despite the negative connotations commonly associated with stress, it is not inherently a negative construct (Herbert, 2011). While the definitions put forward by Lazarus and Folkman (1984) and Beehr (1998) refer to the negative side of stress, namely ‘distress’, the positive side of stress is expressed in the term “eustress”. Eustress is a form of “good stress” which is usually experienced while performing activities that are challenging, rewarding and energising for an individual (Coon & Mitterer, 2007). In this way, job stress can serve as a resource for employees as it will
energise them and help them perform well under pressure, making them better able to handle unexpected situations and emergencies within the workplace and pushing them to function at their optimal performance levels (Herbert, 2011). In the context of this study, however, the term job stress refers to the negative form of stress, namely, ‘distress’.

High levels of job stress hold negative implications for successful organisational functioning—through the occurrence of incivility and its associated costs—making it imperative that stress is monitored and managed effectively within organisations (Herbert, 2011). The relationship between occupational stress and job involvement has been studied previously (Lata Juyal, 2012). However, the moderating role of psychological capital in this relationship has not been examined previously. The relationship between job stress and incivility has been studied previously; with Roberts et al. (2011) finding a significant positive relationship between job stress and the subsequent display of incivility. Importantly, psychological capital was found to play a moderating role in this relationship. Penney and Spector (2005) studied incivility as a stressor in the workplace, which was shown to provoke individuals to engage in counterproductive work behaviour. Additionally, van Jaarsveld, Walker and Skarlicki (2010) studied the relationship between customer incivility and job stress among call centre agents, finding a positive relationship between incivility and job stress.

However, despite research having been conducted on job stress and incivility in a call centre setting (van Jaarsveld, Walker, & Skarlicki, 2010) and the relationship between job stress and incivility and the moderating role of psychological capital in this relationship (Roberts et al., 2011), no previous study has examined the moderating role of psychological capital in the relationship between job stress and the outcomes of incivility and job involvement among call
centre employees in South Africa. This study seeks to fill the existing gap in the literature by studying these relationships among a sample of South African call centre employees.

In addition to the research conducted by Herbert (2011), earlier research in South Africa has also studied job stress in South Africa. Nortje (2007) studied job stress among staff members at a South African tertiary institution, finding that they experienced high levels of stress, mainly as a result of their life events, salaries, and insecurity and negative aspects of their physical work environment. Peltzer, Shisana, Zuma, Van Wyk and Zungu-Dirwayi (2009) studied job stress in relation to job satisfaction and stress-related illnesses in a sample of South African educators. It was found that high levels of job stress and low levels of job satisfaction were associated with most stress-related illnesses. Van der Colff and Rothmann (2009) studied the relationship between occupational stress, sense of coherence, coping, burnout and work engagement in a sample of nurses working in both public and private hospitals in South Africa, finding a significant negative relationship between reported levels of occupational stress and work engagement (Van der Colff & Rothmann, 2009). This suggests that high levels of stress experienced at work may lower the likelihood of nurses experiencing engagement in their work.

Van Zyl (2002) identified the high levels of stress faced by South Africans due to increased demands both within and outside the work environment as resulting in the display of unhealthy competition among employees. This may result in the occurrence of conflict and the display of aggressive behaviour, low morale and poor communication amongst employees (Van Zyl, 2002). This display of unhealthy competition and its various expressions such as conflict, poor communication and aggressive behaviour (albeit of a milder and ambiguous nature) can be seen as closely related to the construct of incivility as described by Andersson and Pearson (1999). Van Zyl (2002) concluded that further research needs to be conducted on stress in the South
African workplace, with the implementation of a system of stress measurement and management being important at all levels of an organisation due to the increased pressures faced by South Africans both in the work environment and in the broader social and economic environment.

2.5. Incivility

Incivility is a widespread phenomenon in the workplace and has far-reaching implications for effective organisational functioning (Cortina, Magley, Williams, & Langhout, 2001; Pearson & Porath, 2009). Despite being low in intensity and mild in nature, acts of incivility have far-reaching implications for organisations (Cortina, Magley, Williams, & Langhout, 2001). It has been known to increase job stress, which costs organisations a reported three hundred billion dollars each year through increased absenteeism, high turnover, and decreases in health and performance—usually as a result of stress (Lim, Cortina, & Magley, 2008; Pearson & Porath, 2009; Leiter & Maslach, 2005). The negative impact of incivility on organisations is channeled through its effects on employees and their increasingly strained interactions as a result of uncivil behaviour. In retaliation against acts of incivility within the workplace, affected employees have reported taking actions such as intentionally lowering productivity, losing respect for their bosses, working fewer hours, not exerting the required effort to perform tasks and even quitting their jobs altogether due to incidences of incivility (Pearson & Porath, 2009). Such measures can have severe social and economic consequences for organisations, making it imperative that incivility is identified as a threat and measures are set in place to monitor its progress and impact within organisations.
Incivility overlaps with the concept of counterproductive work behaviours (CWB). However, it can be differentiated from CWB based on three main factors (Andersson & Pearson, 1999). Whereas CWB is typically carried out with the intention to harm an individual or organisation, incivility, although harmful, is not necessarily carried out intentionally. Acts of incivility are not overtly threatening or hostile and, therefore, can be rather ambiguous. Due to the mild and ambiguous nature of uncivil behaviours, intent to harm can also easily be denied by the perpetrator (Penney & Spector, 2005). Finally, CWB and incivility differ in that incivility is regarded as a stressor according to Spector’s job stress model, whereas CWB is regarded as a response or reaction to stress. Research conducted by Roberts et al. (2011) has, however, indicated that incivility is not only a stressor, but also an outcome of stress.

Workplace civility, as opposed to workplace incivility, involves the display of politeness, regard and respect for others within the work environment and can be differentiated from other positive workplace behaviours such as prosocial organisational behaviour and organisational citizenship behaviour, which refers to the contribution made by employees to the organization which goes beyond the official demands of their jobs (Smith, Organ, & Near, 1983). In other words, it refers to behaviours not recognised by the organisation’s formal reward system. The primary differentiating factor is that these acts of civility are not necessarily carried out with the intention to benefit the organisation but, rather, because it is simply the right thing to do (Andersson & Pearson, 1999).

Incivility, according to Andersson and Pearson (1999), is defined as “a low-intensity deviant behavior with ambiguous intent to harm the target, in violation of workplace norms for mutual respect. Uncivil behaviors are characteristically rude and discourteous, displaying a lack of regard for others.” (p. 457). Thus, three defining characteristics of acts of incivility are that they
are mild in nature, deviant and ambiguous. In researching such aspects as deviant behaviour, aggression and violence within the workplace, previous researchers have focused on active, physical and direct forms of aggression, which are usually carried out with the intention to cause harm. However, a milder form of mistreatment, in the form of inconsiderate actions and rude comments, has been largely neglected in previous studies (Andersson & Pearson, 1999).

Uncivil behaviours tend to be of a milder nature and are regarded as low-intensity behaviours that can be verbal or non-verbal, active or passive, but are never physical (Martin & Hine, 2005). Uncivil behaviours also tend to be deviant in nature and usually involve the violation of commonly accepted, and often unwritten, workplace norms and accepted standards of workplace behaviour. In doing so, they serve to hinder the development of co-operative relationships amongst employees within organisations (Roberts, Scherer, & Bowyer, 2011). Acts of incivility are also ambiguous in nature, as it is difficult to say whether an act is carried out intentionally and with the intent to harm or as a result of ignorance and neglect. Therefore, the intent of the perpetrator and the perception of the victim need to be considered when labelling an act as uncivil. Ultimately, however, incivility is usually determined by the subjective perceptions of individuals on the receiving end of such behavior (Roberts, Scherer, & Bowyer, 2011).

Previous studies in the area of incivility have examined the relationship between job stress and incivility. This includes Penney and Spector’s (2005) study which examined the impact of incivility on its victims, noting an increased stress level amongst individuals exposed to uncivil behavior. Similarly, Roberts, Scherer and Bowyer (2011) assessed the relationship between job stress and incivility and the moderating role of psychological capital in this relationship, noting that heightened stress levels corresponded with an increase in incivility. Taking into consideration the fact that incivility has shown a significant relationship with job stress, both as
an antecedent and as an outcome, this study analysed the relationship between job stress and incivility and the moderating role of psychological capital in this relationship. Additionally, the relationship between job stress and the positive psychological outcome of job involvement was examined, to determine the nature of the relationship and the extent to which psychological capital moderated this relationship.

Previous research findings have indicated that incivility is linked to a wide range of negative outcomes within organisations including a decrease in commitment, job satisfaction and the display of organisational citizenship behaviours (Pearson, Andersson, & Wegner, 2001; Lim & Cortina, 2005; Porath & Erez, 2007) and an increase in absenteeism, deviance behaviours and turnover (Everton, Jolton, & Mastrangelo, 2005; Penney & Spector, 2005; Lim & Teo, 2009). These outcomes hold negative financial implications for organisations, requiring that research is conducted to identify the antecedents of incivility and ways of reducing uncivil behaviours within organisations. In this regard, Roberts et al. (2011) have studied job stress as an antecedent of incivility. Their research findings indicated a positive relationship between job stress and incivility, with high levels of psychological capital serving as a buffer in this relationship by decreasing the likelihood of incivility occurring even in the presence of high levels of job stress. Their study was, however, conducted amongst a sample of mainly university students who were predominantly young, part-time workers. This study, however, examines this relationship in a sample of call centre employees as call centre staff are known to face a significant amount of stress while on the job (Benner, Lewis, & Omar, 2007).

As far as could be ascertained through a review of existing literature, incivility within the work place, as defined by Andersson and Pearson (1999), has not been studied in South Africa. However, Pietersen (2005) discussed the increasing prevalence of displays of aggression in the
work place and their negative impacts, suggesting the need for more research in the area of aggression in the workplace and displays of other forms of uncivil behaviour. She also proposes an integrated approach to identifying and measuring aggression in the South African workplace (Pietersen, 2005).

Despite the lack of research on workplace incivility in South Africa, a more overt and explicit form of incivility, in the form of workplace bullying, has been studied by Cunniff (2011), who examined its prevalence in a South African organisation and its relationship to employees’ sense of coherence and diversity experiences. It was found that a large percentage of the population reported experiencing workplace bullying, with individuals with high levels of a sense of coherence reporting low levels of workplace bullying and individuals reporting positive diversity experiences experiencing lower levels of bullying within the workplace (Cunniff, 2011). However, despite previous attempts to study the prevalence of bullying and aggression within South African organisations, there has been no research conducted on the display of uncivil behaviour within the South African workplace. This indicates a need for research to be conducted in this area.

2.6. Job Involvement

Job involvement refers to the level of an individual’s psychological identification with their work and the significance of that work to one’s self-image (Lodahl & Kejner, 1965). Kanungo (1982) echoes this definition by regarding job involvement as a cognitive belief state which reflects an individual’s psychological identification and level of involvement in their job. It describes an individual’s level of involvement in their work and the centrality of work in their lives.
According to Paullay, Alliger, and Stone-Romero (1994), job involvement refers to the extent to which ‘one is cognitively preoccupied with, engaged in, and concerned with one’s present job’. Taking into consideration the various definitions of job involvement, it is clear that a high level of job involvement would indicate the extent to which one’s work occupies a central position in one’s life. Kanungo (1982) distinguished job involvement from work involvement, claiming that work involvement refers to an individual’s personal code of ethics regarding work in general (i.e. their normative beliefs) which are formed based on individual’s previous experiences and social interactions in the workplace. On the other hand, job involvement considers an individual’s cognitive beliefs regarding a specific job (Kanungo, 1982).

Previous research on job involvement has looked at the mediating role of job involvement in the relationship between job stress and job performance (Ouyang, 2009), the modulating role of job involvement in the relationship between job stress and job satisfaction (López-Araújo, Segovia, & Peiró, 2007) and the relationship between occupational stress and job involvement (Lata Juyal, 2012).

Various attempts have previously been made to study job involvement in South Africa. Govender and Parumasur (2010) examined the relationship between employee motivation and job involvement, finding that high levels of employee motivation correlated significantly with high levels of job involvement. Additionally, Orpen (1982) found a significant relationship between job involvement and self-concept in a South African sample of 38 policemen and 51 clerks, when attempting to study the effect of job involvement on their personal lives and leisure time. Additionally, Toga (2011) studied job involvement in relation to job satisfaction and commitment among lower-level workers in a South African motor car manufacturing organisation, finding a positive relationship between their levels of job involvement and
organisational commitment. Despite previous research conducted on job involvement in South Africa, no research has been conducted on its relationship with psychological capital, job stress or incivility. This indicates a gap in the existing literature, which this study seeks to address.

While previous studies have looked at the relationship between stress and job involvement, no studies have looked at the role played by psychological capital in this relationship, especially not within a call centre setting. Additionally, no previous studies have examined job involvement in relation to workplace incivility. There have also been no studies conducted to assess the relationship between psychological capital and job involvement. This study attempts to address the existing gap in the literature by studying job involvement in relation to psychological capital, job stress and incivility among a sample of South African call centre employees. Studying the relationship between job stress and job involvement and the moderating role of psychological capital in this relationship provides invaluable insight regarding whether psychological capital can be used to increase an individual’s level of job involvement.

2.7. Theoretical Framework

This study adopts Spector and Fox’s (2002) job stress model to examine the relationship between job stress and incivility. Their model explains the relationship between job stress and CWB, stating that an employee’s appraisal of a threatening situation as being stressful results in an emotional reaction which results in them acting out through the display of CWB. As explained previously, the concept of incivility overlaps with that of CWB. However, few studies have examined the relationship between job stress and incivility, with Penney and Spector’s (2005) study being the first to study both constructs in relation to each other, followed by the study
conducted by Roberts et al. (2011). Penney and Spector’s (2005) adaptation of the job stress model classifies incivility as a stressor and their study provides evidence of a positive relationship between incivility and job stress. Roberts et al. (2011), however, adopted Spector’s job stress model but studied incivility, not as a stressor, but as an outcome of stress. Their findings of a positive relationship between job stress and workplace incivility provides evidence that the stress-incivility relationship is reciprocal as acts of incivility can increase the stress levels of its victims, while high stress levels can result in an increase in the display of incivility. In keeping with the finding of Roberts et al. (2011) who identified a reciprocal relationship between job stress and incivility, this study does not regard incivility as a stressor, but rather as an outcome of stress.

In order to study the relationship between job stress and job involvement and the moderating role of psychological capital in this relationship, the broaden-and-build theory of positive emotions proposed by Fredrickson (1998) was used as the overarching theoretical framework through which these constructs were studied. According to Fredrickson (2001), positive emotions play a significant role in leading to broader ways of thinking and behaving by broadening “people’s momentary thought-action repertoires, widening the array of the thoughts and actions that come to mind” (p. 220), further stating that the personal resources gained during these positive emotion states are durable. Fredrickson’s model implies that positive emotions may broaden the range of options perceived by an individual when required to make a decision and assist them in adopting a more open approach to problem-solving (Baumeister, Gailliot, DeWall, & Oaten, 2006). In this manner, it is proposed that an individual’s possession of the positive traits underlying psychological capital (self-efficacy, hope, optimism and resilience) may result in the broadening
and building upon of these positive psychological resources in the workplace to achieve the positive outcome of job involvement.

Prior research has provided indirect support for the idea that individuals who possess high levels of psychological capital are better able to cope with the various stressors that lead to the display of counterproductive work behaviours, such as incivility (Roberts et al., 2011). These studies have looked at each of the four underlying constructs of psychological capital individually in relation to stress, with Bandura (2008) looking at the relationship between coping self-efficacy and stress, Totterdell, Wood, and Wall (2006) studying optimism and stress, Snyder (2000) hope and its relationship with various symptoms associated with stress and Tugade and Fredrickson (2004) providing support for the positive influence of resilience in helping individuals adapt and maintain emotional stability within the workplace. Based on Fredrickson’s (1998) model, this research proposes that high levels of psychological capital, as determined by measures of resilience, self-efficacy, hope and optimism, will moderate the relationship between job stress and job involvement, by buffering the possible negative influence of job stress on job involvement due to the positive psychological resources possessed by an individual with high levels of psychological capital. Conversely, low levels of the four dimensions of psychological capital, coupled with a high level of job stress, may lead to low levels of job involvement.

Previous studies which have examined the relationship between job stress and incivility include Penney and Spector’s (2005) study which assessed the impact of incivility on its victims, noting an increased stress level amongst individuals exposed to uncivil behavior. Similarly, Roberts et al. (2011) examined the relationship between job stress and incivility and the moderating role of psychological capital in this relationship, noting that heightened stress levels corresponded with an increase in incivility. The important difference between Penney and Spector’s (2005) study
and the Roberts et al. (2011) study is that the former studied incivility as an antecedent of job stress while the latter studied incivility as an outcome of job stress. This study examined incivility as an outcome of job stress, while attempting to determine whether psychological capital played a moderating role in this relationship by alleviating the harmful effects of stress and, in this case, reducing the likelihood of incivility being displayed as a result of stress. In this way, this study is similar to the study conducted by Roberts et al. (2011). However, this study also attempted to examine the relationship between job stress and job involvement, and whether psychological capital is able to moderate the relationship between these variables. As far as could be ascertained, although previous studies have examined the relationship between stress and job involvement, no studies have been conducted examining the role of psychological capital in this relationship. Importantly, no previous study has examined this relationship in a sample of call centre employees.

This study aimed to examine the relationship between job stress and the display of uncivil behaviours among call centre employees, and the potential moderating role of psychological capital in this relationship. Additionally, this study attempted to determine the relationship between job stress and job involvement among this sample and the potential moderating role of psychological capital in this relationship. In doing so, the job stress model developed by Spector and Fox (2002) which explains the relationship between job stress and counterproductive work behaviours (CWB) which is closely related to, but distinct from, incivility will be used. Their model explains the relationship between job stress and CWB, stating that an employee’s appraisal of a threatening situation as being stressful results in an emotional reaction which results in them acting out through the display of CWB. Despite the concept of incivility overlapping with that of CWB, few studies have examined the relationship between job stress
and incivility, with Penney and Spector’s (2005) study being the first to study both constructs in relation to each other, followed by the study conducted by Roberts et al. (2011).

In order to study the relationship between job stress and job involvement and the role of psychological capital in this relationship, Fredrickson’s (1998) Broaden-and-Build Theory was used as the theoretical lens through which the relationship between these constructs was studied. As far as could be ascertained, although previous studies have examined stress in relation to job involvement (Ouyang, 2009; López-Araújo, Segovia, & Peiró, 2007; Lata Juyal, 2012), no studies have been conducted examining the role of psychological capital in this relationship. Importantly, no previous study has examined this relationship in a sample of call centre employees.

2.8. Summary

This chapter defined important concepts in the study, particularly the four main constructs of job stress, psychological capital (including its four components: self-efficacy, resilience, hope and optimism), incivility and job involvement. This chapter discussed the existing literature in the broader area of positive psychology, as well as literature on job stress, psychological capital, incivility and job involvement. Additionally, previous research findings in these areas was discussed, followed by an explanation and motivation for the theoretical frameworks adopted in the study. The Job Stress Model (Spector & Fox, 2002) was used to study the relationship between job stress and incivility and the moderating role of psychological capital in this relationship, while the Broaden and Build Theory of positive emotions (Fredrickson, 1998) was
used to examine the relationship between job stress and job involvement and the moderating role of psychological capital in this relationship.
CHAPTER THREE

METHODOLOGY

3.1. Introduction

This chapter discusses the research method used in carrying out the study. This includes an explanation of the research design, sample and sampling method, the research instruments used and the ethical considerations of the study. Additionally, the specific procedure followed in conducting the research as well as the choice of statistical methods used for the purpose of analysing data is discussed.

3.2. Research Methodology

3.2.1. Research Design

This study followed a quantitative research design. Quantitative research involves detailed planning prior to data collection and analysis and tends to focus on issues of design, measurement and sampling (Neuman, 2006). Quantitative research has been favoured historically due to a belief in the superiority of the positivist research paradigm, with its emphasis on scientific and empirical methods of data collection and analysis through the use of statistical methods, and a widespread belief in the objectivity and generalisability of research findings (Durrheim & Painter, 2006). According to Durrheim and Painter (2006), the use of appropriate sampling methods within the quantitative approach enables the researcher to make inferences about a broader category of people based on observations of a smaller subsection of that category. Adopting a quantitative approach to research, a cross-sectional survey design,
conducted through the use of questionnaires as a means of data collection, was used for the purpose of this study. The cross-sectional design is suited to describing the relationship between variables (Burns & Grove, 1993) and assists in determining the relationship between the variables in this study.

3.2.2. Sampling Method

The current study specifically assessed call centre employees and, therefore, the purposive sampling method was used to choose a sample. Purposive sampling is a non-probability sampling method. Non-probability sampling, according to Durrheim and Painter (2006, p. 139) “refers to any kind of sampling where the selection of elements is not determined by the statistical principle of randomness”. It is a method used in order to choose a sample that is typical and representative of the population under study. In the case of this research study, call centre employees were a very specific sample that represented the population under study.
3.2.3. Participants

Participant Characteristics

The demographic characteristics of the participants can be viewed in Table 1 below.

Table 1

Characteristics of the Participants

<table>
<thead>
<tr>
<th>CHARACTERISTIC</th>
<th>FREQUENCY</th>
<th>N</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>104</td>
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</tr>
<tr>
<td><strong>GENDER</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>28</td>
<td>104</td>
<td>26.9</td>
</tr>
<tr>
<td>Female</td>
<td>76</td>
<td>104</td>
<td>73.1</td>
</tr>
<tr>
<td><strong>AGE GROUP</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>24 years and younger</td>
<td>42</td>
<td>104</td>
<td>40.4</td>
</tr>
<tr>
<td>25 - 35 years</td>
<td>60</td>
<td>104</td>
<td>57.7</td>
</tr>
<tr>
<td>36- 45 years</td>
<td>2</td>
<td>104</td>
<td>1.9</td>
</tr>
<tr>
<td><strong>RACE GROUP</strong></td>
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<td></td>
</tr>
<tr>
<td>African</td>
<td>64</td>
<td>104</td>
<td>61.5</td>
</tr>
<tr>
<td>Indian</td>
<td>29</td>
<td>104</td>
<td>27.9</td>
</tr>
<tr>
<td>Coloured</td>
<td>10</td>
<td>104</td>
<td>9.6</td>
</tr>
<tr>
<td>White</td>
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<td>104</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>MARITAL STATUS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>89</td>
<td>104</td>
<td>85.6</td>
</tr>
<tr>
<td>Divorced</td>
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<td>1.0</td>
</tr>
<tr>
<td>Married</td>
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<td>11.5</td>
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<tr>
<td>Living with a Spouse</td>
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<td>1.9</td>
</tr>
<tr>
<td><strong>TENURE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 5 years</td>
<td>97</td>
<td>104</td>
<td>93.3</td>
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<td>6 - 10 years</td>
<td>7</td>
<td>104</td>
<td>6.7</td>
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<tr>
<td><strong>HIGHEST QUALIFICATION</strong></td>
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<tr>
<td>Matric Certificate</td>
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<tr>
<td>Diploma</td>
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</tr>
<tr>
<td>Postgraduate Degree</td>
<td>1</td>
<td>104</td>
<td>1.0</td>
</tr>
</tbody>
</table>

A total of 160 questionnaires were distributed to employees at a call centre and 104 questionnaires were completed and returned, indicating a response rate of 65%. The participants in this study were 104 call centre employees working full-time in the position of call centre
agents. Both male and female participants were used for the purpose of this research. However, there were a larger number of female participants (73.1%) than male participants (26.9%). Most of the participants belonged to the 25-35 years age group (57.7%), while 40.4% belonged to the 24 years and younger age group and 1.9% belonged to the 36-45 years age group. This indicates that the sample consisted mainly of younger participants. In terms of the racial distribution of the sample, participants were predominantly African (61.5%), followed by a smaller number of Indian participants (27.9%), then Coloured participants (9.6%) and, thereafter, White participants (1.0%). Regarding marital status, the majority of participants were Single (85.6%), followed by those who were Married (11.5%), Divorced (1.0%) and Living with a Spouse (1.9%). In terms of the number of years spent working in the organisation, i.e. tenure, most of the participants had worked at the organisation for less than 5 years (93.3%), while 6.7% had been working in the organisation for 6-10 years. The highest qualification attained by 74% of the population was a Matric Certificate, while 21.2% had a Diploma, 3.8% had obtained a Degree and only 1.0% had obtained a Postgraduate Degree.

3.3. Research Instruments

Data was collected through the use of four instruments. Firstly, a biographical data sheet was administered along with an informed consent form in order to gain information such as gender, age, tenure, etc. as well as to ensure that informed consent had been obtained from participants. Thereafter, four other questionnaires were administered, namely, the Psychological Capital Questionnaire (Luthans, Youssef et al., 2007), which is essentially a 24-item scale, with 6 items in each subscale measuring the four main constructs of psychological capital- resilience, hope,
optimism and self-efficacy. Secondly, the Job Stress Scale (Parker & DeCotiis, 1983) which is a 13-item scale that measures both Time stress and Job-related anxiety. Next, the Uncivil Workplace Behavior Scale – Revised (Martin & Hine, 2005) was administered to measure four different types of incivility. Lastly, the Job Involvement Scale (Lodahl & Kejner, 1965) was administered to measure employees’ levels of job involvement as an indication of their psychological identification with their work and the extent to which work occupies a central position in their lives.

The biographical data sheet has been designed to obtain information regarding the demographic characteristics of participants. Information that was sought included: gender, age group, race group, marital status, tenure and highest attained qualification.

3.3.1. Psychological Capital Questionnaire

The Psychological Capital Questionnaire (Luthans et al., 2007b) is a 24-item scale divided into four subscales, with 6 items in each subscale measuring the four main constructs of psychological capital- resilience, hope, optimism and self-efficacy. The PCQ has been found to have good internal consistency, with a Cronbach alpha coefficient of 0.93 determined by Avey et al. (2010), an alpha value of 0.88 found by Toor and Ofori (2010) and a value of 0.89 determined by Roberts et al. (2011). In a South African study, Appollis (2010) found a Cronbach alpha coefficient of 0.93 for the overall scale, indicating a high level of internal consistency for this measure. The PCQ draws from previously published standardised measures for each of the four constructs mentioned above, which are as follows:
3.3.1.1. Self-efficacy

Parker’s (1998) measure of self-efficacy, a 6-item scale consisting of statements such as “I feel confident helping to set targets/goals in my work area” and “I feel confident presenting information to a group of colleagues”, is included in the PCQ to measure self-efficacy. Axtell and Parker (1998) were able to determine a Cronbach alpha coefficient of 0.96 for this measure, while Roberts et al. (2011) found an alpha value of 0.85. Herbert (2011), in a South African study, computed a Cronbach alpha coefficient of 0.83, indicating that the measure has good internal consistency.

3.3.1.2. Resilience

Block and Kremen’s (1996) measure of resilience, the Ego-Resiliency Scale, consisting of statements such as “I usually take stressful things at work in stride” and “When I have a setback at work, I have trouble recovering from it, moving on” (reverse scored), is included in the PCQ. Youssef and Allen (2007) were able to determine a Cronbach alpha coefficient of 0.77 for this measure and Roberts et al. (2011) found a coefficient of 0.81. In a South African study, Herbert (2011) determined a Cronbach alpha coefficient of 0.69 for this measure and in another South African study, a Cronbach alpha coefficient of 0.81 was computed for this measure, indicating good reliability (Du Plessis & Barkhuizen, 2012).
3.3.1.3. Hope

The hope measure, formed by Snyder et al. (1996), includes statements such as “If I should find myself in a jam, I could think of many ways to get out of it” and “At the present time, I am energetically pursuing my goals”, both of which are included in the PCQ. Luthans et al. (2005), during the course of their research, were able to determine a Cronbach alpha coefficient of 0.64 for this measure, while Roberts et al. (2011) found a value of 0.80. In a South African study, Herbert (2011) determined a Cronbach alpha coefficient of 0.81 for this measure, indicating that it has good internal consistency.

3.3.1.4. Optimism

The optimism measure, or LOT-R, formed by Scheier and Carver (1985), includes statements such as “There are lots of ways around any problems that I am facing now” and “In uncertain times, I usually expect the best”. Bosman, Buitendach and Rothmann (2005), in a South African study, determined a Cronbach alpha coefficient of 0.70, indicating that this measure has adequate internal consistency. In another South African study, a Cronbach alpha value of 0.77 was determined for this measure (Du Plessis & Barkhuizen, 2012).

3.3.2. Job Stress Scale

The Job Stress Scale (Parker & DeCotiis, 1983) consists of 13 items rated on a 4-point Likert scale (1 = Strongly Disagree, 4 = Strongly Agree). The scale consists of statements which
measure Time stress such as “I frequently get the feeling I am married to the company” and “I have too much work and too little time to do it in”. This measure consists of two subscales, namely, Time stress and Job-related anxiety. Five items measure Job-related anxiety by using statements such as “I have felt fidgety or nervous as a result of my job” and “Sometimes when I think about my job I get a tight feeling in my chest”. Parker and DeCotiis (1983) determined Cronbach alpha coefficients as follows: Time stress ($\alpha = 0.86$) and Job-related anxiety ($\alpha = 0.74$). Almendra (2010) determined a Cronbach alpha coefficient of 0.91 for the total scale and alpha values of 0.86 for the Time Pressure subscale and 0.74 for Job-related anxiety. As far as could be ascertained through a review of existing literature, this measure has not previously been used in South Africa, suggesting that this study may be the first use of this measure in the South African context.

3.3.3. Uncivil Workplace Behaviour Questionnaire

The Uncivil Workplace Behaviour Questionnaire developed by Martin and Hine (2005) consists of 17 items divided into four subscales which assess four types of incivility, namely, privacy invasion, exclusionary behaviour, hostility and gossiping. Items measuring each of these factors include: “Took items from a co-worker’s desk without prior permission” (privacy invasion); “Did not consult a co-worker in reference to a decision they should have been involved in” (exclusionary behaviour); “Spoke to a co-worker in an aggressive tone of voice” (hostility); and “Talked about a co-worker behind their back” (gossiping). Participants are required to indicate how often they have displayed uncivil behaviour towards their colleagues and supervisors by
rating their responses on a 5-point Likert scale (1= Never, 5= Very Often). A high score indicates that incivility has been displayed regularly by the respondent.

Martin and Hine (2005) determined a Cronbach alpha coefficient of 0.92 for the overall scale and Cronbach alpha values over 0.80 for each of the subscales. Additionally, Roberts et al. (2011) found a high internal consistency for the overall scale (α = 0.93), while acceptable reliability levels were found for each of the subscales. Privacy invasion showed a Cronbach alpha coefficient of 0.87, while exclusionary behaviours had a score of 0.94, hostility was 0.86 and gossiping had an alpha value of 0.85 (Roberts et al., 2011). As far as could be ascertained through a review of existing literature, this measure has not been used previously in South Africa, with this study serving as the first use of this measure with a South African sample.

3.3.4. Job Involvement Scale

The Job Involvement Scale is a 20-item scale developed by Lodahl and Kejner (1965) and is one of the most widely used instruments for measuring job involvement. It measures the extent to which one’s job occupies a central position in one’s life and looks at, both, levels of psychological identification and performance-self-esteem contingency notions (Kanungo, 1982). Responses are rated on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree). This scale includes statements such as “The major satisfaction in my life comes from my job”, “I usually show up for work a little early, to get things ready” and “I have other activities more important than my work”. Ramsey, Lassk, and Marshall (1995) found a Cronbach alpha coefficient of 0.79 for the complete 20-item scale. Govender and Parumasur (2010), in a South
African study, used the 22-item version of this scale and found a Cronbach alpha coefficient of 0.70 for the total scale, indicating that the scale displayed adequate internal consistency.

3.4. Procedure

The call centre was contacted and an appointment was made to meet with the Human Resource Manager. A letter of permission, together with a sample of the questionnaire booklet, was taken to the meeting. The research was explained to the manager, who was assured that employees’ anonymity and confidentiality would be maintained at all times and that the research findings would not harm either the employees or the organisation in any way. The manager agreed to distribute the questionnaires and an appointment was made for the researcher to drop off 150 copies of the questionnaires at the manager’s office. The manager, thereafter, went on to explain the purpose of the research to the employees and assured them of the confidentiality of the information provided. Administrators employed by the organisation were appointed to distribute the questionnaires over a two-week period, after which the completed questionnaires were collected. The researcher was then contacted and informed of a date on which the completed questionnaires could be collected for data analysis.

3.5. Ethical Considerations

Participants were informed of the purpose of the study, including a brief description of the research area and the potential benefit of the research to the organisation. They were also informed of their rights as participants, participation requirements, and how the data would be
used and stored, all while being assured of complete confidentiality and anonymity. They were informed that their participation in the research was entirely voluntary and that they could withdraw from the study at any time. The names and contact details of the research supervisor and university research officer were included in the informed consent form distributed to all participants, in case they had any queries or wished to know more about their rights as participants. No identifying information was used at any time in the data analysis and report writing process and complete anonymity will be ensured when presenting findings for publication or academic presentation purposes. Pseudonyms will be used if necessary. At the end of the study, all data will be stored safely in an office in the Psychology department for a period of five years, after which it will be shredded and disposed of in an appropriate manner.

3.6. Data Analysis

Data analysis was conducted by means of the SPSS program, version 21 (IBM SPSS Inc., 2012). Exploratory factor analysis was conducted in order to determine the factor structure of the instruments as well as to assess the number of factors present in the instrument. Descriptive statistics, in the form of means, medians, standard deviations, kurtosis and skewness (Howell, 2008), were used to analyse data. Descriptive statistics, according to Howell (2008), refers to the describing of data and what the data obtained has to say about the phenomenon under study as opposed to inferential statistics, which does not seek merely to describe, but rather, to make inferences (conclusions based on logical reasoning) about a population based on results obtained from studying a sample drawn from the population (Howell, 2008). Cronbach alpha coefficients were used to determine the reliability of the measuring instruments (Clark & Watson, 1995).
In order to determine the relationship between the various constructs studied, the Pearson product-moment correlation coefficients were used. A correlation coefficient is a measure of the relationship between variables and the Pearson product-moment correlation coefficient is the most common correlation coefficient used (Howell, 2008). Effect sizes, indicative of the significance of obtained results (Cohen, 1988), were used alongside to determine the practical significance of the results. The Pearson correlation analysis was conducted between total scales and their individual subscales in order to determine the relationships between them. Lastly, multiple regression analysis was conducted to assess the contribution of the predictor variable, job stress, on the outcomes of incivility and job involvement and the moderating role of psychological capital in this relationship. Specifically, multiple regression was conducted to determine if psychological capital moderates the relationship between job stress and incivility and the relationship between job stress and job involvement. According to Baron and Kenny (1986, p. 1174) “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.” This method of analysis requires that the variable being tested for moderation (in this case, psychological capital) is partitioned into subgroups that establish its domains of maximal effectiveness in regard to the dependent variable (Baron & Kenny, 1986). While the statistical significance of relationships was determined, it was also important to consider the practical significance of the relationship. In small samples, even small values can reach statistical significance, but this does not necessarily mean that the relationship is practically significant (Pallant, 2010). In order to determine whether a relationship is practically significant, effect sizes were computed and used in addition to statistical significance to determine the actual significance of relationships (Cohen, 1988). This assisted the
researcher in determining whether the results obtained were only significant statistically or whether they were practically relevant as well (Buitendach & Rothmann, 2009).

3.7. Summary

This chapter discussed the research method used in carrying out the study. The choice of research design, sample and sample size, research instruments, procedure of the study, ethical considerations and statistical procedures used for data analysis were all discussed. The study adopted a quantitative research approach and used a cross-sectional survey design. The sample consisted of 104 call centre agents, both male and female, of various races, ages and marital statuses. The research instruments used were standardised questionnaires with good reliability scores. The questionnaires used were the Job Stress Scale, the Psychological Capital Questionnaire, the Uncivil Workplace Behaviour Questionnaire and the Job Involvement Scale. The research procedure followed involved the researcher meeting with the Human Resource Manager to explain the purpose of the research and hand over 104 questionnaires. The questionnaires were administered by the manager and assistant administrators and were collected after two weeks. Ethical considerations of this study included explaining the purpose of the study to participants verbally as well as through the use of an Informed Consent form. The voluntary nature of participation was emphasised and signatures were obtained. Statistical procedures used for data analysis were factor analysis, the computing of descriptive statistics, Pearson correlation analysis and multiple regression analysis.
CHAPTER FOUR

RESULTS

4.1. Introduction

This chapter discusses the results obtained from statistical analyses of the data. It provides the descriptive and inferential statistics for the sample studied. Firstly, the results of confirmatory factor analysis conducted on the Job Stress Scale, Psychological Capital Questionnaire, Uncivil Workplace Behaviour Scale and Job Involvement Scale will be outlined. Secondly, the descriptive statistics of the measures and the Cronbach alpha coefficients indicating the reliability of the measures and their subscales will be reported on. Thirdly, the application of the Pearson product-moment correlation to determine the relationships between the variables will be shown. Fourthly, multiple regression analysis results will be displayed. Hierarchical regression analysis was conducted to determine whether Psychological Capital plays a moderating role in the relationship between Job Stress and Incivility and in the relationship between Job Stress and Job Involvement.
4.2. Exploratory Factor Analysis

Table 2

Exploratory Factor Analysis of the Psychological Capital Questionnaire

<table>
<thead>
<tr>
<th>Item</th>
<th>Hopeful Confidence</th>
<th>Optimism</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Component 1</td>
<td>Component 2</td>
<td>Reliability</td>
</tr>
<tr>
<td>Item 8</td>
<td>0.803</td>
<td>-0.104</td>
<td>0.90</td>
</tr>
<tr>
<td>Item 6</td>
<td>0.730</td>
<td>0.069</td>
<td></td>
</tr>
<tr>
<td>Item 7</td>
<td>0.728</td>
<td>-0.083</td>
<td></td>
</tr>
<tr>
<td>Item 1</td>
<td>0.713</td>
<td>-0.035</td>
<td></td>
</tr>
<tr>
<td>Item 4</td>
<td>0.693</td>
<td>0.179</td>
<td></td>
</tr>
<tr>
<td>Item 11</td>
<td>0.684</td>
<td>-0.036</td>
<td></td>
</tr>
<tr>
<td>Item 2</td>
<td>0.681</td>
<td>0.195</td>
<td></td>
</tr>
<tr>
<td>Item 10</td>
<td>0.674</td>
<td>-0.099</td>
<td></td>
</tr>
<tr>
<td>Item 3</td>
<td>0.667</td>
<td>0.285</td>
<td></td>
</tr>
<tr>
<td>Item 5</td>
<td>0.632</td>
<td>0.139</td>
<td></td>
</tr>
<tr>
<td>Item 9</td>
<td>0.541</td>
<td>-0.039</td>
<td></td>
</tr>
<tr>
<td>Item 12</td>
<td>0.514</td>
<td>-0.022</td>
<td></td>
</tr>
<tr>
<td>Item 14</td>
<td>0.405</td>
<td>0.065</td>
<td></td>
</tr>
<tr>
<td>Item 16</td>
<td>0.302</td>
<td>0.125</td>
<td></td>
</tr>
<tr>
<td>Item 15</td>
<td>0.277</td>
<td>0.243</td>
<td></td>
</tr>
<tr>
<td>Item 13</td>
<td>-0.257</td>
<td>0.043</td>
<td></td>
</tr>
<tr>
<td>Item 23</td>
<td>0.107</td>
<td>-0.090</td>
<td></td>
</tr>
<tr>
<td>Item 19</td>
<td>0.054</td>
<td>0.784</td>
<td></td>
</tr>
<tr>
<td>Item 24</td>
<td>0.189</td>
<td>0.695</td>
<td></td>
</tr>
<tr>
<td>Item 21</td>
<td>0.036</td>
<td>0.663</td>
<td></td>
</tr>
<tr>
<td>Item 18</td>
<td>-0.094</td>
<td>0.645</td>
<td></td>
</tr>
<tr>
<td>Item 22</td>
<td>0.077</td>
<td>0.598</td>
<td></td>
</tr>
<tr>
<td>Item 17</td>
<td>0.149</td>
<td>0.309</td>
<td></td>
</tr>
<tr>
<td>Item 20</td>
<td>0.025</td>
<td>-0.127</td>
<td></td>
</tr>
</tbody>
</table>

Note: Significant factor loadings are in Bold.

The 24 items of the Psychological Capital Questionnaire were subjected to principal components analysis. An assessment of the suitability of the data for factor analysis indicated the presence of many correlation coefficients of 0.30 and above in the correlation matrix. The Kaiser-Meyer-
Olkin value was 0.778 and the Bartlett’s Test of Sphericity value was 0.000, indicating that the data was suitable for analysis.

Principal components analysis revealed the presence of seven components with eigenvalues above 1, explaining 27.664% (Component 1), 9.564% (Component 2), 8.367% (Component 3), 6.682% (Component 4), 6.455% (Component 5), 5.794% (Component 6) and 4.228% (Component 7). Examination of the scree plot indicated a break after the seventh component. However, the loading of items in the pattern matrix appeared to be scattered and very few items loaded significantly on certain components, with no items loading significantly on the seventh component. This resulted in the decision to further reduce the number of components by forcing a specific number of factors each time until the decision was made to retain two components which explained a total of 37.228% of the variance, with component 1 contributing 27.664% and Component 2 contributing 9.564%. Most items loaded significantly on each component (p ≥ 0.45). However, items 13, 14, 15, 16, 17, 20 and 23 did not load significantly on either component and, therefore, were excluded from the final scale during subsequent analyses. The new scale, therefore, consists of the following items: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 18, 19, 21, 22, 24, which loaded on to two components.

Previous research determined a factor structure consisting of four components as follows: Self-efficacy (items 1-6), Hope (items 7-12), Resilience (items 13-18) and Optimism (items 19-24). However, in the case of this study, the following items loaded on to two components: Component 1 (items 1-12) and Component 2 (items 18, 19, 21, 22, 24). Since all the items for Self-efficacy and Hope have loaded on to one component, this component was renamed to form the subscale Hopeful Confidence (items 1-12). Since most of the items in component 2 originally load on to the Optimism subscale, with the exception of item 18 which originally formed a part
of the Resilience subscale but loaded significantly on the second component in this study, it was decided to label the second component Optimism (items 18, 19, 21, 22, 14).

Table 3

*Exploratory Factor Analysis of the Job Stress Scale*

<table>
<thead>
<tr>
<th>Item</th>
<th>Component 1</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 4</td>
<td>0.774</td>
<td></td>
</tr>
<tr>
<td>Item 12</td>
<td>0.752</td>
<td></td>
</tr>
<tr>
<td>Item 10</td>
<td>0.740</td>
<td></td>
</tr>
<tr>
<td>Item 8</td>
<td>0.723</td>
<td></td>
</tr>
<tr>
<td>Item 3</td>
<td>0.720</td>
<td></td>
</tr>
<tr>
<td>Item 2</td>
<td>0.719</td>
<td></td>
</tr>
<tr>
<td>Item 11</td>
<td>0.716</td>
<td></td>
</tr>
<tr>
<td>Item 1</td>
<td>0.667</td>
<td></td>
</tr>
<tr>
<td>Item 7</td>
<td>0.666</td>
<td></td>
</tr>
<tr>
<td>Item 5</td>
<td>0.660</td>
<td></td>
</tr>
<tr>
<td>Item 9</td>
<td>0.648</td>
<td></td>
</tr>
<tr>
<td>Item 6</td>
<td>0.615</td>
<td></td>
</tr>
<tr>
<td>Item 13</td>
<td>0.176</td>
<td></td>
</tr>
</tbody>
</table>

**Overall** 0.91

*Note:* Significant factor loadings are in Bold.

The 13 items of the Job Stress Scale were similarly subjected to principal components analysis (PCA) using SPSS version 21. However, before performing PCA, the suitability of the data for factor analysis was assessed. This was achieved through an examination of the correlation matrix, which indicated the presence of many correlation coefficients of 0.30 and above. Additionally, the Kaiser-Meyer-Olkin value was 0.876, which was above the recommended value of 0.60, and the Bartlett’s Test of Sphericity value was less than 0.05 and, therefore, statistically significant (p = 0.000). This provided evidence of the factorability of the correlation matrix.
Principal components analysis revealed the presence of two components with eigenvalues above 1, explaining 45.668% and 9.555% of the variance respectively. Examination of the scree plot revealed a clear break after the first component. This, coupled with the fact that only two items loaded significantly on Component 2, resulted in the decision to retain one component for further investigation. The one-component solution indicated that Component 1 explained a total of 45.668% of the variance, with all items loading significantly (p ≥ 0.45) on one component except for Item 13, which had a very low value of 0.176, and was therefore excluded from the scale for subsequent analyses.

Since all the items, with the exception of item 13 ("I feel guilty when I take time off from job") loaded significantly on to one component and did not fit the established two-component factor structure (Time Pressure: items 1-7; Job-related Anxiety: items 8-13) shown in previous research, it can be concluded that the one-component factor structure consists of 12 items with no subscales present.
Table 4

*Exploratory Factor Analysis of the Uncivil Workplace Behaviour Scale*

<table>
<thead>
<tr>
<th>Item</th>
<th>Component 1</th>
<th>Component 2</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Privacy Invasion and Exclusionary Behaviour</td>
<td></td>
<td></td>
<td>0.90</td>
</tr>
<tr>
<td>Item 7</td>
<td>0.851</td>
<td>-0.112</td>
<td></td>
</tr>
<tr>
<td>Item 9</td>
<td>0.842</td>
<td>-0.142</td>
<td></td>
</tr>
<tr>
<td>Item 13</td>
<td>0.825</td>
<td>-0.047</td>
<td></td>
</tr>
<tr>
<td>Item 8</td>
<td>0.802</td>
<td>0.064</td>
<td></td>
</tr>
<tr>
<td>Item 11</td>
<td>0.748</td>
<td>0.090</td>
<td></td>
</tr>
<tr>
<td>Item 5</td>
<td>0.648</td>
<td>0.112</td>
<td></td>
</tr>
<tr>
<td>Item 12</td>
<td>0.643</td>
<td>0.207</td>
<td></td>
</tr>
<tr>
<td>Item 16</td>
<td>0.493</td>
<td>0.325</td>
<td></td>
</tr>
<tr>
<td>Item 14</td>
<td>0.470</td>
<td>0.195</td>
<td></td>
</tr>
<tr>
<td>Hostility</td>
<td></td>
<td></td>
<td>0.84</td>
</tr>
<tr>
<td>Item 10</td>
<td>-0.143</td>
<td>0.935</td>
<td></td>
</tr>
<tr>
<td>Item 17</td>
<td>-0.036</td>
<td>0.810</td>
<td></td>
</tr>
<tr>
<td>Item 15</td>
<td>0.040</td>
<td>0.717</td>
<td></td>
</tr>
<tr>
<td>Item 6</td>
<td>0.016</td>
<td>0.671</td>
<td></td>
</tr>
<tr>
<td>Item 3</td>
<td>0.102</td>
<td>0.630</td>
<td></td>
</tr>
<tr>
<td>Item 4</td>
<td>0.018</td>
<td>0.614</td>
<td></td>
</tr>
<tr>
<td>Item 2</td>
<td>0.149</td>
<td>0.500</td>
<td></td>
</tr>
<tr>
<td>Item 1</td>
<td>0.301</td>
<td>0.373</td>
<td></td>
</tr>
</tbody>
</table>

Note: Significant factor loadings are in Bold.

Principal components analysis was conducted on the 17 items of the Uncivil Workplace Behaviour Scale. Assessment of the suitability of data for factor analysis indicated the presence of many correlation coefficients of 0.30 and above in the correlation matrix. The Kaiser-Meyer-Olkin value was 0.856 and the Bartlett’s Test of Sphericity value was 0.000, indicating that the data was suitable for analysis.

Principal components analysis indicated the presence of four components with eigenvalues above 1, explaining 45.143% (Component 1), 9.063% (Component 2), 7.517% (Component 3) and 6.490% (Component 4). Inspection of the scree plot indicated a clear break after the second
component. This, together with the small number of items that loaded significantly on the fourth component, resulted in the decision to further reduce the number of components by forcing a reduced number of factors. The decision was made to retain two components for further investigation. The two-component solution explained a total of 54.206% of the variance, with Component 1 contributing 45.143% and Component 2 contributing 9.063%. Both components showed a number of strong loadings, with all items loading significantly on either one of the components, except for item 1 (“Avoided consulting a co-worker when you would normally be expected to do so”) which did not load significantly on either component and was, therefore, excluded from the scale in subsequent analyses.

The two-component factor structure does not fit the four-component structure determined in previous research which was as follows: Exclusionary Behaviour (items 1, 3, 5, 11, 16), Gossiping (items 2, 6, 8, 12), Hostility (4, 10, 15, 17) and Privacy Invasion (7, 9, 13, 14). Instead, the two-component structure determined in this study consisted of the following items on each component: Component 1 (items 5, 7, 8, 9, 11, 12, 13, 14, 16) and Component 2 (items 2, 3, 4, 6, 10, 15, 17). Most of the items that loaded on Component 1 originally belonged to the Privacy Invasion and Exclusionary Behaviour subscales, hence, these two subscales were combined to create the Privacy Invasion and Exclusionary Behaviour subscale. Items which loaded significantly on Component 2 originally belonged to the Hostility subscale; hence, Component 2 was labelled Hostility.
Table 5

*Exploratory Factor Analysis of the Job Involvement Scale*

<table>
<thead>
<tr>
<th>Item</th>
<th>Component 1</th>
<th>Component 2</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expression of being Job Involved</td>
<td></td>
<td></td>
<td>0.81</td>
</tr>
<tr>
<td>Item 11</td>
<td>0.691</td>
<td>0.070</td>
<td></td>
</tr>
<tr>
<td>Item 3</td>
<td>0.677</td>
<td>0.027</td>
<td></td>
</tr>
<tr>
<td>Item 8</td>
<td>0.652</td>
<td>-0.056</td>
<td></td>
</tr>
<tr>
<td>Item 6</td>
<td>0.649</td>
<td>0.080</td>
<td></td>
</tr>
<tr>
<td>Item 15</td>
<td>0.643</td>
<td>-0.009</td>
<td></td>
</tr>
<tr>
<td>Item 9</td>
<td>0.639</td>
<td>-0.062</td>
<td></td>
</tr>
<tr>
<td>Item 7</td>
<td>0.615</td>
<td>-0.191</td>
<td></td>
</tr>
<tr>
<td>Item 1</td>
<td>0.569</td>
<td>0.289</td>
<td></td>
</tr>
<tr>
<td>Item 4</td>
<td>0.517</td>
<td>0.218</td>
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</tr>
<tr>
<td>Item 12</td>
<td>0.499</td>
<td>0.072</td>
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<tr>
<td>Item 5</td>
<td>0.438</td>
<td>0.056</td>
<td></td>
</tr>
<tr>
<td>Item 2</td>
<td>0.391</td>
<td>-0.048</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Response to Work</th>
<th></th>
<th></th>
<th>0.80</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 19</td>
<td>0.058</td>
<td>0.773</td>
<td></td>
</tr>
<tr>
<td>Item 17</td>
<td>0.014</td>
<td>0.736</td>
<td></td>
</tr>
<tr>
<td>Item 14</td>
<td>-0.125</td>
<td>0.720</td>
<td></td>
</tr>
<tr>
<td>Item 18</td>
<td>0.157</td>
<td>0.670</td>
<td></td>
</tr>
<tr>
<td>Item 13</td>
<td>0.222</td>
<td>0.587</td>
<td></td>
</tr>
<tr>
<td>Item 10</td>
<td>0.116</td>
<td>0.565</td>
<td></td>
</tr>
<tr>
<td>Item 16</td>
<td>-0.044</td>
<td>0.403</td>
<td></td>
</tr>
<tr>
<td>Item 20</td>
<td>0.255</td>
<td>-0.281</td>
<td></td>
</tr>
</tbody>
</table>

| Overall               |             |             | 0.83        |

*Note:* Significant factor loadings are in Bold.

Lastly, principal components analysis was conducted on the 20 items of the Job Involvement Scale. Assessment of the suitability of data for factor analysis indicated that there were many correlation coefficients of 0.30 and above in the correlation matrix. The Kaiser-Meyer-Olkin value was 0.751 and the Bartlett’s Test of Sphericity value was 0.000, indicating that the data was suitable for analysis.
Principal components analysis indicated the presence of five components with eigenvalues above 1, explaining 24.495% (Component 1), 13.793 (Component 2), 7.462 (Component 3), 6.140 (Component 4) and 5.479% (Component 5) of the variance. An inspection of the scree plot revealed a clear break in the plot after the third component. This, coupled with the fact that no significant item loadings showed for the fifth component and very few items loaded significantly on the third and fourth components, resulted in the decision to force a reduced number of factors until it was decided to retain two components for further investigation. The two-component solution explained a total of 38.289% of the variance, with Component 1 contributing 24.495% and Component 2 contributing 13.793%. Only 16 items showed significant loadings on the two-component solution, with items 2, 5, 16 and 20 not loading significantly on either component. These four items were, therefore, excluded from subsequent analyses.

The final factor structure determined from exploratory factor analysis consisted of the following 16 items: 1, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, and 19. The items loaded significantly on to two components as follows: Component 1 (items 1, 3, 4, 6, 7, 8, 9, 11, 12, 15) and Component 2 (items 10, 13, 14, 17, 18, 19). No specific subscales have been established through previous research for this measure. However, Lodahl and Kejner (1965) did separate the items into four sub-dimensions when constructing this measure. The four sub-dimensions and their specific items are as follows: Response to Work (items 10, 14, 16, 17, 18, 19), Expression of being Job Involved (2, 3, 6, 7, 9, 11, 15), Sense of Duty towards Work (1, 4, 8, 12, 20) and Absenteeism and Feelings of Guilt about Unfinished Work (5, 13). Using this sub-dimension structure, it can be seen that the majority of items loading on Component 1 belong to the Expression of being Job Involved and Sense of Duty towards Work sub-dimensions. Therefore, Component 1 was labelled Expression of being Job Involved. Items which loaded on Component
mainly consisted of items belonging to the Response to Work sub-dimension, hence, Component 2 was renamed Response to Work.

4.3. Descriptive Statistics

Psychometric Characteristics of Instruments

Descriptive statistics for all three measuring instruments are displayed in Table 2 below.

Table 6

*Descriptive Statistics*

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Min.</th>
<th>Max.</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Cronbach α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological Capital Questionnaire (PCQ)</td>
<td>104</td>
<td>28</td>
<td>102</td>
<td>75.60</td>
<td>14.85</td>
<td>-1.052</td>
<td>1.537</td>
<td>0.89</td>
</tr>
<tr>
<td>Hopeful Confidence</td>
<td>104</td>
<td>12</td>
<td>72</td>
<td>52.49</td>
<td>12.43</td>
<td>-1.387</td>
<td>2.163</td>
<td>0.90</td>
</tr>
<tr>
<td>Optimism</td>
<td>104</td>
<td>9</td>
<td>30</td>
<td>23.14</td>
<td>4.46</td>
<td>-0.753</td>
<td>0.654</td>
<td>0.73</td>
</tr>
<tr>
<td>Job Stress Scale (JSS)</td>
<td>104</td>
<td>12</td>
<td>45</td>
<td>27.51</td>
<td>7.16</td>
<td>0.174</td>
<td>-0.290</td>
<td>0.91</td>
</tr>
<tr>
<td>Uncivil Workplace Behaviour Scale (UWBS)</td>
<td>104</td>
<td>16</td>
<td>70</td>
<td>22.69</td>
<td>8.22</td>
<td>2.681</td>
<td>11.174</td>
<td>0.91</td>
</tr>
<tr>
<td>Privacy Invasion and Exclusion</td>
<td>104</td>
<td>9</td>
<td>41</td>
<td>11.40</td>
<td>4.46</td>
<td>3.900</td>
<td>20.351</td>
<td>0.90</td>
</tr>
<tr>
<td>Hostility</td>
<td>104</td>
<td>7</td>
<td>29</td>
<td>11.30</td>
<td>4.59</td>
<td>1.250</td>
<td>1.467</td>
<td>0.84</td>
</tr>
<tr>
<td>Job Involvement Scale (JIS)</td>
<td>104</td>
<td>28</td>
<td>72</td>
<td>49.90</td>
<td>10.27</td>
<td>-0.163</td>
<td>-0.494</td>
<td>0.83</td>
</tr>
<tr>
<td>Expression of being Job Involved</td>
<td>104</td>
<td>13</td>
<td>50</td>
<td>30.43</td>
<td>7.28</td>
<td>-0.207</td>
<td>0.271</td>
<td>0.81</td>
</tr>
<tr>
<td>Response to Work</td>
<td>104</td>
<td>7</td>
<td>30</td>
<td>19.16</td>
<td>5.26</td>
<td>-0.098</td>
<td>-0.612</td>
<td>0.80</td>
</tr>
</tbody>
</table>
Table 6 outlines the descriptive statistics for the sample under study. It provides information on the minimum, maximum, mean, standard deviation, skewness and kurtosis scores as well as the Cronbach alpha coefficients of the Psychological Capital Questionnaire (PCQ), Job Stress Scale (JSS), Uncivil Workplace Behaviour Scale (UWBS) and the Job Involvement Scale (JIS).

According to the table, scores on all four measures are normally distributed. Negative skewness values on the PCQ and JIS indicate that scores on these measures tend to be clustered around the high end of the distribution. Positive skewness values for the JSS and UWBS indicate that scores tend to be clustered around the low end of the distribution. While skewness scores for the PCQ, JSS and JIS fall within the acceptable range of between -2 and 2, scores on the UWBS appear to be a higher than the acceptable range. However, inspection of the distribution of scores on the histogram and normal probability plots indicates that the scores appear to be relatively normally distributed. Positive kurtosis values for the PCQ and UWBS indicate that the distribution of scores for these measures is rather peaked (clustered at the centre). All kurtosis values are above 0, indicating that the distribution is not a flat one.

The data was further assessed for normality through an examination of the extreme scores. The difference in values for the Mean and 5% Trimmed Mean was small for each of the scales and subscales examined for extreme scores. Assessment of the Kolmogorov-Smirnov values indicated significance levels below 0.05 for the PCQ, JSS and UWBS. This suggests a violation of the assumptions of normality. The significance values for the JIS, JIS factor 1 and factor 2 are above 0.05, however, indicating an alignment with the assumptions of normality for this measure.

In order to determine the reliability of the measures, Cronbach alpha coefficients were computed. Pallant (2010) states that Cronbach alpha values above 0.70 are considered acceptable, although
values above 0.80 are generally preferable. As indicated in the table, the Cronbach alpha coefficients for all four measures exceed the preferred reliability level of 0.80 (PCQ: $\alpha = 0.89$; JSS: $\alpha = 0.91$; UWBS: $\alpha = 0.91$; JIS = 0.83) and these can, therefore, be considered reliable measures.

The alpha coefficient of 0.89 for the PCQ is consistent with the findings of Roberts et al. (2011) who found the same alpha value for the measure. However, it is slightly higher than the Cronbach alpha value of 0.88 found by Toor and Ofori (2010) and considerably lower than the 0.93 alpha value determined by both Avey et al. (2010) and Appollis (2010). Exploratory factor analysis yielded two factors for this measure (PCQ factor 1: $\alpha = 0.90$; PCQ factor 2: $\alpha = 0.73$) and, therefore, the alpha values cannot be compared to the findings of the aforementioned authors who determined alpha coefficients for four factors.

The alpha coefficient of 0.91 for the JSS is consistent with the findings of Almendra (2010) who also determined a reliability score of 0.91. However, in contrast to the findings of Almendra (2010), all items in this measure loaded significantly onto one factor and did not show evidence of the existence of the two subscales that were previously found, namely, Time Pressure and Job-related anxiety.

The alpha coefficient of 0.91 for the UWBS is only slightly lower than the Cronbach alpha value of 0.92 determined by Martin and Hine (2005) and the alpha value of 0.93 determined by Roberts et al. (2011). While Roberts et al. (2011) determined the presence of four subscales, exploratory factor analysis in the current study found that items loaded significantly on to two factors (UWBS factor 1: $\alpha = 0.90$; UWBS factor 2: $\alpha = 0.84$) and, therefore, the reliability values
determined for the subscales in the current study cannot be compared to those in the study by Roberts et al. (2011).

The alpha coefficient of 0.83 determined for the JIS is substantially higher than the value of 0.70 determined by Govender and Parumasur (2010) and is slightly higher than the value of 0.79 determined by Ramsey, Lassk, and Marshall (1995). Both of these previous studies found that all items loaded significantly onto one factor. However, the current study found that the items loaded significantly on to two separate factors (JIS factor 1: $\alpha = 0.81$; JIS factor 2: $\alpha = 0.80$), indicating the presence of two subscales in this measure.

4.4. Pearson Product-moment Correlation

Pearson product-moment correlations were computed to determine the relationship between variables (scores on the PCQ, JSS, UWBS and JIS). The results of the Pearson correlation have been summarised in Table 7 below.
As indicated in the table above, psychological capital displayed a statistically and practically significant relationship with hopeful confidence and optimism (p≤0.01) (large effect). Psychological capital displayed statistically negative relationships with uncivil workplace behaviour (p≤ 0.05) and hostility (p≤0.01). Additionally, psychological capital yielded a
statistically and practically significant relationship with job involvement \((p \leq 0.01)\) (medium effect) and expression of being job involved \((p \leq 0.01)\) (medium effect).

Hopeful confidence displayed a statistically and practically significant relationship with optimism \((p \leq 0.01)\) (large effect). Hopeful confidence displayed a negative statistically significant relationship with uncivil workplace behaviour \((p \leq 0.05)\) and hostility \((p \leq 0.05)\). Additionally, hopeful confidence yielded statistically and practically significant relationships with job involvement \((p \leq 0.01)\) (medium effect) and expression of being job involved \((p \leq 0.01)\) (medium effect).

Optimism displayed negative statistically significant relationships with job stress \((p \leq 0.05)\) and uncivil workplace behavior \((p \leq 0.05)\). Additionally, optimism yielded a negative statistically and practically significant relationship with privacy invasion and exclusionary behavior \((p \leq 0.01)\) (large effect). Further, optimism displayed a negative statistically significant relationship with hostility \((p \leq 0.01)\). Optimism displayed a statistically and practically significant relationship with job involvement \((p \leq 0.01)\) (medium effect) and expression of being job involved \((p \leq 0.01)\) (large effect).

Job stress displayed a statistically significant relationship with uncivil workplace behavior \((p \leq 0.05)\) and hostility \((p \leq 0.01)\). Job stress also yielded negative statistically and practically significant relationships with job involvement \((p \leq 0.01)\) (medium effect) and response to work \((p \leq 0.01)\) (medium effect).

Uncivil workplace behavior displayed a statistically and practically significant relationship with hostility \((p \leq 0.01)\) (large effect). Uncivil workplace behaviour displayed a statistically negative relationship with job involvement \((p \leq 0.05)\). Uncivil workplace behaviour displayed a nega
negative statistically and practically significant relationship with response to work (p≤0.01) (medium effect).

Privacy invasion and exclusionary behaviour displayed statistically and practically significant relationships with hostility (p≤0.01) (large effect) and response to work (p≤0.01) (medium effect).

Hostility displayed a negative practically and statistically significant relationship with job involvement (p≤0.01) (medium effect). Hostility displayed negative statistically significant relationships with expression of being job involved (p≤0.05) and response to work (p≤0.01).

Job involvement displayed statistically and practically significant relationships with expression of being job involved (p≤0.01) (large effect) and response to work (p≤0.01) (large effect).

Expression of being job involved displayed a statistically and practically significant relationship with response to work (p≤0.01) (medium effect).

Next, multiple regression analysis was conducted to determine whether psychological capital (hopeful confidence and optimism) and job stress predict incivility (privacy invasion and exclusionary behaviour) and job involvement (expression of being job involved and response to work). The results of this regression analysis are presented in Table 8 below.

4.5. Multiple Regression

Multiple regression analysis was conducted to determine whether job stress and psychological capital held predictive value for incivility and job involvement. The results of the analysis are presented in Table 8 below.
Table 8

Regression Analyses with Hopeful Confidence, Optimism and Job Stress as Independent Variables and Incivility (Uncivil Workplace Behaviour), Privacy Invasion and Exclusionary Behaviour, Hostility, Job Involvement, Expression of being Job Involved and Response to Work as Dependent Variables.

<table>
<thead>
<tr>
<th>Variable</th>
<th>F</th>
<th>B</th>
<th>SE</th>
<th>R²</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INCIVILITY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>3.348*</td>
<td>0.112</td>
<td>0.023*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hopeful Confidence</td>
<td></td>
<td>6.771</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optimism</td>
<td>-0.187</td>
<td>0.076</td>
<td>0.108</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Stress</td>
<td>-0.069</td>
<td>0.219</td>
<td>0.561</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PRIVACY INVASION AND EXCLUSIONARY BEHAVIOUR</strong></td>
<td>2.134</td>
<td>0.074</td>
<td>0.102</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td>3.751</td>
<td>0.006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hopeful Confidence</td>
<td>-0.195</td>
<td>0.042</td>
<td>0.101</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optimism</td>
<td>0.041</td>
<td>0.122</td>
<td>0.739</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Stress</td>
<td>0.206</td>
<td>0.070</td>
<td>0.069</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>HOSTILITY</strong></td>
<td>4.345*</td>
<td>0.140</td>
<td>0.007**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td>3.715</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hopeful Confidence</td>
<td>-0.126</td>
<td>0.042</td>
<td>0.269</td>
<td></td>
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</tr>
<tr>
<td>Optimism</td>
<td>-0.181</td>
<td>0.120</td>
<td>0.127</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Stress</td>
<td>0.224</td>
<td>0.069</td>
<td>0.041*</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>JOB INVOLVEMENT</strong></td>
<td>8.741*</td>
<td>0.254</td>
<td>0.000***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td>7.898</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hopeful Confidence</td>
<td>0.183</td>
<td>0.089</td>
<td>0.093</td>
<td></td>
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<tr>
<td>Optimism</td>
<td>0.294</td>
<td>0.256</td>
<td>0.010**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Stress</td>
<td>-0.230</td>
<td>0.147</td>
<td>0.027*</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EXPRESSION OF BEING JOB INVOLVED</strong></td>
<td>11.547*</td>
<td>0.310</td>
<td>0.000***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td>5.382</td>
<td>0.102</td>
<td></td>
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</tr>
<tr>
<td>Hopeful Confidence</td>
<td>0.145</td>
<td>0.060</td>
<td>0.165</td>
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<tr>
<td>Optimism</td>
<td>0.476</td>
<td>0.174</td>
<td>0.000***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Stress</td>
<td>-0.031</td>
<td>0.100</td>
<td>0.752</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>RESPONSE TO WORK</strong></td>
<td>5.490*</td>
<td>0.171</td>
<td>0.002**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td>4.183</td>
<td>0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hopeful Confidence</td>
<td>0.143</td>
<td>0.047</td>
<td>0.201</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Optimism</td>
<td>-0.039</td>
<td>0.136</td>
<td>0.733</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Stress</td>
<td>-0.397</td>
<td>0.078</td>
<td>0.000***</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: * Statistically significant p≤0.05; **statistically significant p≤0.01; ***statistically significant p≤0.001
As indicated in Table 8, psychological capital and job stress hold predictive value for incivility (F=3.348; p≤0.05; R^2=0.11). Further, it is indicated that job stress, in particular, holds predictive value for incivility (p≤0.05).

According to Table 8, psychological capital and job stress hold predictive value for hostility (F=4.345; p≤0.01; R^2=0.14). Job stress, specifically, appears to hold predictive value for hostility (p≤0.05).

Further inspection of Table 8 indicates that psychological capital and job stress hold predictive value for job involvement (F=8.741; p≤0.001; R^2=0.25). In particular, optimism holds predictive value for job involvement (p≤0.01). Additionally, job stress holds predictive value for job involvement (p≤0.05).

Table 8 also indicates that psychological capital and job stress hold predictive value for expression of being job involved (F=11.547; p≤0.001; R^2=0.31). In particular, optimism holds predictive value for expression of being job involved (p≤0.001).

Further, Table 8 indicates that psychological capital and job stress hold predictive value for response to work (F=5.490; p≤0.01; R^2=0.17). In particular, job stress holds predictive value for response to work (p≤0.001).

Next, hierarchical regression was conducted to determine whether the independent variables of psychological capital and job stress held predictive value for incivility and job involvement. Additionally, the moderating role of psychological capital in the relationship between job stress and incivility and job stress and job involvement was assessed through an inspection of the
interaction between psychological capital and job stress. The results of the hierarchical regression analysis are presented in Table 9 below.

### 4.6. Hierarchical Regression

Table 9

*Hierarchical Regression to determine the predictive value of the independent variables (Psychological Capital and Job Stress) on the dependent variable (Incivility) in Test 1 and the dependent variable (Job Involvement) in Test 2.*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Total Incivility</th>
<th>Total Job Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>B</td>
</tr>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>25.922</td>
<td>0.000**</td>
</tr>
<tr>
<td>Psychological Capital</td>
<td>-0.234</td>
<td>0.886</td>
</tr>
<tr>
<td>Job Stress</td>
<td>5.066</td>
<td>0.224</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>25.891</td>
<td>0.000**</td>
</tr>
<tr>
<td>Psychological Capital</td>
<td>-0.245</td>
<td>0.892</td>
</tr>
<tr>
<td>Job Stress</td>
<td>0.226</td>
<td>0.887</td>
</tr>
<tr>
<td>Interaction between Psychological Capital and Job Stress</td>
<td>3.676</td>
<td>0.103</td>
</tr>
<tr>
<td><strong>Variable</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological Capital</td>
<td>0.356</td>
<td>1.050</td>
</tr>
<tr>
<td>Job Stress</td>
<td>10.858</td>
<td>-0.276</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>48.013</td>
<td>0.000**</td>
</tr>
<tr>
<td>Psychological Capital</td>
<td>0.370</td>
<td>1.052</td>
</tr>
<tr>
<td>Job Stress</td>
<td>-0.278</td>
<td>1.046</td>
</tr>
<tr>
<td>Interaction between Psychological Capital and Job Stress</td>
<td>7.851</td>
<td>-0.131</td>
</tr>
</tbody>
</table>

* p < 0.05; ** p < 0.000
+ 0.30-0.49 (medium effect); ++ 0.50 and larger (large effect)
As indicated in Table 9, hierarchical regression was used to determine whether the two independent variables (psychological capital and job stress) were able to predict, firstly, incivility and, secondly, job involvement. Preliminary analyses were conducted to determine whether the assumptions of normality, linearity, multicollinearity and homoscedasticity had been met and were not violated.

Hierarchical regression was, firstly, conducted to determine the predictive value of psychological capital and job stress on incivility. In Step 1, only the independent variables (psychological capital and job stress) were entered, explaining 11.6% of the variance in incivility. In Step 2, the computed interaction term (z-score) for psychological capital and job stress was entered into the model, explaining 12.7% of the variance in incivility (F=3.676; p=0.343). The addition of the interaction term indicated no statistically significant difference in the model, thereby suggesting that psychological capital did not moderate the relationship between job stress and incivility.

Hierarchical regression was, thereafter, conducted to determine the predictive value of psychological capital and job stress on job involvement. In Step 1, only the independent variables (psychological capital and job stress) were entered, explaining 22.5% of the variance in job involvement. In Step 2, the computed interaction term for psychological capital and job stress was entered into the model, accounting for 24.1% of the variance in job involvement (F=7.851; p=0.203). The addition of the interaction term indicated no statistically significant difference in the model, suggesting that psychological capital did not moderate the relationship between job stress and job involvement.
To further ensure the accuracy of this finding, hierarchical regression was conducted a second time. However, instead of computing one interaction term using the total psychological capital scale and total job stress scale, the new analysis consisted of two interaction terms using the two psychological capital factors determined through exploratory factor analysis. The new interaction terms were as follows: Moderator 1 (Hopeful Confidence and Job Stress) and Moderator 2 (Optimism and Job Stress). Each of these moderators was tested against, firstly, the outcome of incivility and, secondly, job involvement. In accordance with the findings reported for the analysis in Table 9, no significant interactions were found to exist between each of the moderators and the outcomes of incivility and job involvement.

![Figure 1. The Moderating Effect of Psychological Capital in the relationship between Job Stress and Incivility](image-url)
In Figure 1 above, the moderating effect of psychological capital in the relationship between job stress and incivility is indicated. It can be observed that there was no significant interaction displayed between the variables. This confirms the findings outlined in Table 9, which indicated that the interaction term held no significant predictive value for the outcome of incivility. This suggests that psychological capital does not moderate the relationship between job stress and incivility.

In Figure 2, the moderating effect of psychological capital in the relationship between job stress and job involvement is displayed. It can be similarly noted, as in Figure 1, that no significant interaction effect was displayed, as no interaction occurred between the moderator and job stress and job involvement. This confirms the results outlined in Table 9 which indicated that the interaction term held no significant predictive value for the outcome of job involvement, suggesting that psychological capital does not moderate the relationship between job stress and job involvement.
job involvement. The results of the analyses outlined in this chapter will be discussed further in the next chapter.

4.7. Summary

This chapter described the results of the statistical analyses conducted on the data. The findings were determined using statistical methods which included exploratory factor analysis conducted on the measuring instruments and descriptive statistics and Cronbach alpha coefficients which were reported for each measure. Additionally, Pearson $r$ correlation coefficients were reported to establish the relationship between psychological capital, job stress, incivility and job involvement, as well as their individual subscales. The results of multiple regression analysis were reported to determine the predictive value held by psychological capital (hopeful confidence and optimism) and job stress for the outcomes of incivility (privacy invasion and exclusionary behaviour, and hostility) and job involvement (expression of being job involved and response to work). Additionally, the results of hierarchical regression analysis were reported to determine the moderating role of psychological capital in the relationship between job stress and incivility and the relationship between job stress and job involvement.
CHAPTER FIVE

DISCUSSION

5.1. Introduction

The previous chapter outlined the results of the statistical analyses conducted on the data. This chapter discusses the results reported in the previous chapter. Results are discussed within the context of the theoretical conceptualisations of psychological capital, job stress, incivility and job involvement. The findings of the current study are discussed in relation to previous research findings and within the theoretical frameworks of the Job Stress Model (Spector & Fox, 2002) and the Broaden and Build Theory of positive emotions (Fredrickson, 1998).

The objective of this study was to determine the relationship between psychological capital, job stress, incivility and job involvement. Secondly, the study sought to determine whether psychological capital and job stress held any predictive value for the outcomes of incivility and job involvement. Finally, the study examined whether psychological capital played a moderating role in this relationship.

Call centres are known to present employees with particularly stressful working conditions due to increasing demands for performance and the implementation of strict performance monitoring mechanisms, which have been linked to high levels of stress and staff turnover in many call centres (Benner, Lewis & Omar, 2007). In this regard, South African call centres were found to rank amongst those with the highest degree of performance monitoring and feedback (Holman, Batt, & Holtgrewe, 2007). This suggests that South African call centre employees may experience a particularly high level of stress within the workplace. As indicated by van Jaarsveld, Walker and Skarlicki (2010) and Roberts et al. (2011), the experience of high levels of
job stress within the workplace may result in employees responding through acts of incivility. Additionally, within the South African workplace, Van Zyl (2002) found that high levels of stress were known to result in the display of unhealthy competition between co-workers, which could ultimately result in displays of aggression and acts of incivility. This has raised concerns surrounding the high levels of stress faced by South Africa call centre employees (Benner, Lewis, & Omar, 2007), making it imperative that this phenomenon is studied so that ways of alleviating the harmful effects of job stress can be determined. In this regard, it is believed that a high level of psychological capital may serve to moderate the relationship between job stress and incivility.

Considering the lack of literature examining psychological capital within the South African context (Rothmann & Cilliers, 2007) and the small number of studies examining job involvement, there is an obvious need for such research to be conducted so that it can be determined whether psychological capital moderates the relationship between job stress and incivility within a call centre setting, with a high level of psychological capital reducing the likelihood of incivility being displayed despite an individual experiencing a high level of job stress. Additionally, it is important to examine whether psychological capital moderates the relationship between job stress and job involvement, with a high level of psychological capital increasing the likelihood of an employee experiencing a high level of job involvement despite experiencing a high level of job stress.
5.2. Discussion of Results

5.2.1. Exploratory Factor Analysis

Exploratory factor analysis is a statistical technique often used in the initial stages of research to explore the interrelationships and underlying factor structure of a set of variables without the researcher having a preconceived idea of the outcome (Pallant, 2010). Unlike confirmatory factor analysis, which seeks to confirm an existing factor structure, exploratory factor analysis seeks to identify the underlying factor structure of a set of variables (Suhr, 2006).

Exploratory factor analysis of the PCQ found a two-factor model best suited the data. The factor structure of the PCQ in the current study does not entirely compare to the original four-factor structure determined by Luthans, Youssef and Avolio (2007b) in which Self-Efficacy, Hope, Optimism and Resilience were identified as being the four factors present. The four-factor structure of the PCQ was confirmed in various studies (Herbert, 2011). Rather, it is clear that the sample in the current study did not appear to differentiate between Self-Efficacy and Hope, resulting in the combining of these subscales to form Hopeful-Confidence. The Hopeful-Confidence subscale was initially named by du Plessis and Barkhuizen (2011) who, using a South African sample, similarly detected an inability to differentiate between Self-Efficacy and Hope amongst their sample. This resulted in the formation of the subscale named Hopeful-Confidence. However, the items included in their subscale do not exactly match the Hopeful-Confidence subscale found in the current study. Since the four underlying constructs of PsyCap share more similarities than differences (Luthans, Youssef & Avolio, 2007b) and the strongest relationship between PsyCap subscales in a study conducted by Herbert (2011) was between self-efficacy and hope, this provides support for the loading of self-efficacy and hope items on to
one factor, renamed Hopeful Confidence. The second PCQ factor consisted of a combination of items originally belonging to the Optimism and Resilience subscales, with a majority of the items belonging to the Optimism subscale. For the purpose of the present study, this factor was labelled Optimism.

Exploratory factor analysis conducted on the JSS found a one-factor model best suited the data. This is in contrast to the original two-factor model determined by Parker and DeCotiis (1983) and confirmed by Addae and Wang (2006) who found that job stress is a two-dimensional construct consisting of Time Pressure and Anxiety. For the purpose of the present study, however, job stress is regarded as a one-dimensional construct as this was deemed to suit the data best.

Analysis of the UWBS found a two-factor model fitted the data best, as opposed to the four-factor model originally determined by Martin and Hine (2005) as the sample did not appear to differentiate between Gossiping and Hostility, resulting in the loading of items from both subscales on to one factor labelled Hostility. Additionally, the sample did not differentiate between Privacy Invasion and Exclusionary Behaviour, resulting in the renaming of the factor which included items from both subscales and was, therefore, labelled Privacy Invasion and Exclusionary Behaviour. No previous research appeared to have determined a two-factor structure for this measure, although Roberts et al. (2011) chose to use the overall measure in all analyses rather than individual subscales as the results of exploratory factor analysis in both their study and the study conducted by Martin and Hine (2005) suggested that each of the four subscales measured a higher-order construct. For the purpose of the present study, however, the two factors determined through exploratory factor analysis were used in all analyses.
Analysis of the JIS determined that a two-factor model fitted the data best. According to Lodahl and Kejner (1965) in their initial analysis of the 20-item scale, a four-factor solution was initially determined for the scale but was found to be impossible to interpret. Further analyses concluded that job involvement appeared to be a multidimensional construct with at least three factors present. However, the factor structure of the scale appeared unstable due to its changing nature and they lacked clarity regarding the specific sub-dimensions. Based on the specific items formulated for the measure, however, the items could be grouped into four sub-dimensions or themes that are important to job involvement (Lodahl & Kejner, 1965; Govender & Parumasur, 2010). These are: Response to Work (referring to employees’ expectations regarding work and whether these expectations are met, thereby affecting their response to work); Expressions of Being Job Involved (referring to various expressions of being involved with one’s job, which differ according to level of job involvement); Sense of Duty towards Work (referring to an individual’s willingness to go above and beyond the call of duty to complete work due to their high level of job involvement and strong sense of duty felt towards their work); and Feelings about unfinished work and absenteeism (referring to an employee avoiding being absent from work and feeling guilty about leaving work incomplete). In accordance with these four sub-dimensions, Govender and Parumasur (2010) determined a four-factor structure for the 22-item version of this measure. The present study, however, adopts the two-factor structure determined through exploratory factor analysis as this structure was deemed to best fit the sample.
5.2.2. Reliability

High levels of internal consistency were determined for each of the measuring instruments and their subscales. Cronbach alpha coefficients (\(\alpha\)) were used to determine the reliability of the instruments. Cronbach alpha coefficients above 0.70 are considered acceptable, although values above 0.80 are generally preferable (Pallant, 2010). According to these guidelines, all four instruments and their subscales had Cronbach alpha coefficients above 0.80, indicating high internal consistency, with the exception of Optimism which had a Cronbach alpha coefficient above 0.70 and was, therefore, considered to be acceptable.

A high level of reliability was found for the two-factor model of PsyCap which had a Cronbach alpha coefficient of 0.89. Cronbach alpha coefficients for the two PsyCap factors extracted from exploratory factor analysis, Hopeful Confidence and Optimism, were 0.90 and 0.73 respectively. Previous studies determined a four-factor structure with Cronbach alpha coefficients above 0.80 determined for the overall measure (Luthans, Youssef & Avolio, 2007b; Appolllis, 2010; Avey, Luthans & Palmer, 2010; Toor & Ofori, 2010; Roberts et al., 2011). Additionally, these authors determined acceptable reliabilities for the four original subscales. In a previous South African study, du Plessis and Barkhuizen (2012) found that a three-factor structure best suited their data with acceptable reliabilities of above 0.70 determined for the overall measure and each of the three subscales. It was determined that the constructs of Hopeful-Confidence, Optimism and Resilience seemed more relevant to the South African sample (du Plessis & Barkhuizen, 2012). The present study, however, determined that a two-factor structure consisting of Hopeful-Confidence and Optimism best suited the data and subsequent analyses were conducted using these two factors.
The Job Stress Scale displayed a high level of internal consistency with a Cronbach alpha coefficient of 0.91. This is in accordance with the Cronbach alpha coefficient of 0.91 for the overall scale determined by Almendra (2010). While previous studies have determined a two-factor structure for this measure, consisting of Time Stress and Job-related Anxiety (Parker & DeCotiis, 1983; Addae & Wang, 2006; Almendra, 2010), the present study determined that a one-factor structure best suited the data and, therefore, the overall measure of job stress was used in all analyses.

The two-factor model of the Uncivil Workplace Behaviour Scale indicated a high level of reliability with a Cronbach alpha coefficient of 0.91 reported for this measure. The two factors extracted through exploratory factor analysis displayed similarly high levels of reliability with a Cronbach alpha coefficient of 0.90 reported for Privacy invasion and Exclusion and 0.84 for Hostility. Martin and Hine (2005) determined a four-factor structure in their development of this measure, finding Cronbach alpha coefficients of above 0.80 for the overall scale and each of the four subscales. The four-factor structure was confirmed by Roberts et al. (2011) who similarly determined reliabilities over 0.80 for the total measure and each of its subscales.

The two-factor model of the Job Involvement Scale displayed a high level of internal consistency with a Cronbach alpha coefficient of 0.83 reported for the overall measure. The two factors extracted through exploratory factor analysis showed similarly high levels of reliability, with a Cronbach alpha coefficient of 0.81 reported for Expression of being Job Involved and 0.80 for Response to Work. Previous research determined a Cronbach alpha of 0.79 for the 20-item version of the scale (Ramey, Lassk & Marshall, 1995), however, no specific sub-dimensions were determined and, therefore, no reliabilities were computed for individual subscales. In the
present study, however, high levels of internal consistency of above 0.80 were determined for both the overall measure and the two subscales.

5.2.3. Pearson Product-Moment Correlation Analysis

The first objective of this study was to determine the relationship between psychological capital, job stress, incivility and job involvement. In order to do so, the Pearson product-moment correlation analysis was conducted on PsyCap, Job Stress, Uncivil Workplace Behaviour, Job Involvement and each of their subscales to determine the relationships between the variables in this study.

The findings of the analysis indicated that PsyCap and Uncivil Workplace Behaviour were negatively related, while PsyCap and Job Involvement were positively related. A stronger relationship was found between PsyCap and Job Involvement than between PsyCap and Uncivil Workplace Behaviour. The negative relationship between PsyCap and Uncivil Workplace Behaviour suggests that higher levels of PsyCap are associated with lower levels of Uncivil Workplace Behaviour, indicating that an individual possessing a high level of psychological capital may be less likely to engage in acts of incivility. A study by Avey, Luthans and Youssef (2010) found a relationship between high levels of PsyCap and a decrease in the display of counterproductive behaviours at work. Similarly, Roberts et al. (2011) determined that individuals possessing high levels of psychological capital displayed less incivility than those with low levels of psychological capital. This provides support for the negative relationship between PsyCap and Uncivil Workplace Behaviours found in the present study. PsyCap displayed a stronger negative relationship with Hostility than with overall Uncivil Workplace
Behaviour. This provides an indication of the specific nature of uncivil responses reduced, as individuals with high PsyCap are less likely to display hostility towards co-workers in the form of either rolling their eyes at a co-worker, speaking to a co-worker in an aggressive tone of voice or gossiping behind a co-worker’s back.

The positive relationship between PsyCap and Job Involvement suggests that higher levels of psychological capital are associated with higher levels of job involvement, indicating that an individual possessing a high level of psychological capital may display a high level of job involvement. Previous research has indicated that employees displaying high levels of psychological capital possess psychological resources that produce positive workplace behaviours (Roberts et al., 2011). This could explain the relationship between psychological capital and job involvement, as individuals possessing high levels of self-efficacy, hope, optimism and resilience may possess greater psychological resources to draw upon in achieving positive workplace outcomes such as job involvement. Additionally, PsyCap displayed a stronger relationship with Expressions of being Job Involved than with overall Job Involvement. This indicates that individuals with high PsyCap are more likely to be personally involved with their jobs, may consider the most important things that happen to them to be connected to their jobs and may even feel depressed when they fail at something connected to their jobs.

The PsyCap dimension of Hopeful Confidence, specifically, displayed a positive relationship with Job Involvement and Expressions of being Job Involved. This indicates that individuals who are confident about engaging in work-related behaviours and can perceive a number of different pathways to achieving their goals may be more involved in their jobs, expressed through the importance and centrality of work in their lives. Previous research by Govender and Parumasur (2010) found a relationship between Expressions of being Job Involved and the sub-dimensions
of employee motivation, with employees possessing high levels of motivation displaying high
levels of Expressions of being Job Involved and high overall Job Involvement. However, no
previous research has examined the relationship between psychological capital and job
involvement.

Hopeful Confidence also displayed a negative relationship with Uncivil Workplace Behaviour
and Hostility. However, a stronger relationship was found between Hopeful Confidence and Job
Involvement and Expression of being Job Involved, than between Hopeful Confidence and
Uncivil Workplace Behaviour and Hostility. The negative relationship between Hopeful
Confidence and Uncivil Workplace Behaviour and its sub-dimension of Hostility indicates that
individuals who feel confident about participating in work-related activities and can determine
multiple ways of achieving their desired outcomes are less likely to display hostile behaviour at
work through acts such as gossiping about co-workers or speaking to co-workers in an
aggressive tone of voice. While previous research has examined the relationship between PsyCap
and Uncivil Workplace Behaviours (Roberts et al., 2011) each construct was studied as a whole
and the specific sub-dimensions of each construct and the relationships between them were not
studied. Therefore, no previous study indicates the nature of the relationship between the
Hopeful-Confidence and Hostility subscales.

Although PsyCap did not display a significant relationship with Job Stress, the Optimism
subscale displayed a negative relationship with Job Stress. This suggests that an individual
experiencing a high level of job stress may possess a low level of optimism. Research conducted
by Herbert (2011) similarly found a strong negative relationship between Optimism and
Occupational stress, indicating that individuals high on optimism reported lower levels of
occupational stress. Additionally, Abbas and Raja (2011) found that individuals with high
PsyCap reported lower levels of job stress than individuals with low PsyCap. The present study examined job stress as an antecedent and not an outcome, and therefore, it can be understood that findings of the current study suggest that individuals experiencing greater levels of job stress reported lower levels of optimism and may, therefore, have fewer positive expectations of the future. Optimism also displayed a negative relationship with Uncivil Workplace Behaviour and both its subscales- Privacy Invasion and Exclusion, as well as Hostility. This indicates that individuals possessing greater positive expectations for the future are less likely to display negative and uncivil workplace behaviours such as invading a co-worker’s privacy, neglecting to pass on important information to a co-worker or raising their voice at a co-worker. Roberts et al. (2011) found that a high level of overall PsyCap (and not just optimism) correlated strongly with reported low levels of incivility, indicating that individuals high in PsyCap were less likely to display uncivil and counterproductive work behaviours. Optimism also displayed a positive relationship with Job Involvement and Expression of being Job Involved. This indicates that individuals who have positive expectations of the future tend to exhibit a greater degree of identification with their work and tend to immerse themselves in their work, finding meaning and satisfaction in carrying out their tasks. In terms of Fredrickson’s (1998) Broaden-and-Build theory of positive emotions which forms the underlying theoretical framework through which the relationship between psychological capital and job involvement was studied, it can be understood that the experience of the positive state of optimism would result in broader and more positive ways of thinking so that an individual will enthusiastically immerse themselves in their work as they will expect only the best possible outcome for their future.

The findings of the Pearson product-moment correlation further indicated that Job Stress and Uncivil Workplace Behaviour were positively related, while Job Stress and Job Involvement
were negatively related. A stronger relationship was found between Job Stress and Job Involvement than between Job Stress and Uncivil Workplace Behaviour.

The positive relationship between Job Stress and Uncivil Workplace Behaviour suggests that individuals experiencing a high level of job stress may display a high level of incivility. Previous research has similarly found a strong relationship between job stress and incivility, such as the study conducted by Penney and Spector (2005) in which it was found that individuals towards whom counterproductive workplace behaviours (CWBs) were displayed, including acts of incivility, tended to experience higher levels of stress. Additionally, Roberts et al. (2011) determined a strong association between an individual’s experience of job stress and their display of incivility. This can be understood in the fact that individuals experiencing high levels of stress may, as a result of the negative emotions experienced, react negatively by lashing out at others through acts of incivility. According to Lazarus and Folkman (1984) when employees are faced with such stressors within the workplace, their appraisal of the situation results in a psychological or behavioural reaction which may be expressed in a counterproductive manner.

Job Stress displayed a stronger positive relationship with the Hostility subscale than with overall Uncivil Workplace Behaviour. This can be explained by the fact that an individual’s experience of high levels of job stress may elicit negative and hostile responses from the individual such as using an inappropriate tone when speaking to a co-worker or talking about a co-worker behind their back.

The relationship between Job Stress and Uncivil Workplace Behaviour determined in the present study can be understood in terms of the Job Stress Model (Spector & Fox, 2002) which forms the underlying theoretical framework through which the relationship between job stress and incivility was studied. In terms of the job stress model, an individual’s appraisal of stressful
events within the workplace may result in the individual acting out by displaying uncivil behaviours. In this manner, it can be understood that the positive relationship between Job Stress and Uncivil Workplace Behaviour, and Hostility in particular, indicates that an individual experiencing a high level of stress in the workplace may form a negative appraisal of the situation and react in a negative and hostile manner towards others within the work environment.

The negative relationship between Job Stress and Job Involvement suggests that individuals experiencing a high level of Job Stress may display a low level of Job Involvement. A similar finding was determined by Lata Juyal (2011) in a study of private and public sector managers, in which it was found that high levels of job stress were associated with low levels of job involvement. Since the experience of job stress can result in a negative appraisal of one’s work situation, it can be understood that this may reduce the centrality of work in an individual’s life due to their negative perception of their work situation. Additionally, Job Stress displayed a stronger negative relationship with the Response to Work subscale than with overall Job Involvement. Since Response to Work refers to an individual’s response to work based on whether their expectations regarding work have been met, it can be understood that the experience of high levels of job stress would naturally frustrate an employee’s positive expectations regarding their work and may result in a less enthusiastic response to work.

Although the present study had not set out to determine the relationship between the two outcomes of incivility and job involvement, it was found that Uncivil Workplace Behaviour was negatively related to Job Involvement, suggesting that an individual experiencing a low level of Job Involvement may be more likely to engage in acts of incivility. However, Uncivil Workplace Behaviour displayed a stronger negative relationship with Response to Work than with overall Job Involvement. This implies that an individual experiencing a low level of job involvement
through having had their expectations regarding work frustrated, may resort to displays of incivility as an expression of their frustration. The Privacy invasion and Exclusionary Behaviour subscale, in particular, displayed a strong negative relationship with Response to Work. This indicates the nature of the uncivil acts perpetrated as an expression of one’s low level of job involvement. Such acts may include invading a co-worker’s privacy by taking their things without seeking permission, reading e-mails addressed to them and not consulting them in decisions they should be involved in. A negative relationship existed between Hostility and Job Involvement, as well as its two subscales- Expression of being Job Involved and Response to Work. This indicates that individuals experiencing low levels of job involvement may engage in hostile behaviour towards their co-workers through acts such as delaying responding to their queries without reason, gossiping about them and speaking to them harshly. No previous research has examined the relationship between job involvement and incivility, with the present study being the only one known to the researcher providing an indication of a relationship between these constructs.

5.2.4. Multiple Regression Analysis to Determine the Predictive Value of Psychological Capital and Job Stress for Incivility and Job Involvement.

The second objective of this study was to determine whether psychological capital and job stress held any predictive value for the outcomes of incivility and job involvement. Multiple regression analysis was conducted six times with Hopeful Confidence, Optimism and Job Stress as the independent variables in all the analyses. In the first analysis, Incivility was the dependent variable, in the second analysis Privacy Invasion and Exclusionary Behaviour was the dependent
variable, in the third analysis Hostility was the dependent variable, in the fourth analysis Job Involvement was the dependent variable, in the fifth analysis Expression of being Job Involved was the dependent variable and in the sixth analysis Response to Work was the dependent variable.

The findings indicated that Job Stress held predictive value for Incivility and the Hostility subscale. Previous research conducted by Roberts et al. (2011), however, found that job stress was not a significant predictor of incivility. Rather, psychological capital was a stronger and more significant predictor of incivility in their study. This was accounted for in the fact that there was a significant degree of overlap found between job stress and psychological capital due to the strong correlation between these two constructs, therefore, only one of the constructs (psychological capital) held significant predictive value for incivility. In the present study, however, psychological capital did not display significant predictive value for incivility. Instead, job stress was determined to hold significant predictive value for incivility and the hostility subscale in particular. This implies that an individual reporting a high level of stress can be expected to also exhibit uncivil and counterproductive workplace behaviours that may be hostile in nature.

Multiple regression analysis further indicated that the PsyCap subscale of Optimism held strong predictive value for Job Involvement and the Expression of being Job Involved subscale. This suggests that optimistic employees who generally have positive expectations of the future can be expected to be more involved in their work and to engage in behaviours that indicate their enthusiasm and interest in their work. No previous studies have examined psychological capital and its four underlying constructs in relation to job involvement; therefore, no previous findings could confirm this relationship. However, previous research findings have indicated that
optimism predicts outcomes such as burnout, organisational commitment, job satisfaction and creativity (Chang, Rand & Strunk, 2000; Cetin, 2011; Armenio, Filipa, Marques & Cunha, 2012). According to the findings of the current study, it can be understood that optimism predicts job involvement.

Further, it was found that Job stress held predictive value for Job Involvement and the Response to Work subscale. Research conducted by Ouyang (2009) similarly found that job stress was a predictor of job involvement. This predictive relationship can be understood in terms of the Job Stress Model (Spector & Fox, 2002) whereby individuals experiencing high levels of job stress can be expected to report low levels of job involvement, due to the negative impact of excessive stress on their willingness to become actively involved in their work. This may be as a result of their expectations regarding their work having not being met, resulting in a less than enthusiastic response to work.

5.2.5. Hierarchical Regression Analysis to Determine the Moderating Role of Psychological Capital.

The third objective of this study was to determine whether psychological capital played a moderating role in the relationship between job stress and the outcomes of incivility and job involvement. In order to do so, hierarchical regression analysis was conducted two times with psychological capital and job stress as the independent variables, and incivility as the dependent variable in the first analysis and job involvement as the dependent variable in the second analysis.
The results indicated that while psychological capital and job stress held significant predictive value for incivility and job involvement, there was no significant interaction effect as addition of the interaction term (psychological capital x job stress) in the second step of each analysis resulted in no significant interaction with incivility and job involvement. This indicated that psychological capital did not moderate the relationship between job stress and incivility and neither did it moderate the relationship between job stress and job involvement. The findings of hierarchical regression analysis were further confirmed by the moderation graphs displayed in Figure 1 and 2.

5.3. Summary

The results of the current study which were presented in the previous chapter were discussed in this chapter. The results of the statistical analyses conducted were discussed in terms of the research questions of the study and in relation to previous scientific research findings. The next chapter will present conclusions drawn regarding previous literature findings and the empirical findings of the current study. Limitations of the present study, recommendations for the organisation and the direction of future research will be discussed.
CHAPTER SIX

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

6.1. Introduction

The previous chapter discussed the results of the current study. This chapter discusses the conclusions arrived at based on the findings of previous literature and the findings of the present study. Specific limitations are discussed and recommendations are made for the organisation and for future research endeavours in this area of study.

6.2. Conclusions

The conclusions arrived at in the following section are in accordance with the research objectives and empirical findings of this study.

6.2.1. Conclusions in terms of the results of the study

6.2.1.1. Exploratory Factor Analysis

Exploratory factor analysis of the Psychological Capital Questionnaire found that a two-factor model suited the data best. The original measure formulated by Luthans et al. (2007b) consisted of four subscales (self-efficacy, hope, optimism and resilience). This four-factor model has been confirmed by numerous subsequent studies. However, no previous research findings have determined a two-factor model for this measure as determined in the present study. However, a three-factor model for the PCQ was determined in a South African study conducted by du Plessis and Barkhuizen (2012) in which a similar overlap between the Self-efficacy and Hope subscales
was determined, resulting in the formulation of the combined subscale labelled Hopeful Confidence. The two-factor model of the PCQ used in the present study consisted of two subscales, namely, Hopeful Confidence and Optimism.

Exploratory factor analysis of the Job Stress Scale determined a one-factor model, as opposed to the original measure which consists of two subscales, namely, Time Pressure and Job-related Anxiety (Parker & DeCotiis, 1983). A previous study by Addae and Wang (2006) confirmed the original two-factor model, but no previous study has established a one-factor model of this measure. A one-factor model consisting of the total scale was used in this study as it was determined to be best suited to the data in the present study.

Analysis of the Uncivil Workplace Behaviour Scale established a two-factor model as opposed the original four-factor model determined by Martin and Hine (2005). No previous study has determined a similar two-factor model. Roberts et al. (2011) confirmed a four-factor model for this measure, but chose to use the overall measure in all subsequent analyses in their study as opposed to the individual four factors. The two-factor model established in the present study consisted of two subscales labelled Hostility and Privacy Invasion and Exclusionary Behaviour.

Exploratory factor analysis conducted on the Job Involvement Scale determined a two-factor model, instead of the four-factor model originally established by Lodahl and Kejner (1965) which was later reduced to three factors but was regarded as having unstable dimensionality. The measure is generally regarded as having no specific dimensions, however, based on Lodahl and Kejner’s (1965) original formulation of the measure, four sub-dimensions were extracted based on the specific aspects measured by each item. Govender and Parumasur (2010) mentioned these four sub-dimensions in their use of the measure in a South African study. The two-factor
structure determined in the present study derived the names for each of the two subscales from these four dimensions. The two subscales that make up the measure of job involvement used in the current study were labelled Response to Work and Expressions of being Job Involved.

6.2.1.2. Reliabilities of the measuring instruments used

High levels of internal consistency were determined for all four measuring instruments used in the study as well as their subscales. The measures were, therefore, regarded as reliable and suitable for the purpose of the present study.

6.2.1.3. To determine the relationship between psychological capital, job stress, incivility and job involvement.

The research objective to determine the relationships between psychological capital, job stress, incivility and job involvement was attained. Findings indicated that psychological capital was statistically negatively correlated with uncivil workplace behaviour (incivility) (p≤ 0.05), indicating that individuals possessing high levels of PsyCap may be less likely to display incivility within the workplace.

Psychological capital was also statistically and practically significantly correlated with job involvement (p≤0.01) (medium effect), indicating that individuals high on PsyCap may display greater job involvement than individuals low on PsyCap. Since research conducted by Roberts et al. (2011) indicated that employees displaying high levels of psychological capital possess psychological resources that produce positive workplace behaviours, this could explain the
relationship between psychological capital and job involvement, as individuals possessing high levels of self-efficacy, hope, optimism and resilience may possess greater psychological resources to draw upon in achieving positive workplace outcomes such as job involvement.

Job stress displayed a statistically significant relationship with uncivil workplace behavior (p≤0.05), indicating that high levels of job stress are associated with an increased display of incivility. Previous research has similarly found a strong relationship between job stress and incivility, such as the study conducted by Penney and Spector (2005) in which it was found that individuals towards whom counterproductive workplace behaviours (CWBs) were displayed, including acts of incivility, tended to experience higher levels of stress. Additionally, Roberts et al. (2011) determined a strong association between an individual’s experience of job stress and their display of incivility. This can be understood in the fact that individuals experiencing high levels of stress may, as a result of the negative emotions experienced, react negatively by lashing out at others through acts of incivility. According to Lazarus and Folkman (1984) when employees are faced with such stressors within the workplace, their appraisal of the situation results in a psychological or behavioural reaction which may be expressed in a counterproductive manner. The relationship between Job Stress and Uncivil Workplace Behaviour determined in the present study can be understood in terms of the Job Stress Model (Spector & Fox, 2002) which forms the underlying theoretical framework through which the relationship between job stress and incivility was studied. In terms of the job stress model, an individual’s appraisal of stressful events within the workplace may result in the individual acting out by displaying uncivil behaviours.

Job stress yielded a negative statistically and practically significant relationship with job involvement (p≤0.01) (medium effect). This indicates a strong association between high levels of
job stress and low levels of job involvement. The negative relationship between Job Stress and Job Involvement suggests that individuals experiencing a high level of Job Stress may display a low level of Job Involvement. A similar finding was determined by Lata Juyal (2011) in a study of private and public sector managers, in which it was found that high levels of job stress were associated with low levels of job involvement. Since the experience of job stress can result in a negative appraisal of one’s work situation, it can be understood that this may reduce the centrality of work in an individual’s life due to their negative perception of their work situation.

The study did not seek to determine the relationship between Uncivil Workplace Behaviour and Job Involvement. However, a significant relationship was found. Uncivil workplace behaviour (incivility) displayed a statistically negative relationship with job involvement ($p \leq 0.05$), indicating that individuals low on job involvement may display greater incivility within the workplace.

In summary, psychological capital displayed a negative relationship with incivility and a positive relationship with job involvement, indicating that individuals with high psychological capital may display less incivility and a greater degree of job involvement.

Psychological capital and job stress shared no significant relationship, except that the Optimism subscale of PsyCap displayed a negative relationship with job stress, indicating that individuals with high levels of job stress may be less optimistic than individuals with low job stress.

Job stress displayed a positive relationship with incivility and a negative relationship with job involvement, indicating that individuals with high levels of job stress are more likely to display uncivil behaviours and less likely to be involved in their jobs.
6.2.1.4. To determine the relationship between psychological capital and job stress constructs.

Psychological capital and job stress shared no significant relationship, except that the Optimism subscale of PsyCap displayed a negative statistically significant relationship with job stress (p≤0.05), indicating that individuals with high levels of job stress may be less optimistic than individuals with low job stress. Research conducted by Herbert (2011) similarly found a strong negative relationship between Optimism and Occupational stress, indicating that individuals high on optimism reported lower levels of occupational stress. Additionally, Abbas and Raja (2011) found that individuals with high PsyCap reported lower levels of job stress than individuals with low PsyCap. The present study examined job stress as an antecedent and not an outcome, and therefore, it can be understood that findings of the current study suggest that individuals experiencing greater levels of job stress reported lower levels of optimism and may, therefore, have fewer positive expectations of the future.

6.2.1.5. To determine the relationship between psychological capital and incivility constructs.

Psychological capital was statistically negatively correlated with the Hostility subscale (p≤0.01), suggesting that the individuals possessing high levels of psychological capital display lower levels of incivility. Specifically, the PsyCap subscale of Hopeful Confidence displayed a negative statistically significant relationship with uncivil workplace behaviour (p≤0.05) and the Hostility subscale (p≤0.05). This indicates that individuals who feel confident about participating in work-related activities and can determine multiple ways of achieving their desired outcomes are less likely to display hostile behaviour at work through acts such as gossiping about co-
workers or speaking to co-workers in an aggressive tone of voice. While previous research has examined the relationship between PsyCap and Uncivil Workplace Behaviours (Roberts et al., 2011) each construct was studied as a whole and the specific sub-dimensions of each construct and the relationships between them were not studied. Therefore, no previous study indicates the nature of the relationship between the Hopeful-Confidence and Hostility subscales. The PsyCap subscale of Optimism also displayed a negative relationship with Uncivil Workplace Behaviour and both its subscales- Privacy Invasion and Exclusion, as well as Hostility. This indicates that individuals possessing greater positive expectations for the future are less likely to display negative and uncivil workplace behaviours such as invading a co-worker’s privacy, neglecting to pass on important information to a co-worker or raising their voice at a co-worker. Roberts et al. (2011) found that a high level of overall PsyCap (and not just optimism) correlated strongly with reported low levels of incivility, indicating that individuals high in PsyCap were less likely to display uncivil and counterproductive work behaviours.

6.2.1.6. To determine the relationship between psychological capital and job involvement constructs.

Psychological capital was statistically and practically significantly correlated with the Expression of being Job Involved subscale of job involvement (p≤0.01) (medium effect). This indicates that individuals with high PsyCap are more likely to be personally involved with their jobs, may consider the most important things that happen to them to be connected to their jobs and may even feel depressed when they fail at something connected to their jobs.
Additionally, the Hopeful Confidence subscale of PsyCap yielded statistically and practically significant relationships with total job involvement \((p \leq 0.01)\) (medium effect) and the Expressions of being Job Involved subscale \((p \leq 0.01)\) (medium effect), further confirming the strength of this relationship. This indicates that individuals who are confident about engaging in work-related behaviours and can perceive a number of different pathways to achieving their goals may be more involved in their jobs, expressed through the importance and centrality of work in their lives. Previous research by Govender and Parumasur (2010) found a relationship between Expressions of being Job Involved and the sub-dimensions of employee motivation, with employees possessing high levels of motivation displaying high levels of Expressions of being Job Involved and high overall Job Involvement. However, no previous research has examined the relationship between psychological capital and job involvement.

The PsyCap dimension of Optimism also displayed a positive relationship with Job Involvement and Expression of being Job Involved. This indicates that individuals who have positive expectations of the future tend to exhibit a greater degree of identification with their work and tend to immerse themselves in their work, finding meaning and satisfaction in carrying out their tasks. In terms of Fredrickson’s (1998) Broaden-and-Build theory of positive emotions which forms the underlying theoretical framework through which the relationship between psychological capital and job involvement was studied, it can be understood that the experience of the positive state of optimism would result in broader and more positive ways of thinking so that an individual will enthusiastically immerse themselves in their work as they will expect only the best possible outcome for their future.
6.2.1.7. To determine the relationship between job stress and incivility constructs.

Job stress displayed a statistically significant positive relationship with the Hostility subscale (p≤0.01). This can be explained by the fact that an individual’s experience of high levels of job stress may elicit negative and hostile responses from the individual such as using an inappropriate tone when speaking to a co-worker or talking about a co-worker behind their back. In terms of the Job Stress Model, looking at this relationship, it can be understood that the positive relationship between Job Stress and Uncivil Workplace Behaviour, and Hostility in particular, indicates that an individual experiencing a high level of stress in the workplace may form a negative appraisal of the situation and react in a negative and hostile manner towards others within the work environment.

6.2.1.8. To determine the relationship between job stress and job involvement constructs.

Job stress yielded a negative statistically and practically significant relationship with the Response to Work subscale of job involvement (p≤0.01) (medium effect). Job Stress displayed a stronger negative relationship with the Response to Work subscale than with overall Job Involvement. Since Response to Work refers to an individual’s response to work based on whether their expectations regarding work have been met, it can be understood that the experience of high levels of job stress would naturally frustrate an employee’s positive expectations regarding their work and may result in a less enthusiastic response to work.
6.2.1.9. The relationship between incivility and job involvement constructs.

Although the study did not seek to determine the relationship between the outcomes of incivility and job involvement, findings indicated that a relationship did exist between these two constructs. Uncivil Workplace Behaviour (incivility) displayed a negative statistically and practically significant relationship with the Response to Work subscale of job involvement (p≤0.01) (medium effect). Further, the Hostility subscale displayed a negative practically and statistically significant relationship with job involvement (p≤0.01) (medium effect). Additionally, Hostility displayed negative statistically significant relationships with both Job Involvement subscales—Expression of being Job Involved (p≤0.05) and Response to Work (p≤0.01). This indicates that individuals experiencing low levels of job involvement may engage in hostile behaviour towards their co-workers through acts such as delaying responding to their queries without reason, gossiping about them and speaking to them harshly. An individual experiencing a low level of job involvement through having had their expectations regarding work frustrated may resort to displays of incivility as an expression of their frustration. The Privacy invasion and Exclusionary Behaviour subscale, in particular, displayed a strong negative relationship with Response to Work. This indicates the nature of the uncivil acts perpetrated as an expression of one’s low level of job involvement. Such acts may include invading a co-worker’s privacy by taking their things without seeking permission, reading e-mails addressed to them and not consulting them in decisions they should be involved in. No previous research has examined the relationship between job involvement and incivility, with the present study being the only one known to the researcher providing an indication of a relationship between these constructs.
6.2.1.10. To determine the predictive value of psychological capital and job stress on incivility and job involvement.

Job Stress was found to hold predictive value for Incivility and the Hostility subscale. Previous research by Roberts et al. (2011) which examined job stress and incivility in relation to each other found that job stress was not a significant predictor of incivility. Rather, psychological capital was a stronger and more significant predictor of incivility in their study. This was accounted for in the fact that there was a significant degree of overlap found between job stress and psychological capital due to the strong correlation between these two constructs, therefore, only one of the constructs (psychological capital) held significant predictive value for incivility.

In the present study, however, psychological capital did not display significant predictive value for incivility. Instead, job stress was determined to hold significant predictive value for incivility and the hostility subscale in particular. This implies that an individual reporting a high level of stress can be expected to also exhibit uncivil and counterproductive workplace behaviours that may be hostile in nature.

Multiple regression analysis further indicated that the PsyCap subscale of Optimism held strong predictive value for Job Involvement and the Expression of being Job Involved subscale. This suggests that optimistic employees who generally have positive expectations of the future can be expected to be more involved in their work and to engage in behaviours that indicate their enthusiasm and interest in their work. No previous studies have examined psychological capital and its four underlying constructs in relation to job involvement; therefore, no previous findings could confirm this relationship. However, previous research findings have indicated that optimism predicts outcomes such as burnout, organisational commitment, job satisfaction and creativity (Chang, Rand & Strunk, 2000; Cetin, 2011; Armenio, Filipa, Marques & Cunha,
According to the findings of the current study, it can be understood that optimism predicts job involvement.

Further, it was found that Job stress held predictive value for Job Involvement and the Response to Work subscale. Research conducted by Ouyang (2009) similarly found that job stress was a predictor of job involvement. This predictive relationship can be understood in terms of the Job Stress Model (Spector & Fox, 2002) whereby individuals experiencing high levels of job stress can be expected to report low levels of job involvement, due to the negative impact of excessive stress on their willingness to become actively involved in their work. This may be as a result of their expectations regarding their work having not being met, resulting in a less than enthusiastic response to work.

In summary, Job Stress was found to have predictive value for both Incivility and Job Involvement. While total Psychological Capital was not found to hold predictive value for either Incivility or Job Involvement, the PsyCap subscale of Optimism was found to hold predictive value for Job Involvement.

6.2.1.11. To determine whether psychological capital moderated the relationship between job stress and incivility and job stress and job involvement.

While psychological capital and job stress were found to hold significant predictive value for incivility and job involvement, there was no significant interaction effect determined as the addition of the interaction term, made up of psychological capital and job stress, in the second step of each analysis resulted in no significant interaction with incivility and job involvement. This indicated that psychological capital did not moderate the relationship between job stress and incivility and neither did it moderate the relationship between job stress and job involvement.
Research conducted by Roberts et al. (2011) determined that psychological capital moderated the relationship between job stress and incivility, with psychological capital serving as a buffer against the effects of job stress so that individuals with high levels of job stress were less likely to engage in uncivil workplace behaviours if they possessed high levels of psychological capital. However, the present study was did not determine a similar moderation effect. In terms of the relationship between job stress and job involvement and the role of psychological capital in this relationship, the present study did not determine a moderating effect for psychological capital in this study. Since no previous research has studied these constructs in relation to each other, no previous research findings were able to confirm the findings of this study regarding this relationship.

6.3. Limitations of the study

As with most studies, the present study has its limitations. Firstly, the small sample size of 104 participants was disappointing and limited the generalisibility of the findings. According to Pallant (2010), a sample size of at least 150 participants would have been ideal for the results of factor analysis to be regarded as more reliable and accurate. Additionally, larger sample sizes are required when conducting multiple regression analysis. Secondly, participants’ tendency to provide socially desirable responses, especially on the Uncivil Workplace Behaviour Scale which requires that they admit to perpetrated acts of incivility, calls into question the accuracy of the findings. Socially desirable responding is a common problem especially when self-report questionnaires are used. Thirdly, participants displayed a lack of interest in completing the questionnaires as many frequently chose the same response throughout certain questionnaires or
displayed a noticeable pattern in their responses which suggested that they had not answered the questionnaire honestly. Lastly, the use of a cross-sectional research design in which data is collected at a fixed point in time does not allow for the determining of causal relationships among variables. While significant relationships between variables were determined in the present study, causal relationships cannot be inferred from these findings. In order for causality to be determined, future research will have to adopt a longitudinal research design by studying the same phenomenon at different points in time.

6.4 Recommendations for the Organisation

The findings of the present study indicated positive relationships between Job Stress and Incivility, indicating that high levels of job stress are associated with high levels of incivility. Job stress was also found to have predictive value for incivility. This suggests a need for organisations to seek ways to reduce job stress in order to lower the risk of incivility being displayed. A negative relationship also existed between Job Stress and Job Involvement, indicating that high levels of job stress were associated with low levels of Job Involvement, thereby suggesting that ways of reducing job stress should be determined so that employees’ levels of job involvement may increase. Job Stress was also found to have predictive value for Job Involvement, indicating that high levels of job stress may predict low levels of job involvement, further confirming the need for determining ways of reducing job stress in order to enhance employee job involvement. Additionally, a negative relationship was determined between Job Stress and Psychological Capital, suggesting that high levels of job stress were associated with low levels of psychological capital. This indicates a need for stressors within the
workplace to be reduced in order to enhance the psychological capital of employees. Ways of reducing these workplace stressors have been discussed in the literature with possible methods including organisations implementing stress management interventions for employees, making adjustments to workload and schedules and increasing the level of autonomy associated with performing particular tasks (Humphrey, Nahrgang, & Morgeson, 2007). Additionally, job rotation can be implemented to alleviate the effects of stress associated with a particular job by allowing an employee to perform tasks in a number of different areas, thereby teaching them new skills, granting variety to tasks, preventing the onset of conditions such as Cumulative Trauma Disorder (CTD) and reducing the risk of boredom (Triggs & King, 2000; Smith, 2002).

A positive relationship was found between Psychological Capital and Job Involvement. This indicates that high levels of psychological capital are associated with high levels of job involvement, suggesting that organisations should invest in training which is aimed at improving the psychological capital of employees in order to increase their level of job involvement. Since the PsyCap subscale of Optimism was determined to have very strong predictive value for Job Involvement, this further confirms the benefits of organisations investing in interventions aimed at improving the psychological capital of employees, but more importantly, improving their optimism as way of enhancing their job involvement. Interventions aimed at improving the psychological capital of employees have been formulated and tested among varied samples. Luthans, Avey, Avolio, Norman and Combs (2006) have demonstrated the utility of interventions aimed at improving psychological capital through an hour-long micro-intervention conducted amongst a sample of management students and managers from several organisations, finding that the intervention was successful in improving the psychological capital of these individuals. Such an intervention, if implemented correctly within the workplace, would not only
prove efficient by minimising costs and the time required to implement the intervention, but would also ensure greater willingness among employees to participate in the intervention.

6.5. Recommendations for Future Research

Future research endeavours in this area of study should consider controlling for the specific limitations of the study mentioned above. This can be achieved through providing desirable incentives for individuals to willingly participate in the study, rather than relying on individual’s sense of duty towards the organisation to provide adequate incentive to participate. This may achieve a higher response rate and, possibly, more honest responses which would ensure more reliable findings.

In spite of the various limitations of the study, future research can further examine the relationship between psychological capital, job stress, incivility and job involvement. In terms of the findings of the present study, future research can explore the relationships determined in the study, especially the relationship between job stress and job involvement, psychological capital and job involvement, and job involvement and incivility, as there is a noticeable lack of research examining these constructs in relation to each other.

6.6. Summary

This chapter presented the conclusions made based on the theoretical and empirical findings of the study. The chapter discussed the limitations of the study, recommendations for the organisation and recommendations for future research.
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## Appendix 1: Biographical Questionnaire

### BIOGRAPHICAL DATA SHEET

**INSTRUCTIONS:**
Please answer the following questions by marking the appropriate boxes.

1. **GENDER**
   - Male [ ]
   - Female [ ]

2. **AGE GROUP**
   - 24 years and younger [ ]
   - 25 – 35 years [ ]
   - 36 – 45 years [ ]
   - 46 – 55 years [ ]
   - 56 years and older [ ]

3. **RACE GROUP**
   - African [ ]
   - Indian [ ]
   - Coloured [ ]
   - White [ ]

4. **MARITAL STATUS**
   - Single [ ]
   - Divorced [ ]
   - Widowed [ ]
   - Married [ ]
   - Living with a spouse [ ]

5. **YEARS WORKING WITHIN THIS ORGANISATION**
   - Less than 5 years [ ]
   - 6 – 10 years [ ]
   - 11 – 20 years [ ]
   - More than 20 years [ ]

6. **HIGHEST ATTAINED QUALIFICATION**
   - Matric Certificate [ ]
   - Diploma [ ]
   - Degree [ ]
   - Postgraduate Degree [ ]
Appendix 2: Psychological Capital Questionnaire

PsyCap Questionnaire (PCQ)

Instruction
Below are statements that describe how you may think about yourself right now. Use the following scale to indicate your level of agreement or disagreement with each statement. (1=strongly disagree, 2=disagree, 3=somewhat disagree, 4=somewhat agree, 5=agree, 6=agree)

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

#### Job Stress Scale

**Parker & DeCotiis (1983)**

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

Uncivil Workplace Behavior Scale-Revised

R. Martin and D. W Hine (2005)
University of New England, Armidale

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 letter in the right hand column)

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

Job Involvement Scale

(Lodahl & Kejner, 1965)

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I’ll stay overtime to finish a job, even if I’m not paid for it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. You can measure a person pretty well by how good a job s/he does.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. The major satisfaction in my life comes from my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. For me, mornings at work really fly by.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. I usually show up for work a little early, to get things ready.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. The most important things that happen to me involve my work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. Sometimes I lie awake at night thinking ahead to the next day.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. I’m really a perfectionist about my work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. I feel depressed when I fail at something connected with my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. I have other activities more important than my work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. I live, eat, and breathe my job.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. I would probably keep working even if I didn’t need the money.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. Quite often I feel like staying home from work instead of coming in.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. To me my work is only a small part of who I am.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. I am very much involved personally in my work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. I avoid taking on extra duties and responsibilities in my work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. I used to be more ambitious about my work than I am now.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18. Most things in life are more important than work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19. I used to care more about my work, but now other things are more important to me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20. Sometimes I’d like to kick myself for the mistakes I make in my work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Appendix 6: Informed Consent Letter and Form

Informed Consent Form

Dear Participant,

Your participation in this research project is greatly appreciated. In order to grant your informed consent to participate in this study, you will need to be aware of the following information.

1. This study is based on the moderating role of Psychological Capital in the relationship between Job Stress and the outcomes of Incivility and Job Involvement among Call Centre employees. Psychological capital is made up for four main constructs which are regarded as positive psychological resources. These constructs are resilience (the ability to bounce back from adversity), optimism (a tendency to view events positively), hope (positive expectations of the future) and self-efficacy (a sense of competence).
2. Participation in this study is entirely voluntary.
3. You will, at all times, remain completely anonymous. If data pertaining to your answering of the questionnaires is discussed, the data will be discussed through the use of a pseudonym.
4. The information you provide will be kept confidential and your survey data will only be made available to the researcher(s).
5. Findings from this study may be used in academic presentations and/or publications, but will exclude any information that could reveal your identity.
6. You may choose to withdraw from the study at any time.
7. If you have any questions regarding the research, please contact the project supervisor, Professor Joey Buitendach on 031-260 2022 or email her at buitendach@ukzn.ac.za.
8. If you wish to obtain information on your rights as a participant, please contact Ms Phumelele Ximba, Research Office, UKZN, on 031 360 3587.

I, __________________________________, consent to participate in the study on The Moderating role of Psychological Capital in the relationship between Job Stress and the outcomes of Incivility and Job Involvement among Call Centre employees. I also acknowledge and fully understand the information discussed above.

Full Name: ______________________

Signature: ______________________

Date: ________________