

**A COMPARATIVE STUDY OF THE PSYCHOLOGICAL WELL-BEING OF SINGLE  
AND MARRIED MOTHERS WHO WORK SHIFTS IN A CALL CENTRE  
ENVIRONMENT**

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**3011551**

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## Abstract

South Africa is recognised as having world-class status in the call centre arena and this industry has grown exponentially in the last two decades, as has the number of women entering the workforce, including married and single mothers. Call centres provide a 24/7 service to the public, and therefore employees are expected to work shifts in this environment. It is also evident that even though mothers are making a significant contribution to the workforce, the role of the working mother is still that of primary caregiver and nurturer in the home. The main purpose of this study was to examine and compare the psychological well-being of single and married mothers, who do and do not work shifts in a call centre environment. The study findings were based on quantitative research in a call centre in the Western Cape, South Africa, with a sample of 192 single and married working mothers, of whom 135 mothers worked shifts and 57 mothers did not. Psychological well-being was indicated by the use of two instruments: Rosenberg's (1965) Self-esteem Scale and Diener's (1982) Satisfaction with Life Scale. The data was analysed using the Statistical Package in the Social Sciences (SPSS version 20). The analysis of the data included the use of descriptive and inferential statistics. Findings of the study show that marital status has a significant effect on the psychological well-being of working mothers in this call centre environment. However, it was found that shift work did not make a significant difference to the psychological well-being of the working mothers in this call centre. The Multivariate Analysis of Variance (MANOVA) was used to analyse the interaction of the four groups (single, married, shift working and non-shift working mothers) and the results of this analysis showed that there was no significant difference in the interaction between the groups. Recommendations are provided in the study.

## Declaration

I declare that this thesis, *A comparative study of the psychological well-being of single and married mothers who work shifts in a call centre*, is my own work and that it has not been submitted for any degree of examination in other university and that all the sources that I have used or quoted have been indicated and acknowledged by complete references

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Glynnis Ann Green



## Acknowledgements

I would like to acknowledge the following people who contributed to the completion and success of this thesis:

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## DEDICATION


This thesis is dedicated to my mother, Mrs Nola Shaw. My mother was a single parent for most of my childhood and she successfully juggled the challenges of working in a corporate environment, raising four children alone and studying at the same time! She is a wonderful role model and it was she who taught me to be tenacious and to persevere especially through times of adversity. I learnt from her, that if one keeps your eye on the goal, you will achieve it, no matter how long it takes. However, the greatest lesson that she modeled for me lies in the Scripture:

**"I Can Do All Things Through Christ Who Strengthens Me". Philippians 4:13.**



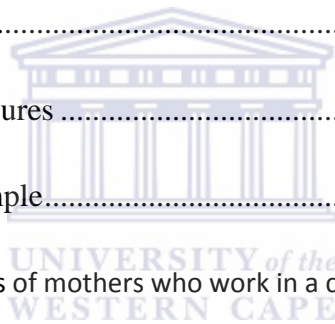
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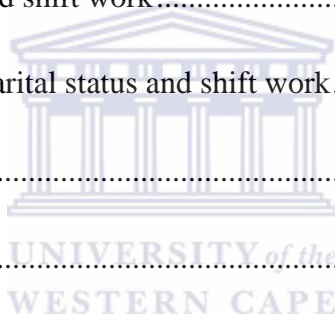
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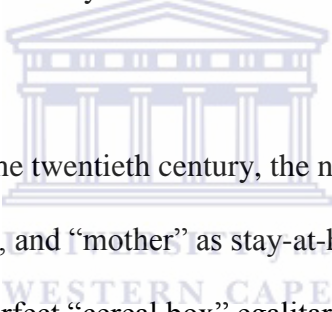


# CHAPTER 1

## CONTEXT

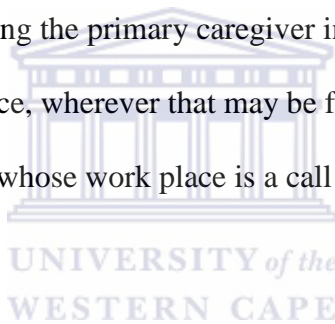
### 1.1 Background

The Government Gazette (2011, p. 7) describes the structure and content of the family as “dynamic”, since over the centuries the family has continuously adapted to global and societal changes. The family is instrumental in giving meaning to societal constructs. These constructs include the way marriage is perceived, the bearing and raising of children, educational methods and the rights and responsibilities of family members and hence society in general (Government Gazette, 2011).



During the middle to latter part of the twentieth century, the nuclear Western family constructs of the role of “father” as bread-winner, and “mother” as stay-at-home homemaker and primary child-carer, were idealised as the perfect “cereal box” egalitarian family unit to strive for. Single-parent families (particularly single mothers), were largely stigmatised and deemed socially unacceptable at this time (Chapman, 2004, p. 3). The late 1960s and part of the 1970s saw the rise of feminism. It was this movement that challenged the inequalities of women, both at home and in the workplace (Chapman, 2004). Feminism contributed largely to women breaking the typical mould of women as homemaker, and encouraged women to venture into the workplace. In South Africa, many women have entered the workforce over the last two decades and according to statistics published in South Africa, 1.4 billion women entered the workforce between 1991 and 2001 (Statistics South Africa, 2004). However, now in the twenty-first century, even with the evolution of a variety of what can be regarded as new or non-traditional

families – for example gay/lesbian, single-parent, and living-together families with their own new sets of values and norms – it seems that the patriarchal, capitalist concept of family with the role of the male as breadwinner and the female as primary caregiver in the home, is still upheld. Traditionally, the role of mother has been perceived to be that of homemaker and primary carer of children (Chapman, 2004; Herbst, Coetzee, & Visser, 2007). Furthermore, research conducted by Herbst et al. (2006) shows that although more women are entering the workforce, thus creating more dual-earning couples, domestic and child-care responsibilities are still primarily managed by the mother in the family. Therefore, it is evident that the traditional role of wife and mother is still firmly established. This means that for working mothers, there is still the added pressure of the responsibility of being the primary caregiver in the home, as well as actively making a difference in the workplace, wherever that may be for the women concerned. In this study, the participants are mothers whose work place is a call centre in the financial business sector.



A review of the literature shows that call centres are rigidly run and according to Peaucelle (2000, as cited in Hingst 2006, p. 2), call centres resemble “Taylorian workshops” in the way that they are structured to achieve maximum output from the employees. The employees work in a highly structured, monitored environment, where there is little room for flexibility (Boonzaier & Boonzaier, 2008). The work that the call centre agents do is described as “repetitive and monotonous, limited by technology and one that has little room for variation and problem solving” (Torvatn & Dahl-Jørgensen, 2003, p. 5). Hence, the call centre work environment is very pressured and stressful and has been described in literature as the “sweatshop of the new millennium” (Werner 2006, p. 1). Literature pertaining to call centres has even been referred to

call centres as “dark satanic mills of the twenty-first century”, because of the type of work done in call centres and its impact on the call centre agents’ well-being (Holman, 2002, p. 35).

Call centre agents are the first point of contact with telephonic customers in a technologically driven environment. Not only are they the first point of contact, but the call centre agents in this environment have to deal with irregular work hours such as shift work, time pressure and high call volumes (Sharma, Raina, Sharma & Tiwari, 2011). Holman’s (2002, p. 35) review of literature proposes that performance monitoring, and the actual design of the job itself, significantly affect the well-being of call centre agents. The literature also shows that stress is one of the primary factors in terms of dysfunction in the workplace and that the very nature of shift work is stressful in itself as this creates shifts and imbalances in the work-home life function (Werner, 2006).

In the call centre environment, most agents are expected to work shifts. Agents are shifted according to the needs of the business divisions, via a computer programme. The agents are required to work eight-hour shifts on a rotational basis. Early shifts can be scheduled to start early in the day (as early as 6 a.m.), or to start later in the day, while the last shift ends at 9 p.m. Shift work includes working on Saturdays and Sundays. When the need arises, the agents will be scheduled to work “marathon shifts”, which are 12-hour shifts. Breaks are also scheduled according to business needs and call volumes. According to Perrucci et al. (2007), rotating shifts affect the individual’s ability to adjust to the shifts. The authors found that shift work affects three areas of an individual’s life, namely family life, parent-child interaction and participation in community life. The company at which this study was conducted has an effective wellness department. Counsellors from this department reported that, in counselling working mothers, trends show that changes in shifts lead to changes in the home, pressurising mothers to

constantly make new arrangements for their children. Mothers had reported pressure on their support structures or lack thereof in arranging care for their children and managing their households. The mothers also were missing out on normal parenting tasks of seeing the teacher, being there for the first day of school, attending concerts, sports events and family functions.

Liu, Wang, Keesler, & Schneider (2011) state that the majority of the research conducted on the effect of shift work on parents has made use of married samples rather than parents in other types of relationships, for example, cohabiting parents. The questions then raised are: whether the psychological well-being of working mothers could be influenced by the marital status of mothers; and, would the pressures of shift work in a corporate call centre environment be an additional challenge to their psychological well-being? Thus, the purpose of this study was to examine and compare the psychological well-being of single and married mothers, who work shifts and those who do not work shifts, in a call centre environment.

## **1.2 Theoretical framework**

Psychofortology and positive psychology is a theoretical approach that focuses on the psychological well-being of an individual and the skills needed to cope with the demands of stress. This study used psychofortology as a theoretical framework. The term “fortology” means “strength” and is derived from the Latin word “fortis” meaning “strong”. Thus psychofortology is referred to as “strength psychology” and is an antonym for pathology (Crous, 2007; Strümpfer, 2005).

Historically, the “strengths” paradigm has existed in various personality theories, in which personality growth was emphasised. Psychologists and psychiatrists who have been influential in the realm of this paradigm of psychology and who made contributions to what is also referred to



as positive psychology during the first 80 years of the twentieth century, in one way or another, were Carl Jung, Gordon Allport, Carl Rogers, Victor Frankl and Abraham Maslow (Strümpfer, 2005). Martin Seligman (2000) is considered the father of positive psychology (Smith, 2007). In their research, Breed, Cilliers & Visser, (2006, p. 74) cited Seligman & Csikszentmihalyi's (2000) definition of positive psychology as "the scientific study of ordinary, positive, subjective human strengths, virtues, experiences and functioning" Another definition of positive psychology presented by Sheldon and King (2001, as cited in Compton, 2005, p. 3) is: "... nothing more than the scientific study of ordinary human strengths and virtues." Compton (2005, p. 3) concludes that positive psychology "studies people and what they do right and how they manage to do it. This view includes what they do for themselves, for their families, and for their communities."

Research suggests that as Martin Seligman (2000) is viewed as the father of positive psychology, so is Antonovsky (1987) seen as a major contributor to psychofortology (as cited in Breed et al., 2006). The progression of psychofortology essentially began with Antonovsky's salutogenic (strengths) model (Van Niekerk & Prins, 2001). From the year 2000, much development in psychofortology research has been done in South Africa, particularly in organisational psychology (Coetzee & Cilliers, 2001).

South Africans, Wissing and Van Eden (1997, as cited in Crous, p. 3) used the term "fortology" to create "psychofortology" to suggest a new sub-discipline. A discipline where not only psychological well-being should be studied, but also to understand the nature of psychological well-being, the way it manifests and the ways in which it can be used to enhance and develop the capacities of individuals.

The basic premise of psychofortology is that health and growth psychology exist on the opposite spectrum of sickness and pathology of an individual (Coetzee & Cilliers, 2001). Spady (2005) proposes that the aim of psychofortology is to bring about a change in the focus of psychology, from concentrating on repairing what is awful and bad in life, to building on the qualities in life that are positive and good.

In this study, the focus is on well-being rather than ill-being. The study examines and compares the psychological well-being (indicated by self-esteem and satisfaction with life) of working mothers in relation to their marital status and shift work within the theoretical framework of psychofortology.

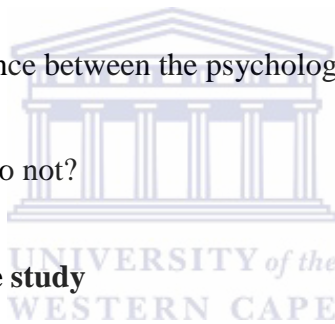
### **1.3 Research problem**

The literature suggests that single, working mothers may be more challenged than married, working mothers due to different support structures (Cairney, Boyle, Offord, & Racine, 2003). Research also shows that married women have higher psychological well-being than single mothers, including those who cohabit with their partners (Kim & McKerney, 2002; Reneflot & Mamelundt, 2011 & Brown, Balunda & Lee, 2005). In addition, the literature suggests that working women are negatively influenced by long work hours, specifically shift work hours (Losoncz, & Bortolotto, 2009; Dziak, Janzen & Muhajarine, 2010). In South Africa, and specifically in the Western Cape, call centres are growing rapidly and the work environment is a stressful one since employees often have to work shifts (Werner, 2006, p. 1). The stressful call centre environment could influence the psychological well-being of employees in general. Hence, this study examines and compares the psychological well-being of single and married

working mothers who work in a call centre environment. The study also compares the psychological well-being of those mothers who work shifts with those who do not work shifts.

#### **1.4 Research questions**

1. What is the psychological well-being of single and married mothers who work in a call centre environment?
2. Is there a significant difference between the psychological well-being of single and married mothers who work in a call centre environment?
3. Is there a significant difference between the psychological well-being of mothers who work shifts and those who do not?



#### **1.5 Aims and objectives of the study**

##### **1.5.1 Aim of the study**

The aim of this study was to examine and compare the psychological well-being of married and single mothers who work shifts and of those mothers who do not work shifts in a call centre environment.

##### **1.5.2 Objectives**

The objectives of the study were to:

1. determine the psychological well-being (indicated by self-esteem and satisfaction with life) of single and married mothers who work in a call centre environment;

2. compare the psychological well-being (indicated by self-esteem and satisfaction with life) of single and married mothers who work in a call centre environment;
3. compare the psychological well-being (indicated by self-esteem and satisfaction with life) of mothers who work shifts and those who do not work shifts;
4. determine the interactional effects of psychological well-being (indicated by self-esteem and satisfaction with life) between the groups.

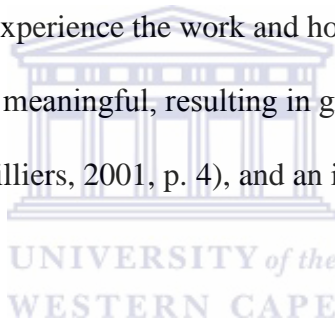
## **1.6 Hypotheses**

1. Married mothers who work in a call centre environment will have higher psychological well-being (indicated by self-esteem and satisfaction with life) than single mothers who work in a call centre environment
2. Mothers, who do not work shifts in a call centre environment will have higher psychological well-being (indicated by self-esteem and satisfaction with life), than those mothers who do work shifts in a call centre environment.

## **1.7 Significance of the study**

Work occupies an important and prominent place in the daily lives of most adult women, as does family life. It is important then, that for mothers to function at an optimum level, they need to be able to cope effectively in both arenas. Insights on the influence of working shifts on the psychological well-being of mothers may help to enhance those working mothers' coping strategies as well as help to improve their psychological well-being. For the company itself, where the majority of staff are females, of child-bearing age and/or with young children, these

insights could help line managers to understand the extent of coping skills, the level of satisfaction and self-esteem in the mothers themselves and how shift work influences their psychological well-being. The extent of the psychological well-being could influence productivity, absenteeism and late-coming issues. The company has an extensive wellness centre, with two counsellors. The primary function of the counsellors is to help employees manage their situations more effectively and this includes helping the employees and line managers by pointing them to resources that may help them if they are battling with the work/home life balance. Therefore, the relevant results will be generated back to the company and could lead to improved wellness structures being put in place. Given the necessary skills and coping mechanisms, mothers will experience the work and home environments as “comprehensible, manageable, and meaningful, resulting in greater commitment” toward the company and family (Coetzee & Cilliers, 2001, p. 4), and an improved sense of psychological well-being.



## **1.8 Definition of terms**

### **Call centre**

Gilmore (2001, as cited in Werner 2006, p. 4) defines a call centre as a “physical or virtual operation in an organisation in which a managed group of people spend most of the time doing business by telephone, usually using a computer-automated environment”.

### **Shift work**

Shift work is the time worked by individuals/employees which does not conform to the standard hours of 8 a.m. – 4 p.m. / 5 p.m. (Grosswald, 2003).

## **Single mothers**

Single-parent families mostly consist of single mothers and their children. Single parenting is as a result of widowhood, divorce and children born outside of marriage. (Cairney, Boyle, Oxford & Racine, 2003)

## **Psychological well-being**

Psychological well-being refers to how people evaluate their lives cognitively and affectively, in terms of satisfaction. (Diener, Emmons, Larson & Griffin, 1985) Therefore psychological well-being is a subjective construct base on a range of psychological needs that are being met or not. It is also regarded as a construct that has many facets involving the self introspectively as well as the self pertaining to interpersonal relationships (Wissing & Van Eeden, 2002).

## **Satisfaction with life**

Satisfaction with life is referred to the way an individual cognitively judges, appraises or assesses quality of life incorporating a set of standards or criteria that the individual has imposed themselves. (Diener et al., 1985; Pavot & Diener, 1993, p. 164)

## **Married mothers**

In this paper, married mothers pertain to those mothers who were married by customary law or legally according to the South Africa, Marriage Act, such as the Marriage Act of 1961, (Act no. 25), the Customary Marriage Act of 1998, (Act no. 120), and the Civil Union Act of 2006, (Act no.17). These laws indicate that married mothers are women who have entered into legal agreements and civil partnerships between persons who share a binding, legal contract.

(Government Gazette, 2011:32). Those mothers who are cohabiting with their partners are viewed as single mothers as these were registered as single on the HR system with the organisation where the study was conducted.

## **1.9 Overview of chapters**

### **Chapter 1: Introduction**

Chapter 1 is an introduction and refers briefly to the influence of working shifts in a call centre, on the psychological well-being of mothers, because work occupies an important and prominent place in the daily lives of most adult women, as well as family life. It also provides the background and sets the framework for the study. The framework is the problem statement, aims and objectives that guide the research study. This chapter also provides an outline of the thesis.

### **Chapter 2: Conceptual framework**

The second chapter presents a literature review of the major concepts of the study. It provides the theoretical support and a review of the available research conducted in this study. Hence, research literature on psychofortology, the call centre environment, shift work and working mothers, with particular reference to the differences experienced by single and married mothers, is presented in this chapter.

### **Chapter 3: Methodology**

Chapter 3 focuses on the methods used in conducting the research. Specific attention is paid to how the study was conducted with regard to the aims, objectives, hypothesis, sample, measuring instruments, data collection and analysis procedures and the ethical considerations of the study.

## **Chapter 4: Results**

Chapter 4 presents the results of the study by using tables and graphs, together with the presentation of descriptive and inferential statistics. The results of the study in this chapter follow on from the analysis of the study as discussed in Chapter 3.

## **Chapter 5: Discussion, conclusion and recommendations**

Chapter 5 provides the conclusion to the study in the form of a discussion of the main findings and these are integrated with research done previously as outlined in Chapter 2. This chapter also provides limitations apparent in the study and some recommendations for further study on the topic.





# **CHAPTER 2**

## **CONCEPTUAL FRAMEWORK**

### **2.1 Introduction**

This chapter presents a review of literature with regard to the theoretical framework that underpins this research, namely psychofortology, also referred to as psychological well-being. This will include the development of psychofortology up to and including the influence of South African psychologists in the area of psychological well-being. This chapter also includes a review of literature regarding the two constructs of psychological well-being (namely satisfaction with life and self-esteem) being measured in this study. Also discussed in this chapter are the following: a review of the available literature of the history and nature of call centres; literature pertaining to working mothers, specifically comparing single and married working mothers; the influence of marital status on psychological well-being; and shift work and its influence on psychological well-being;.

### **2.2 Psychofortology, positive psychology and psychological well-being**

A review of the literature shows that the theory surrounding the concept of psychological well-being has been referred to in different ways at various stages, but all share the same basic premise. That premise focuses on the wellness or strengths of individuals, as opposed to the pathology of individuals. This creates a paradigm shift from the predominantly pathogenic approaches which had their focus on physical and mental illnesses and weaknesses of individuals, to the strengths and wellness approach that focuses on the strength capabilities of individuals (Wissing & Van Eden, 2002).

### **2.2.1 Development of psychological well-being**

Historically, various personality theories have existed, in which personality growth was emphasised by relevant psychologists and psychiatrists who were influential in wellness approaches. However, the scientific focus on psychological well-being perspectives and subsequent models for psychological intervention, was more intensely researched and popularised just prior to and after the turn of the century (Wissing & Van Eeden, 2002).

Internationally, Martin Seligman (2000, as cited in Smith, 2007) is considered the “father” of positive psychology. He developed this theory after an epiphany experience he had during an interaction with his daughter. Together with Csikszentmihalyi, they have also been instrumental in the shift away from pathology and mental illness, towards mental health and wellness (Smith, 2007). Seligman and Csikszentmihalyi (2000) refer to three specific areas of human experience that contribute to a better understanding of the scope of positive psychology. These three areas are specific to the subjective level, the individual level and the group or societal level of human beings. The subjective level addresses the “subjective states” or positive emotions such as happiness, satisfaction with life, relaxation, joy, love, intimacy and contentment, including the level of energy, confidence and vitality of the individual. Positive subjective states would also include the thoughts that individuals have of themselves and regarding their future and how optimistic and hopeful they are about their future (Seligman & Csikszentmihalyi, 2000). The individual level focuses on the positive traits which are specific to existing individual character strengths in terms of endurance, persistence, honesty, wisdom, creativity and the pursuit of excellence which will persist and endure in the individual over time and will be able to be measured historically (Seligman & Csikszentmihalyi, 2000). Lastly, positive psychology looks at positive institutions such as healthy families, healthy work environments and positive

communities, and how these can be created, developed and maintained to support society positively (Seligman & Csikszentmihalyi, 2000).

Literature shows that the progression of the psychofortology movement essentially began with Aaron Antonovsky (1987, cited Van Niekerk & Prins, 2001) and his salutogenic model. This model promotes the notion that psychological strengths of individuals lead to an enhanced quality of life and the prevention of pathology (Antonovsky, 1996). Antonovsky's salutogenic model rests on two major concepts. These concepts are sense of coherence (SOC) and generalised resistance resources (GRR) (Antonovsky, 1996). According to Sullivan (1993, as cited in Van Niekerk & Prins, 2001) the presence of a strong SOC in a crisis or in pressurised and stressful conditions will allow the individual to mobilise his/her GRRs and therefore enable effective coping strategies to resolve the crisis.

According to Guse (2010, p. 1), psychofortology has considerably escalated in momentum in the last decade and the author describes psychofortology as the “movement towards acknowledging, understanding and enhancing the positive aspects of psychological functioning.”

In the South African context, as of 2000, much development in psychofortology research has been done. Strümpfer (1995) built on Antonovsky's (1987, as cited in Van Niekerk & Prins, 2001) salutogenic model, which became known as the fortigenic model. The focus of this model was on competence and strength. Fortigenesis literally means a “science of strengths” (Strümpfer, 2005a).

Many constructs in psychofortology have now been used in South African organisations in the form of measuring and applying counselling to employees, as well as in the development of the employees and/or the organisations themselves (Breed, 1997; Cilliers, 2001; 2002; Cilliers &

Coetzee, 2003; Cilliers & Kossuth, 2002; 2004; Cilliers, Viviers & Marais, 1998; Jackson, 2004; Johnson, 1993; Kossuth & Cilliers, 2002; Linley & Joseph, 2004; Storm, 2002; Viviers, 1996; Wissing & Van Eeden, 2002, in Breed et al. 2006).

South Africans, Wissing and Van Eeden (2002) also conducted research on psychological well-being using the theoretical constructs of salutogenesis (Antonovsky, 1987, 1991) and fortigenesis (Strümpfer, 1990, 1999, as cited in Wissing & Van Eeden, 2002). The research involved participants across all cultures, sexes and ages. In response to this research that they introduced the term “psychofortology” to the concept of positive psychology, using the fortigenic/strengths paradigm to emphasise psychological strengths or well-being (Wissing & Van Eeden, 2005). Hence, Van Niekerk and Prins (2001) conclude that the term “psychofortology” was derived from Strümpfer’s strengths science term, “fortigenesis” (1995, as cited in Van Niekerk & Prins, 2001). Wissing and Van Eeden (1997, as cited in Van Niekerk & Prins, 2001, p. 40) discuss affect, cognition and behaviour, as constructs of well-being. “Affect” refers to feelings and the way in which positive feelings overpower negative feelings. “Cognition” refers to how the individual perceives life, and whether it is comprehensible and meaningful. Lastly, “behaviour” refers to how the individual accepts challenges without avoiding the problems related to challenges and engages with interest in work activities. Furthermore, psychological well-being is greater if there is an absence of anxiety, depression and the presence of good interpersonal relationships and a sound self-image (Van Niekerk & Prins, 2001, p. 40).

Pretorius (2004, p. 9) contributed to psychofortology in South Africa, when he originally conducted research in 1998. Pretorius also based his work on the concepts of salutogenesis (Antonovsky, 1987, as cited in Antonovsky, 1996) and fortigenesis (Strümpfer, 1995, as cited in Strümpfer, 2005) in the quest to answer the question “where does strength come from?” Out of

this research, Pretorius (2004) developed the term “fortitude” to describe an individual’s ability to “manage stress and stay well” and the individual is able to do this as a result of his/her ability to appraise the self and also as a result of support from family and others. Amongst the variables that Pretorius used in his research, one was the construct of self-esteem. (Pretorius, 2004)

### **2.2.2 Psychological well-being and self-esteem**

Self-esteem is a component of the self-concept. According to Rosenberg (1989) it is as important a part of the self-concept as are other aspects such as self-efficacy and self-identity. Rosenberg’s (1989) definition of self-esteem states that self-esteem is the individual’s complete perception of his / her thoughts and feelings in regard to the self and these thoughts and feelings may either be favourable towards the self, or unfavourable.

A classic definition of self-esteem is provided by Coopersmith (1967, p. 4) as follows:

The evaluation which the individual makes and customarily maintains with regard to himself: it expresses an attitude of approval and indicates the extent to which an individual believes himself to be capable, significant, successful and worthy. In short, self-esteem is a personal judgment of the worthiness that is expressed in the attitudes the individual holds towards himself.

Heatherton and Wyland (2003) consider self-esteem to be the attitude that individuals perceive towards themselves. It is an emotional response that will affect their belief in themselves and will influence their relationships, abilities and skills and their perception of their future. Self-esteem has different dimensions and has been conceptualised and influenced by many different constructs. Heatherton and Wyland (2003, p. 223) maintain that self-esteem is derived from three main components – performance, physical and social components.

High self-esteem is said to be related to happiness and research shows that those individuals who possess high self-esteem appear to be happier, cope better with challenges and negative situations and appear to be more successful in their work environment (Heatherton & Wyland, 2003). High self-esteem also equips individuals to engage positively in inter-personal relationships and appears to help them apply meaning and value to their lives more effectively (Ryan & Deci, 2000). Low self-esteem on the other hand, is associated with poor coping skills, unhappiness and depression and even with individuals with social problems, and has an influence on societal norms (Heatherton & Wyland, 2003).

A study done to determine the extent of low self-esteem across a spectrum of psychological disorders, found that low self-esteem played a significant role in disorders like major depressive episodes, eating disorders and substance abuse and the researchers proposed that there was a definite link between low self-esteem and the onset of psychiatric disorders (Silverstone & Salsali, 2003). According to Martin-Albo, Nunez, Navarro and Grijalvo (2007), it was found that the construct of self-esteem was an essential part of studying psychological research, because it was associated with a number of other aspects, including psychological-well-being.

A number of self-esteem scales have been designed. Of these, Heatherton and Wyland (2003) consider the Rosenberg self-esteem scale (1965) to be one of the top four for measuring self-esteem. This scale was developed by Rosenberg in 1965 to measure adaption of youth in a state-wide study (Bagley, Bolitho & Bertrand, 1997). The scale was then used by Kaplan (1980, as cited in Bagley et al., 1997) in an important research study of the “predictive power” of low self-esteem of youth entering high school as a pre-cursor for delinquent behaviour such as teen pregnancies and substance abuse in later adolescence. Since its initial use, this has become one of the most extensively used self-esteem instruments across the world and has been used in

cross-cultural studies. It has also been successfully translated and adapted into different languages (Martin-Albo et al., 2007). Schmitt & Allik (2005) state that Rosenberg's self-esteem scale (RSES) has in fact been translated into 28 languages and administered in 53 nations to 16 998 participants effectively, with scores that correlated and did not vary in structure, supporting the cross-cultural reliability. In South Africa, Pretorius (1991) used RSES with a sample of 658 undergraduate students at a university in Cape Town with an internal consistency of 0.77

According to Martin-Albo et al. (2007, p. 459), the RSES is a “uni-dimensional instrument elaborated from a phenomenological conception of self-esteem that captures subjects' global perception of their own worth by means of a 10-item scale, 5 positively worded and items and 5 negatively worded items.” Scores below the mid-point suggest that the individual presents with low self-esteem, although there is no specific “cut-off” point and there are no specific guidelines attached to the actual score. It is merely that the higher the score, the higher the self-esteem of the individual will be (Rosenberg, 1989).

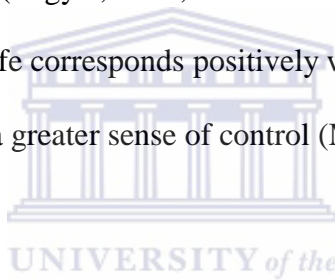
### **2.2.3 Psychological well-being and satisfaction with life**

Psychological well-being refers to how people evaluate their lives cognitively and affectively in terms of satisfaction (Diener et al., 1985; Pavot & Diener, 1993, p. 164). Ed Diener, according to Larson and Eid (2008), first published work on subjective well-being in 1984 after years of research and this work became the cornerstone of research of subjective well-being in the United States and around the world. Continued research showed that subjective well-being “refers to affective experiences and cognitive judgements” (Larson & Eid, 2008, p. 4). More specifically, subjective well-being and satisfaction with life are measures of the quality of an individual's life. However, because satisfaction with life refers more to “global judgement of life as a whole” it is

considered to be the cognitive component of subjective well-being. The affective component of subjective well-being refers to “ongoing reactions to events” (Diener 1995, p. 104, as cited in Murphy 2006, p. 34)

Requiring a means of measuring subjective well-being (both cognitive judgements and affective experiences), led to the development of the satisfaction with life scale, (Diener et al, 1985).

Furthermore, research shows that satisfaction with life is an important value of individuals and the most stable component of subjective well-being (Diener and Larsen, 1993, as cited in Murphy, 2006, p. 104). Literature also shows that the higher the individual’s satisfactions with life, the higher their positive affect (Argyle, 1987, as cited in Murphy, 2006). It is also shown that a high level satisfaction with life corresponds positively with other positive traits such as higher self-esteem, less stress and a greater sense of control (Meyers, 1992, as cited in Murphy, 2006).



A definition of satisfaction with life is the “individual’s overall appraisal of his/her quality of life which incorporates and transcends the immediate effects of life events and mood states” (Pavot & Diener, 1993, p. 276). Research on satisfaction with life reveals that a number of key aspects of the individual’s cognitive constructs are related to satisfaction with life. These constructs include the individual’s emotional intelligence, self-esteem, locus of control, presence or absence depression and other health-related constructs (Murphy, 2006).

Satisfaction with life is most influenced by social relationships and those individuals who have close supportive friends and family will have higher psychological well-being. This can also be said for an individual’s life goals and the achievement or lack of achievement of these goals in life (Diener, 2006). Personal factors such as spiritual, leisure, learning and health can either be



powerful sources of life satisfaction or dissatisfaction, depending on circumstances (Diener, 2006). Satisfaction with life is not a constant construct, but is dynamic, changing with time, work changes, dealing with loss or gain, changing relationships and achievement (or lack of achievement) of value-driven goals (Diener, 2006). However, when measuring satisfaction with life, the instrument used needs to be stable enough to measure satisfaction, in spite of changes in emotion, yet be sensitive enough to be able to determine or detect when there are life changes such as a death (Pavot & Diener, 1993).

It is also important to note that when work life or the role that an individual fills in life is meaningful, satisfaction with life will be higher (Diener, 2006). The literature shows that work also has a significant influence on psychological well-being and in the context of this research the specific work environment being the call centre environment.

## **2.3 Conceptualising the call centre work environment**

### **2.3.1 Definition of call centres and the growth in the call centre industry**

Healy and Bramble (2003) describe call centres where human resources, technology and well-designed business processes are integrated. A call centre differs from other business sectors or industries by the mere fact that the work required to be done is technologically based, therefore employees and customers can interface at different geographical places for transactions to take place (Healy & Bramble, 2003). The call centre agent has direct contact with the customer telephonically, via inbound or outbound calls – often using predictive dialing systems. At the same time as the call takes place, the agents are entering information into computers which is relevant to the transaction, which is available to be scrutinised and monitored by line managers (Hauptfleisch & Uys, 2006).

Call centres have seen phenomenal growth worldwide (Boonzaier & Boonzaier, 2008). According to research, Hauptfleisch and Uys (2006) found that the development in telecommunications and the integration of this together with information technology, has contributed to enormous call centre growth all over the world. Boonzaier and Boonzaier (2008) attribute call centre growth to the paradigm shift within the economic environment, from a focus on producing goods, to one of providing services. Furthermore, the service provided by call centres has become profitable and competitive because they provide quality service that is efficient and is also cost-effective.

Since the 1980s, call centres have become more and more globalised and are being increasingly found outside of the wealthy economic countries. The reason for this is the availability of large numbers of skilled, but cheap labour available in countries like India, the Philippines and in South Africa (Burgess & Connell, 2004, as cited in Hauptfleisch & Uys, 2006, p. 1). India and the Philippines are perceived as the “prototypical countries for call centre industries” in the way that they provide unique and extensive service to international markets (Boonzaier & Boonzaier, 2008).

### **2.3.2 Conceptualising call centres in South Africa**

The 1970s saw the first appearance of call centres in South Africa and by the 1990s the call centres had “mushroomed” because of the vast improvement in computer technology and because the cost of telecommunications had become more reasonable (Benner, Lewis & Omar, 2007; Boonzaier & Boonzaier, 2008). Call centres in South Africa, when they first emerged, were created to serve the domestic market, but quickly developed into serving an international market during the 1990s, with the explosion of call centres all over the world (Boonzaier &

Boonzaier, 2008). According to Carrim, Basson & Coetzee (2006, as cited in Boonzaier & Boonzaier, 2008), South African call centres have seen a growth rate of 35% since 1996. By 2004, 390 million rands had been invested by foreign companies in the Western Cape alone (Sakeredaksie, 2004, as cited in Boonzaier & Boonzaier, 2008). It was predicted that the number of positions available for call centre agents would triple from that date to 2010 because of a number of factors. These factors included: “affordable labour, high unemployment, a time zone that is line with Europe, good language skills and accent that is relatively neutral” (Boonzaier & Boonzaier, 2008, p. 1) South Africa, therefore, is now part of this global phenomenon and South African call centres are created to be able to provide a service 24 hours a day, 7 days a week all year through. Research conducted by Hauptfleisch and Uys (2006) states that the primary benefit of a call centre is its cost effectiveness, saving customers time and money to address queries, problems and sales of products. In fact, South Africa is recognised as having world class status in the call centre arena and has therefore become the preferred country for these types of centres (Van Gass, 2003, as cited in Hauptfleisch & Uys, 2006).

A study conducted by Benner et al. (2007) shows that a number of industries include established call centres, including telecommunication companies, insurance companies and most prominently, the financial and banking industry. The workforce percentage of call centres in South Africa is largely made up of females, therefore the call centre industry tend to employ more women than men. According to Belt, Richardson and Webster (2002), the call centre workforce in the United Kingdom is also mostly made up of women. Belt et al. (2002) posit that women are more often employed in service-orientated companies, like call centres, because of their feminine social skills and communication skills. It was also stated that women seem to cope

better with the monotonous, regimented type of work that tends to make up the nature of call centre environments. (Belt et al., 2002)

The Western Cape is experiencing the greatest growth in the call centre arena (Werner, 2006, p. 1). Despite the growth, benefits and cost effectiveness of call centres, they are not devoid of problems and agents who work in these centres experience are constantly under pressure to meet the demands and expectations of their employers (Werner, 2006).

#### **2.3.4 Call centres and psychological well-being**

Work plays a significant role in the psychological well-being and functioning of individuals. Tait, Padgett and Baldwin (1989, as cited in Prag, 2007) found that there is a definite relationship between job satisfaction and life satisfaction. Over the last couple of decades, psychological well-being has moved from the focus on individual psychological well-being to the work environment. (Basson & Rothmann, 2001; Cilliers & Kossuth, 2002; 2004; Cilliers, Viviers & Marais, 1998; Jackson, 2004; Rothmann, 2002; Storm, 2002, as cited in Breed et al., 2006). The focus on psychological well-being in the work arena has provided and facilitated a better idea of how to conceptualise and grow the psychological well-being of both employers and employees. It has also facilitated coping with the demands, such as change, in the work environment and is being used in the development and the management of the performance of employees (Breed et al., 2006).

When challenges arise at work, particularly where time and skills employment was found to be overwhelming, the outcome is stress and anxiety. However, if the work environment is predictable and manageable, if the employee has “a voice” and has the opportunity to participate in decisions that are made, the psychological well-being of the employee is higher (Breed et al.,

2006). Research shows that when there is better ego development, higher self-esteem and higher self-actualisation, levels of autonomy are higher and levels of controls and measures that are coercive in nature are lower. In the work environment, the greater the consistency of the self and the greater the persistence to achieve goals, the greater the individual's satisfaction at work will be, with less boredom (Knee & Zuckerman, 1998, as cited in Smith, 2007). Antonovsky's term, sense of coherence (SOC), in his salutogenic model (Antonovsky, 1996) is a construct used for measuring psychological well-being. SOC is the ability to make sense of events, the ability to mobilise resources to help deal with work stressors and then to have the motivation to cope and be involved (Van Niekerk & Prins, 2001). Hence, it was found that employees who display a strong sense of coherence display positive behavioural characteristics, even in a stressful work environment. Examples of these positive behavioural characteristics are the "absence of burnout, a good self-esteem, satisfied with life, extroversion, independence, conscientiousness, agreeableness and social support" (Barnard, 2001; Basson & Rothmann, 2001; Boyle, Grap, Younger & Thornby, 1991, as cited in Breed et al., 2006, p. 75). Luthans (2002, p. 698) argues that unfortunately, more attention has been paid to problems, deficiencies and dysfunctions of employees and managers in the work environment, as opposed to developing strengths and to the enhancement of psychological capacity to improve performance and to develop.

According to Boonzaier & Boonzaier (2008), most call centres have been established according to Taylorist principles. "Taylorism" refers to the scientific management approach that was implemented by Frederick Taylor, to bring order and structure after the Industrial Revolution (Hingst & Lowe, 2008). Taylorism's main objective is described in Taylor's own words (1911, p. 39, as cited in Torvatn & Dahl-Jørgensen, 2003, p. 4) as: "The most prominent single element in modern scientific management is the task idea. The work of every workman is fully planned

out by the management at least a day in advance”. According to Peaucelle (2000, p. 461 as cited in Hingst 2006, p. 2) call centres resemble Taylorian workshops in the way that they are structured to achieve maximum output from the employees, providing few breaks with high deadlines/targets to be met. The employees of call centres work in teams yet are expected to work largely in isolation from their colleagues (Hingst, 2006). The employees work in a highly structured, monitored environment where there is little room for flexibility, both within the structure of the business itself and in the way call centre agents are expected to manage their tasks (Boonzaier & Boonzaier, 2008). According to Hingst (2006), high levels of stress are induced by a work environment that is very structured and closely monitored. The work that the call centre agents do is described as “repetitive and monotonous, limited by technology and one that has little room for variation and problem-solving” (Torvatn & Dahl-Jørgensen, 2003). It is for this reason that they are frequently described as the “electronic sweatshops of the new millennium” (Werner 2006, p. 1). Research shows that low employer well-being in a call centre can result in higher absenteeism and high employee turnover, amongst other financial implications (Workman and Bommer, 2004, as cited in Hauptfleisch & Uys, 2006).

Findings from some of the studies cited by Grebner et al. (2003) indicate a number of complaints varying from psychosomatic problems, psychosocial problems, physiological problems and depression for various reasons, ranging from poor job satisfaction, “lack of complexity”, the stressful nature of the types of calls that are handled, all relate to the stress of the shift work that is required in a call centre.

Research studies have shown that a call centre is an environment that is associated with undesirable work hours, controlled with little or limited autonomy, both emotionally and physically intense and an environment that exerts pressure on performance and high surveillance

(Taylor et al., 2003; Barnes, 2006; Gavhead & Toomingas, 2007; Toomingas & Gavhead, 2008, as cited in Bohle, Willaby, Quinlin & McNamara, 2010). In the study conducted by Bohle et al. (2010) it was found that work-life conflict is created by the employees' lack of control over work schedules, combined with a work environment that is stressful and intense, which in turn produced evidence of both fatigue and related psychological symptoms. Performance-monitoring in call centres is a "pervasive feature of everyday life in call centres" and is quantitative in nature and done by monitoring electronically by means of times logging on and off systems and quality of calls and has been related to anxiety (Holman, Chissik & Totterdell, 2002). Holman et al. (2002) states low employee well-being in call centres is associated with low control over procedures, performance-monitoring and lack of line manager support.

When work life or the role that an individual fills in life is meaningful, satisfaction with life will be higher (Diener, 2006). In the context of work and self-esteem, research shows that low self-esteem also has a negative impact on career and productivity (Heatherton & Wyland, 2003). South African organisations have begun to use the constructs of psychological well-being in employee counselling, as well as in the development of individuals and whole organisations. It also appears to be effective in the South African context where there are high levels of stress, burnout and depression in a "work environment characterised by scarcity of job opportunities" (Breed, 1997; Cilliers, 2001; 2002; Cilliers & Coetzee, 2003; Cilliers & Kossuth, 2002; 2004; Cilliers, Viviers & Marais, 1998; Jackson, 2004; Johnson, 1993; Kossuth & Cilliers, 2002; Linley & Joseph, 2004; Storm, 2002; Strümpfer, 1990; 1995; Viviers, 1996; Wissing & Van Eeden, 1994; 1997a; 1997b, Wissing & Van Eeden, 2002, as cited in Breed et al. 2006)

Stress is perceived to be a primary factor in terms of dysfunction and research shows that the nature of shift work is stressful in itself and creates an imbalance in work-life function (Werner,

2006). Studies undertaken in call centres to examine the correlation between shift work and stress in the call centre environment, have related shift work to burnout and other dysfunctions including emotional dysfunction, in the call centre environment (Werner, 2006).

## **2.4 Conceptualising marital status of mothers and psychological well-being**

### **2.4.1 Definition of single and married mothers**

When comparing the psychological well-being of single and married working mothers, it is important to define what single mothers are as opposed to married mothers. The Government Gazette (2011, p. 32) defines marriage according to the legal contract that exists between spouses as follows: “Marriage is safeguarded by legislation, such as the Marriage Act of 1961 (Act no. 25), the Customary Marriage Act of 1998 (Act no. 120), and the Civil Union Act of 2006 (Act no.17).” These laws indicate that married mothers are women who have entered into legal agreements and civil partnerships between persons who share a binding, legal contract (Government Gazette, 2011, p. 32). Therefore, in this research, married mothers were those that are legally married, according to South African law, and those mothers who were married by customary law. Mothers that were cohabiting with their partners were regarded as single according to the following description, as they were registered on the HR system of the company as unmarried. Single mothers, on the other hand, are described as a single parent (mother) and their child or children. Single parenting is as a result of widowhood, divorce and children born outside of marriage (Cairney, Boyle, Oxford & Racine, 2003).



## **2.4.2 Family constructs**

Both globally and in South Africa, over the last decades, changes in the structure of families have been quite considerable, specifically with regard to those families in which the couples do not marry, but choose to live together (Government Gazette, 2011; Liu et al. 2011). The number of cohabiting couples who have and raise children has increased considerably. Casper and Bianchi, (2001, as cited in Liu et al., 2011) refer to cohabiting couples as one of the most noticeable as changes within the American family structure. In South Africa, the Green Paper released in the Government Gazette (2011) describes the many types of family constructs that exist in South Africa. These include three-generation families (grandparent with parent(s) and child(ren)), nuclear families, single-parent families, grandparent/child families, cohabiting families, child-headed families, siblings only families and same-sex parent families. The Green Paper (Government Gazette, 2011) also emphasised the centrality and importance of the family, particularly the way it influences social constructs within society. In South Africa, the nuclear family was the most common type of family, followed by single-adult families and three-generation families. Of the families that were female-headed, 54% were three-generational families or single-parent families. The nuclear family was the most common type of family in the Western Cape, at 34.88% of families. This was the highest percentage of the nuclear family, followed by Gauteng, compared to the other provinces in South Africa (Government Gazette, 2011).

## **2.4.3 Comparison of single and married working mothers**

Cairney et al. (2003) concluded from their research that single working mothers presented with more cases of depression and chronic stress than married mothers. Single mothers also appeared

to receive less social support, social involvement and friendships that married mothers and that single mothers show a higher predisposition to psychiatric and physical illness than married mothers. Research regarding single versus married working mothers to date has been largely concerning the employment status and physical health of mothers, as opposed to the influence of work on their psychological well-being. However, Dziak et al. (2010) show in their research that when job demands are high there is a greater influence on the mother's physical and mental status. Their research also found that single working mothers had significantly higher levels of psychological stress with particular reference to financial, psychosocial and work family conflict as opposed to partnered mothers. This study also reports single mothers working more hours to meet financial constraints, than partnered mothers.

Single mothers appear to have greater stress in having to juggle work and home life in terms of responsibilities relating to both. Research has shown that emotional and instrumental supports are key resources needed to reduce the stress of work-family conflict. This is particularly reduced for working mothers who are married (Dziak et al., 2010). In addition, reports show that studies done in the USA, that single, working mothers coped better when there was assistance from the community or extended family (Dziak et al., 2010). Coetzee and Cilliers (2001) indicated in their study on coping behavior in organisations, that possible future research could include the different degrees of well-being in terms of cognitive, emotional, physical and social manifestations of wellness.

Research also showed that single parent families, specifically female-headed families presented with the highest poverty levels and that women were most susceptible to the social ills found in South Africa, poverty being the biggest problem. This seems to be exacerbated by the fact that the safety net of the role of the extended family also seems to be diminishing (Government

Gazette, 2011). In the light of this study, where marital status of working mothers is concerned, one has to bear in mind the influence that the family structure may have on the psychological well-being of the mother.

Mothers who cohabit with their partners could be viewed as married mothers; however, from the literature it can be seen that mothers who are married as opposed to cohabiting with their partners, have a higher psychological well-being (Kim & McKerney, 2002; Reneflot & Mamelundt, 2011; Brown, Balunda & Lee, 2005; Liu et al, 2011).

Studies conducted globally show that there is a distinct difference between the psychological well-being of married mothers compared to single mothers, including those single mothers who cohabit with their partners. Diener, Gohm, Suh and Oishi, (2000) conducted a study which examined the relationship between subjective well-being and marital status in different cultures. Subjective well-being was found to be high in marriage. However where strong emotional and social support from extended family members existed, this could substitute for the emotional support found in a marriage relationship. The assumption was that women who cohabit with their partners would enjoy equal support to their married counterparts. But numerous studies have shown that women living in cohabiting relationships have less psychological well-being than married women. In fact, these women displayed more depression symptoms than married women (Brown, Balunda & Lee, 2005).

Benson (2006) analysed data collected from new parents in the United Kingdom, in the Millennium Cohort Study. This is said to be the most “up-to-date, large-scale panel survey of new parents.” Analysis showed that there was a big difference between the stability of married couples and unmarried couples, particularly in the early stages of parenting. Furthermore, it was

found that the risk of family breaking apart between married couples and those living together (cohabiting) differed greatly, so that “even the poorest 20% of married couples are more stable than all but the richest 20% of cohabiting couples.”

A study conducted by Reneflot & Mamelundt (2011), comparing the marital status and psychological well-being of married couples with cohabiting couples in Norway, found that divorced cohabiting people presented as more likely to have a problem with alcohol and more likely to have a history of depression, than married people. When examining the protection perspective of marriage, Kim & McKerney (2002) found that the protective effects of marriage were greater in married relationships than in cohabiting relationships. This study also confirmed that marital status has strong effects on psychological well-being.

In the United States, where the number of parents who work shifts (non-standard work hours) is increasing, studies conducted by Liu et al. (2011) compared differences between the psychological well-being of cohabiting and married parents working non-standard hours. Liu et al. (2011) found in their research that those parents who were married had a more positive experience working these hours than cohabiting parents. Furthermore, Liu et al. (2011) found that there was greater work-life conflict and lower levels of well-being for cohabiting parents, which could be attributed to the fact that cohabiting parents have greater financial needs than married parents.

Research conducted by Liu et al. (2011) also found that cohabiting parents had less family support and their access to social resources were less than their married counterparts and this created problems with child-care arrangements, indicating that cohabiting parents have fewer social resources than married parents. Therefore one can assume from the literature that family

constructs influence the psychological well-being of mothers, and that the psychological well-being of married mothers and mothers who are single but live together with their partners, is different. It is for this reason that in the current study, when comparing the psychological well-being of married to single mothers, cohabiting mothers were placed in the “single mother” category.

Liu et al. (2011) examined the relationship between married and cohabiting parents (mothers and fathers) well-being and non-schedule work. But little has been written on the psychological well-being of only mothers who work shifts in a call centre environment and the influence that this and their marital status will have on their psychological well-being.

## **2.5 Conceptualising working mothers and psychological well-being**

Research conducted by Herbst et al. (2007), found that the well-being of mothers who work can be affected, particularly with regard to the difficulties related to the incompatibility of the two roles that they function in within the work context, and within the home context. Literature shows that having to cope with these dual roles does lead to increased stress, particularly because these mothers are predominantly still responsible for the care of the children and domestic responsibilities in the home (Chusmir & Durand, 1987; Sears & Galambos, 1993; Vosloo, 2000, Senior, 2003, as cited in Herbst et al., 2007). Furthermore, literature shows that working women in the South African context do not only cope with the work environment and the organisational requirements, but they also have family responsibilities that exists in the context of a system of extended family and other demographic variables which may create even greater conflict.

Research conducted by Herbst et al. (2007) shows that, depending on the personality of the

mother, the greater the psychological well-being of the mother, the greater the ability to cope better with the stress and demand of her work / life roles.

Research on working mothers has focused largely on a particular aspect of the work-life balance (that is, family roles and work roles or the interaction between the two in terms of work and family strain) (Losoncz & Bortolotto, 2009). Pocock et al. (2007, as cited in Losoncz & Bortolotto, 2009) concluded in their research that there was a strong link between long work hours and poorer work-life outcomes as well as family-life outcomes. The same holds true for shift work. Longer working hours and shift work is also associated with a negative impact on personal well-being (Losoncz & Bortolotto, 2009). Alexander & Baxter (2005, as cited in Losoncz & Bortolotto, 2009) perceived that a lack of support particularly for working women has a greater negative influence, both as spouse and parent on women than on men, due to child care, care of elderly family members and the distribution of household responsibilities. In light of this, it is necessary to discover whether shift work has a greater influence on married or single mothers in terms of perceived spousal support.

Liu et al. (2011) state that as shift work schedules may interfere with family life; this in turn could affect parental psychological well-being. This is referred to as “work-family conflict”. Work-family conflict is defined by Schneider and Waite (2005, as cited in Liu et al., 2011, p. 474) as the “extent to which limited time, emotional/physical stress and strain, and high personal expectations for performance are experienced both at home and at work” and that there is a great deal of evidence to show that this leads to reduced psychological well-being (Allen et al., 2000, as cited in Liu et al., 2011). Empirical studies show that there are a number of consequences to work-life conflict, including physical and psychological manifestations, and that work- family life conflict is greater when the parent has to work shifts which are inflexible (Liu et al., 2011).

In the light of this, there is a need to for further study in the area of psychological well-being of employees in the call centre environment. Additionally, and significant to this research study is the influence of shift work in the call centre environment on the psychological well-being of single and married working mothers, as shifts may influence the availability of support structures and assistance, which in turn may influence psychological well-being.

## **2.6 Conceptualising shift work and psychological well-being**

Research shows that work pressure has intensified over the last few decades, particularly with regard to the focus on speed, quality of work and outputs. Increased competition in the work environment has led to the need for greater production therefore creating more pressure in the work environment to provide services around the clock seven days a week, each day of the month, hence the importance of shifts (Jacobs & Gerson, 2001; Schor, 1991; Smith, 1996, as cited in Perrucci et al., 2007). With the call centres providing business availability 24/7, every day of the year, the hours that employees work make shift work necessary. Shift work can be described as “the hours of employment during non-standard or alternative hours and for Saturdays and Sundays” (Perrucci et al., 2007, p. 601). Eight-hour shifts could begin at 3 p.m. and end at 11 p.m. or run from 7 a.m. to 3 p.m. for example. The shifts could last 12 hours and they may or may not rotate (Perrucci et al., 2007). Beers (2000, as cited in Perrucci et al., 2007, p. 601) defined alternative shift work as “working on other than a regular daytime schedule,” in other words, evening shift, night shift, rotating shift or split shift.

Work environments that make use of shift work, either organise their shifts on a fixed shift basis or on rotating patterns. If the shifts are fixed shifts, the employee works nights or evenings on an ongoing basis. If the shifts are rotating shifts, the shifts either alternate or are variable shifts

(Perrucci et al., 2007). According to Presser (2003, as cited in Liu et al., 2011), by 1997 as many as 70% of the American work force, with at least one partner of dual-earning couples, worked in environments that required shift work and many of these had children. The way parents' work shifts are scheduled is significant and these may affect the way the family organises its life, not only in terms of co-ordinating functions within the family, but in terms of parental role function, and parent child relationship (Barnett & Garies, 2007).

Research shows that shift work, both fixed and rotating shifts, have an effect on physical health and examples of these effects include gastrointestinal disorders, sleep problems and cardiovascular problems (Perrucci et al., 2007). Studies have shown that shift work also affects individuals' psychological well-being in a number of ways. These range from depression to psychosomatic ailments like lethargy, fatigue and burnout (Perrucci et al., 2007). In addition to the physical and emotional exhaustion, shift work can contribute to the parent feeling less successful as they have less time to spend with their children, and less time to monitor and discipline their children (Staines & Pleck, 1986; White and Keith, 1990; Presser, 1986, 1988, 1998, 2003, as cited in Liu et al., 2011).

Perrucci et al. (2007) noted that the degree of the individuals' personal resources, like sense of coherence, can play a role in the way in which the individual manages the stressors and stress of shift work and its subsequent effect on his/her psychological well-being. The same can be said for the individual's ability to choose shift options, satisfaction with remuneration and effective social support structures. Perrucci et al. (2007) specified a number of moderating variables that can influence the effect of shift work on individuals to be taken into consideration when assessing the impact of shift work on physical health, psychological well-being and family life. These variables are the type of shift worked, the nature of the job and its demands, the



individual's choices in the shift work context, marital and social support structures and the extent of the ability to exercise control and choices over the shifts. However, Bohle et al. (2010) noted that in call centre environments where employees have little control over their work schedules, specifically when limited by line managers due to the nature of the authoritarian style employed by managers in this environment, work-life conflict was greater. Furthermore, the study confirmed the relationship between psychological symptoms, fatigue and work-life conflict in call-centre environments where employees worked variable hours. Their study found that when call centre employees had greater control over their work schedules, it minimised the effect of their dissatisfaction of variable hours worked and vice versa (Bohle et al. 2010)

Liu et al. (2011) also point out that shift work does not necessarily have to influence the parent negatively. However, this only applies when shifts are flexible and when the parent has control over their shift and therefore is able to spend more time with their children. This can also be said when remuneration for shifts is good and therefore working shifts is a choice for the financial reward (Mirowsky & Ross, 2003, as cited in Liu et al., 2011).

Therefore one could argue that the literature shows that call centre work has a negative influence on psychological well-being, specifically related to pathology in the view of the evidence of stress, burnout, as well as other emotional dysfunctions, except when the agents have greater control over their hours worked and other reward variables are present.

## **2.7 Conclusion**

Chapter 2 presented an overview of the literature on psychological well-being, call centre environments, shift work and working mothers' marital status. The literature provides evidence that psychological well-being, with specific reference to satisfaction with life and self-esteem, is

susceptible to environmental and social influences of the individual's surroundings and that the work environment can compromise the psychological well-being of individuals. This was researched with specific reference to shift work in a call centre environment and to the marital status of mothers. A review of the literature shows evidence that married, working women have higher psychological well-being than single, working mothers. That is as a result of their different support structures. Research shows that married women have higher psychological well-being than single mothers, including those that cohabit with their partners. The literature suggests that working women are negatively influenced by long work hours, specifically shift work hours. Therefore, in South Africa, specifically in the Western Cape where call centres are growing rapidly and the work environment is a stressful one since employees often have to work shifts, the stressful call centre environment could influence the psychological well-being of employees in general. Hence, this study examined and compared the psychological well-being of single and married working mothers who work in a call centre environment. The following chapter presents the methodological process which had been followed.

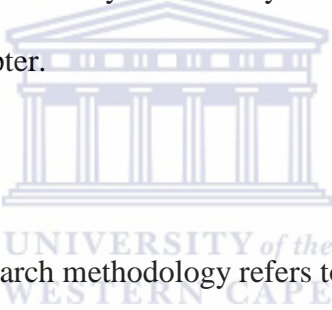
# CHAPTER 3

## METHODOLOGY

### 3.1 Introduction

This chapter provides a discussion of the methodology and procedures used to compare the psychological well-being of working mothers, marital status and shift work in a call centre environment. The methods, processes and procedures are discussed including the aims and objectives of the research, the pilot study, data collection, and the instruments used. How the data was analysed, the reliability and validity of the study and the ethical issues relating to the study are also discussed in this chapter.

### 3.2 Methodology



According to Vogt (2007, p. 5) research methodology refers to the general strategy that the researcher chooses to answer the research question. Babbie and Mouton (2001) describe research methodology as “the techniques and procedures that are used to implement the research design and the assumptions associated with it”. “Method” refers specifically to how the research was conducted in terms of research design, the sampling/population, how the data was collected, the instruments used to measure the constructs, and how the data was analysed in terms of the statistical techniques that were applied.

The methodology used in this research study was a quantitative approach which was used to test the hypothesis. A quantitative approach is an approach in which the variables that were studied were able to be measured and compared in order to prove or disprove the hypothesis. In this study, the construct that was measured was psychological well-being which was indicated by the

variables of self-esteem and satisfaction with life. The methods and procedures employed were specifically used to compare the psychological well-being of single and married mothers who work shifts in a call centre environment. The methods and procedures of this study include the aims, objectives, hypotheses of the research, the pilot study, and the instruments that were used to measure psychological well-being. Details of how the data was administered, collected and analysed, its reliability and validity, and ethical considerations related to the study, all form part of this study's methods and procedures and are pertinent to this chapter.

### **3.3 Research design**

The research design used in this study was a cross-sectional research design. A cross-sectional design means that the data collected consisted of two or more categories or variables and that the data was all collected at one time in the form of a survey or questionnaire (Cho, 1997). In this research study, the variables were psychological well-being, indicated by self-esteem and satisfaction with life, single and married mothers, who either worked shifts or did not work shifts, in a call centre environment. This data collected was limited to collection at one time from which conclusions were inferred (Babbie & Mouton, 2001).

### **3.4 Participants**

Permission was obtained from the managing director and Human Resources (HR) manager to conduct the study. A stratified sampling process was used in this study. This required that specific groups or "strata" from a population were selected, to be compared (Vogt, 2007). In this study the groups compared were married and single working mothers who work shifts in a financial call centre environment. The study included call centre employees, who are mothers, from all of the different departments in the company. Due to turnover of staff, exact numbers of

mothers and those who are single or married, vary from month to month. A sampling frame of employees' names was accessed from the company's human resources department. The population was stratified according to the four groups: single mothers, married mothers, mothers who work shifts, mothers who do not work shifts. The total number of people employed at the call centre at the time that the data collected, was 1169, of which 815 were women and 325 of these women were mothers. Of the 325 mothers, 153 were single and 172 were married. The questionnaire was sent to all 325 mothers. From the 325 mothers who received the questionnaire, 192 completed it (since participation was voluntary), and this then became the sample for the study. The sample of 192 mothers was made up of 110 married mothers and 82 single mothers, of whom 135 worked shifts and 57 did not work shifts.

### **3.5 Instruments**

The instruments used were Diener's satisfaction with life scale (1984) and Rosenberg's self-esteem scale (1965). The questionnaires were completed electronically via the company's intranet computer system. The data was then captured in Excel and then transferred to the statistical package for the social sciences (SPSS version 20) to be analysed. The questionnaires are theoretically based in psychofortology because they evaluate the psychological well-being of individuals, in this case of single and married mothers.

#### **3.5.1 Rosenberg's self-esteem scale**

According to Silverstone & Salsali (2003), this scale is the most widely used scale to measure "global self-esteem and personal worthlessness." It consists of 10 general statements that assess the degree of how satisfied and how good the respondents feel about themselves and their lives. Each statement has a rating of four strengths which the respondents can choose

from, in a range from “strongly disagree” to “strongly agree”. Generally the scale ranges from 0 to 30, if values 0 to 3 are allocated to the responses (Rosenberg, 1989). However, this study will use a 4-point Likert scale with values ranging from 1 = strongly disagree to 4 = strongly agree. The respondent is allocated a score of 4 when answering “strongly agree”, 3 for a response of “agree”, 2 for a response of “disagree” and 1 for a response of “strongly disagree”. Five of the items in the scale are reverse-scored. Therefore, in this study the scale ranges from 10 to 40, with 40 being the highest score that can be allocated. High scores indicate a degree of high self-esteem and vice versa (Silverstone & Salsali, 2003). There is no specific interpretation or “cut-off” attached to the score that marks high or low self-esteem; it is merely that the higher the score, the higher the self-esteem. It is recommended that the scores are interpreted according to the specific population in which the study is being done, in order to interpret the scores (Rosenberg, 1989). The data gathered was analysed by means of a computerised SPSS (version 20). Rosenberg’s self-esteem scale was a scale originally designed to measure self-esteem in adolescents, but it has been validated for use in all population and age groups (Pretorius, 1993, as cited in Roman, 2008). An example of an item on this scale is: “*I am able to do things as well as most other people*”. The Cronbach’s Alpha for this study was .81 which indicates that this instrument was reliable.

### **3.5.2 Satisfaction with life scale**

In support of the theory that underpins this study, one of the instruments that accompany it, is Diener’s (1985) satisfaction with life scale. This is a 5-point scale that measures global life satisfaction and subjective well-being and is defined by Shin and Johnson (1978, as cited in Diener et al., 1985, p. 71) as: “...a global assessment of a person’s quality of life according to his chosen criteria.” Originally the scale had 48 items that were completed as self-report items,

which measured cognitive and affective domains. This scale was then revised and reduced to 10 items and then was finally reduced to 5 items due to the similarity of some of the items (Murphy, 2006). The participants respond on a 7-point Likert scale ranging from 1 = strongly disagree to 7 = strongly agree. The number 4 is a neutral score. The first two components of the scale refer to the individual's affective/emotional well-being. Each person sets certain standards for him or herself and therefore judgements are made according to these individual stands, which are not extrinsic. This is a perception of subjective well-being based on the individual's own perceptions. Examples of items in the scale include: *"In most ways my life is close to my ideal, the conditions of my life are excellent and I am satisfied with my life"*.

Scoring satisfaction with life is as follows:

- 31-35 Extremely satisfied
- 26-30 Satisfied
- 21-25 Slightly satisfied
- 20 Neutral
- 15-19 Slightly dissatisfied
- 10-14 Dissatisfied
- 5-9 Extremely dissatisfied



According to Diener (2006), respondents who score in the extremely satisfied range love their lives in almost every respect, although their lives may not be perfect. Their extreme satisfaction could be derived from the fact that they are growing and successful in overcoming challenges. Scores above 25 indicate that the individuals' lives are mostly good in most areas including growth areas. A score in the average or slightly satisfied range indicates that there are some areas

in the respondent's life that need improvement and that some life changes would need to be made for greater satisfaction. Those who score on the slightly dissatisfied level have areas of their lives where there are significant problems and other areas where they are doing well. Dissatisfied respondents have areas in their lives which could indicate bereavement or some sort of loss, for example a death or a divorce. Respondents who score in the lowest range are extremely unhappy with their lives. Such an individual may have an ongoing persistent or chronic problem to manage, such as an addiction. Scores in both bottom scales may mean that the individual could benefit from some kind of intervention like counselling (Diener, 2006)

The satisfaction with life scale was reported by Diener et al. (1985) to have internal consistency, in a two-month test-retest of reliability, with a correlation of  $r=.82$  and a coefficient alpha of  $r=.87$ . According to Murphy (2006), research shows that satisfaction with life presents long-term consistency of reliability over a period of time and is also sensitive to changes such as deaths, divorces and completion of therapy (Murphy, 2006, p. 44). In this research, the reliability of the instrument was measured using the SPSS Version 19 and showed a Cronbach's Alpha of .745

### **3.6 Procedure of the pilot study**

The procedure outlines the way that the study was administered. It initially describes how the pilot study was conducted and its purpose. The results are discussed, and changes that were made to the questionnaires according to the results of the pilot study, are outlined.

#### **3.6.1 Pilot study**

The pilot study was conducted in the same company that was used for the main study. Forty employees were randomly selected from various departments in the company. The



questionnaires were administered individually by hand to the employees who were part of the group randomly selected to complete the pilot study. The questionnaires were administered together with the informed consent forms. This informed the participants of the purpose of the study, and of permission granted by the company, and outlined the ethics involved in the study. Participants were aware that the process was a voluntary one and that they could withdraw at any time. They were made aware that staff counsellors were available should the questionnaire affect any employee negatively. The questionnaires were completed individually by the participants in their own time; however they were given a specific time frame within which to complete the study.

### **3.6.2 The purpose of the pilot study**

The purpose of the pilot study was to establish the level of understanding of the instruments used. It was also used to assess understanding of the language used in the questionnaire and instruments, to assess the understanding of the questions and to assess how long it would take to complete the questionnaire. The pilot study was also useful in assessing the suitability of the process of administering the questionnaire, and in identifying any other difficulties that could present themselves during the actual data collection and data analysis procedures of the completed questionnaires.

### **3.6.3 Results and changes made after the pilot study**

The pilot study showed that there were some changes which needed to be made in the demographic part of the questionnaire. Question 1 was changed from allowing the participant to choose from an age range, to the participant specifying their exact age in order to ascertain the average age of the mothers in the main study. The question related to the ages of their children

also had to be changed to allow the participant more than one option and to allow the participants who had more than one child to show the ages of all their children.

The pilot study showed that the participants confused meanings of some of the wordings used for identifying their living arrangements. The question options were changed and worded more specifically. For example, the option “With husband/partner” was changed to “In own home with husband/partner and child/children”, so it was not confused with “Own home with child/ren”. Some married mothers living with their husbands chose the “own home” option when this was really intended for single mothers who lived in their own homes. The sixth option, which was “Other”, was changed to specify what “Other” meant. The pilot study revealed that some of the participants, both married and single, lived with their extended families, thus creating better support structures and therefore possibly having an influence on their psychological well-being. Another question was added in relation to where the children resided, as the pilot study showed that some children did not reside with their mothers during the week, but with their extended family. Therefore, this could also have an influence on the psychological well-being of the mother and needed to be reflected in the main study.

The wording for the marital status question was changed, to make it more specific and more easily understood. Under the options for divorced, widowed and never married, the word “single” was also added in brackets. This was done to draw distinctions between single mothers: whether they were divorced, widowed or never married, and those who fitted one of these profiles but were cohabiting. In the pilot study, some of the mothers had marked both options, for example the “divorced” and the “living with a partner” options.

The data was entered, analysed and checked for errors using the SPSS version 20. Test reliability was measured by means of the Cronbach's Alpha reliability test. According to Vogt (2007, p. 90) the Cronbach's Alpha reliability test is a correlation test that "assesses the consistency and reliability of the items that are used in a scale. This indicates the extent to which participants answered items favourably or unfavourably". The Cronbach's Alpha reliability test's range for reliability is from 0 to 1.0. The cut-off point is 0.70 or higher. The reliability results of the satisfaction with life instrument, in the pilot study showed a score was .60, which shows that the scores were on the questionable side of being reliable compared to the reported reliability in Roman (2008, p. 123) with a test-retest reliability of 0.82 and an alpha-reliability of 0.87

In the pilot study, the scale was administered incorrectly as a 5-point Likert scale, instead of a 7-point Likert scale. Also, question 4 on the satisfaction with life scale should also have read, "So far I have gotten the important things I want in life" but it incorrectly read, "So far I have forgotten the important things I want in life". Therefore in the analysis, this was re-coded and analysed. Hence, a reliability Cronbach's Alpha score of .745 was reported in the main study, as opposed to the one of .604 in the pilot study.

Reliability statistics for the second instrument that was used for measuring self-esteem, namely Rosenberg's self-esteem scale, showed a reliability of .853, which indicates that the results were very reliable.

### **3.7 Main study**

Permission was obtained from the managing director and the top management of the call centre in order to conduct the study. Part of the process of obtaining permission to conduct the study included a, a PowerPoint presentation outlining the purpose of the study and how it was to be

administered to the business centre leaders and business unit leaders of the various departments. These leaders were told in detail of the processes and procedures to be followed and the ethics of the study were carefully outlined for them, specifically regarding anonymity and confidentiality of the information obtained from the questionnaires. The leaders were also informed, though, that the outcome of the study would be made available to them once completed.

The questionnaires were administered online via the company's computer system. The software used by the company to administer company questionnaires like the annual climate survey, is Questback software. The company found it beneficial to administer surveys and questionnaires in this manner, because of the size of the company which has over one thousand staff members, as well as the nature of the shift work. Therefore, the questionnaires were completed online. The informed consent forms were sent via email to the agents who are mothers in the company, together with the link to the questionnaire. The link was not sent to all the members of staff. Once the link to the questionnaire was opened, the agents had to complete each question one at a time before moving onto the next one to ensure that the entire questionnaire was completed before submitting. However, agents could choose to opt out at any stage if they wanted to. The business unit leaders were asked to encourage their agents to complete the questionnaires as quickly as possible. The agents were given a week to complete the questionnaires, because of the shifts that they work. Once the time limit was up, all the data was collated on Excel spreadsheets and transferred to SPSS 20 for analysis. One section of the business did not get a chance to complete the questionnaire. Therefore 27 questionnaires were administered manually and collected manually and this data was entered straight into SPSS 20.

### 3.8 Data analysis

This study compared the relationship between the variables from the data that was collected from the participants who work in a call centre environment. Once the data was collected and scored according to the requirements of the instruments used, the data was then collated. This data was collated and analysed using the SPSS 20. From the data, descriptive statistics which included frequencies, means and standard deviations of the variables, were obtained. The statistical analysis also used inferential statistics to interpret the data. Inferential statistics are used to make inferences about a population based on the analysed data obtained from the sample. According to Vogt (2007, p. 11) inferential statistics “answer the question of how likely it is true of the population”. Inferential statistics were measured by means of Univariate Analysis of Variance (ANOVA) and Multivariate Analysis of Variance (MANOVA). A MANOVA is used to test the variables, when there are two or more than two groups being compared. In this study, the dependent variables are Diener’s satisfaction with life scale (1985) and Rosenberg’s self-esteem scale (1965), the instruments used to measure the psychological well-being of the participants. The four groups being compared in the study are: married mothers, single mothers, mothers who work shifts and mothers who do not work shifts. The significance of the study was also established and is shown by means of an F- value (which should be a high value if the interaction of the variables is significant), together with a corresponding significance ( $p$  value) which should be low. The generally accepted “cut-off” for statistical significance is .05, meaning that the results of a study are not likely to be due to chance 5% of the time. The statistical significance is therefore written:  $p < .05$  (Vogt, 2007, p. 13). The reliability and validity of the study was measured using Cronbach’s Alpha. Therefore, the variables that were predetermined in a quantitative research design, hence the study attempted to analyse measurable data that was

objective, in a statistical context (Rosnow & Rosenthal, 1996). The analysis done specifically answers the research questions, aims and objectives of the study. Additionally, the analysis tests the hypotheses of the study.

### **3.9 Reliability and Validity**

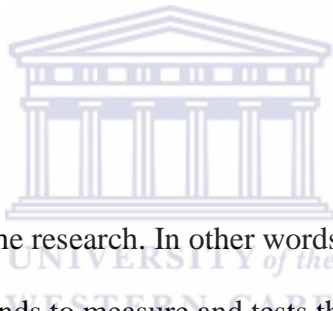
An important aspect of all research designs and techniques of measurement, are the constructs of reliability and validity. They are two distinct concepts, but equally important (Vogt, 2007).

#### **3.9.1 Reliability**

Reliability refers to “the consistency of a measurement, design” (Vogt, 2007, p.114), or scale, as used in this research. In other words, if the measurements or scales used by different researchers studying the same phenomena, and the conclusions that are arrived at are the same, the measurement is said to be reliable (Vogt, 2007, p. 114). Reliability coefficients (correlation coefficients) are used to measure reliability and these are measured on a scale from 0.0 to 1.0. Measurements of 0.0 are not reliable at all and those that measure 1.0 are entirely reliable. Vogt (2007, p. 115) calls the Cronbach’s Alpha the “mother of all split-half reliabilities”. This measurement, which is also known as “alpha” and “coefficient alpha”, is used by researchers to determine whether a number of items being measured all correlate. A score of .7 and higher is good (Vogt, 2007). According to Anastasi, (1982) a Cronbach’s Alpha of .6 is considered acceptable.

According to Diener et al. (1985), satisfaction with life is a scale suitable for use in cross-cultural contexts and across all age groups. It has been shown to be statistically reliable and is shown to have “favourable psychometric properties, including high internal consistency and high

temporal reliability. Scores on the satisfaction with life scale correlate moderate to high with other measures of subjective well-being, and correlate predictably with specific personality characteristics” (Diener et al., 1985, p. 71). The satisfaction with life scale has a test-retest reliability of 0.82 and an alpha-reliability of 0.87 (Roman 2008, p. 123). Rosenberg’s self-esteem scale is a 10-item scale showing an alpha coefficient of 0.77 indicating an internal consistency which is considered statistically valid, confirmed by an eigenvalue  $>1$  (Pretorius, 1991, p. 23 as cited in Roman, 2005). In this research the Cronbach’s Alpha of the measurements was calculated using the statistical package SPSS version 20. These results and the internal consistency for the current study were tested during the pilot study and were recorded as previously indicated.



### **3.9.2 Validity**

Validity refers to the relevance of the research. In other words, the measurement, scale or questionnaire measures what it intends to measure and tests the variables that are being observed, tested, determined, investigated or examined (Vogt, 2007). Anastasi (1988, as cited in Murphy, 2006) states that construct validity is achieved by gradually collecting and collating information or data on a particular construct and what influences it, from a number of sources over a period of time. The satisfaction with life questionnaire designed by Diener et al. (1985) measures what it was designed to measure and the developers professed this to be so (Diener et al., 1985, p. 74).

### **3.10 Ethical Considerations**

According to Babbie and Mouton (2001, p. 522) research should never injure the participants, regardless of the fact that they may volunteer to take part in the study. Therefore the following ethical requirements were applied:

**Voluntary information:** The participants were informed that the research study is voluntary. The participants knew they had the right to refuse any participation in the research and the right to withdraw from the research at any stage.

**Privacy, anonymity and confidentiality:** The participants' identities and the information gathered was protected, and kept anonymous by the use of codes rather than names, and will remain confidential.

**Informed consent:** The process and purpose of the research was explained to the managing director, HR manager, management team and participants and consent from the managing director and participants was obtained.

**Beneficence and justice:** The researcher is “responsible for the benefit” of the participants. It was important to ensure that the participants were treated fairly and without bias. Participants were selected fairly in relation to the aims of the study. The vulnerability of the participants needed to be taken into consideration, especially since those participants are women.

### **3.11 Conclusion**

The main research methods and the procedures were outlined and described in Chapter 3, including the methodology, research design, how the data was analysed and the reliability and validity of the study. An in-depth description of the instruments and the reliability of these were presented. The pilot study was also discussed. Important changes that needed to be made coming out of the analysis of the pilot study were discussed, pointing towards the successful implementation and results of the main study in Chapter 4.



# CHAPTER 4

## RESULTS

### 4.1 Introduction

Chapter 4 outlines the results of the analysis of the study. This analysis was done using the statistical package for social sciences (SPSS version 20) in order to test the hypotheses of the study. The first part of this chapter is a presentation of the demographic data obtained from the sample in order to gain insight and understanding of the participants in this study.

The results pertaining to the marital status of the mothers and its influence on psychological well-being, as well as those pertaining to shift work and its influence on psychological well-being of the mothers are presented in this chapter. The results are presented as descriptive information of participants based on frequencies and means of scores; and as comparisons of the four groups of mothers who are married, single, shift workers and non-shift workers, to see if there is a significant difference between the groups in terms of self-esteem and satisfaction with life.

The following is a guide to abbreviations used in the analysis of the data:

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<b>Abbreviation</b>	<b>Term</b>
TM	Total number of mothers
MM	Married mothers
SM	Single mothers
RSES	Rosenberg's self-esteem scale
SWL	Satisfaction with life scale
SW	Shift work
MS	Marital status

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## **4.2 Analysis overview**

The aims and the objectives of this study, as presented in Chapter 1, formed the basis for the hypotheses for this study. The hypotheses were tested individually by means of Univariate Analysis of Variance (ANOVA). The hypotheses are as follows:

- (1) Married mothers who work in a call centre environment will have higher psychological well-being than single working mothers.
- (2) Mothers, who do not work shifts in a call centre environment, will have higher psychological well-being than those mothers who do work shifts in a call centre environment.

A Multivariate Analysis (MANOVA) was also conducted to test the interaction of the variables of shift work and marital status.

### 4.3 Internal consistency of measures

This study used two instruments for the purpose of measuring the variables. These instruments were satisfaction with life scale (SWL) developed by Ed Diener (Diener et al., 1985) and Rosenberg's self-esteem scale (RSES) developed by Rosenberg (Rosenberg, 1965). SWL was reported by Diener et al. (1985) to have internal consistency, in a two-month test-retest of reliability, with a correlation of  $r = .82$  and a coefficient alpha of  $r = .87$ .

According to Bagley et al. (1997), RSES is reliable and has shown alpha scores consistently above 0.85. In this study, the Cronbach's Alphas showing the reliability of the instruments are represented in Table 4.1 below.

**Table 4.1: Reliability of SWL and RSES**

Scale	$\alpha$ total sample	$\alpha$ single mothers	$\alpha$ married mothers	$\alpha$ mothers who work shifts	$\alpha$ mothers who do not work shifts	N of Items
SWL	.75	.65	.78	.73	.75	5
RSES	.81	.73	.84	.77	.87	10

Anastasi (1982), states that any instrument that has a Cronbach's Alpha of below .60 is considered to be unreliable. The results for the Cronbach's Alphas for both instruments in this study could be considered reliable as the Cronbach's Alphas for the total sample for SWL is .75 and for RSES it is .81

### 4.4 Description of the study sample

This section shows the results of the study by presenting the descriptive statistics of the data that was collected. The demographic descriptions detail the participants' work-related variables, including whether they work shifts or not. Tables 4.2, 4.3 and 4.4 present the demographic

descriptions of the participants' relationships, marital status, living arrangements, and child-related variables.

#### **4.4.1 Demographic descriptions of mothers who work in a call centre environment**

Table 4.2 presents the demographic findings for the total sample of mothers working in a call centre environment. These are work-related demographics and the descriptions include the characteristics of the participants' race group, salary bracket, business division within the call centre and the number of participants who work shifts and those who do not work shifts in the call centre.



**Table 4.2: Demographic descriptions of the participants**

<b>Variables</b>	<b>Total sample</b>	<b>n=192</b>	<b>%</b>
<b>Race group</b>			
Asian		3	(2%)
White		7	(4%)
Black		19	(10%)
Coloured		163	(85%)
<b>Monthly salary</b>			
Less than R5000		22	(12%)
R5000 - R10 000		136	(71%)
R10 000 - R15 000		21	(11%)
R15 000 - R25 000		6	(3%)
Above R25 000		7	(4%)
<b>Business division</b>			
Loans		94	(49%)
Collections		58	(30%)
Offshore		2	(1%)
Business Support		21	(11%)
Other		17	(9%)
<b>Shift work</b>			
Yes		135	(70%)
No		57	(30%)

The results indicate that the majority (85%) of the 192 participants working in the call centre identified themselves as coloured employees. There were only three participants (2%) who were Asian staff members, who were mothers working in the call centre. The majority of the participants, [136 (71%)], earned between R5000 and R10 000 a month, and two (12%) of them earned less than R5000 a month. Seven (4%) earned more than R25 000 a month. Five business divisions of the call centre were represented, with a majority of the participants working in the loans division, [94 (49%)]. The department with least representation was the offshore business division, which was represented by two (1%) participants. “Other” was represented by the fee

income business division, and was represented by 17 (9%) participants. A majority of participants indicated that they do work shifts [135 (70 %)], leaving a minority of 57 (30%) of the participants who do not work shifts.

Table 4: 3 presents the demographic descriptions of the participants' relationship status, marital status, living arrangements of participants and the weekly care of the participants' children, including how many of the participants do not have their children living with them during the week.

**Table 4.3: Marital status, living arrangements and weekly care of children**

<b>Variables</b>	<b>Total sample</b>	<b>n=192</b>	<b>(%)</b>
<b>Relationship status</b>			
Married		110	(57%)
Divorced (single)		14	(7%)
Widowed (single)		4	(2%)
Never married		39	(20%)
Living with partner		25	(13%)
<b>Marital status</b>			
Married		110	(57%)
Single		82	(43%)
<b>Living arrangements</b>			
In your own home, with husband/partner and child/children		96	(50%)
Extended family/in-laws, husband/partner and child/children		46	(24%)
Alone, with extended family/in-laws and child/children		44	(23%)
Own home with child/children		5	(3%)
Other		1	(5%)
<b>Participants who live away from their children during the week</b>			
Yes		14	(7%)
No		178	(93%)

Of the 192 participants who completed the questionnaire, a majority of 110 (57%) were married and 82 (43%) were single. Of the 82 single mothers, 14 (7%) were divorced, four (2%) were widowed, 39 (20%) had never married, and 25 (13%) were cohabiting with a partner. The single mothers cohabiting with partners were considered as single mothers for this study, since they are listed on the company's human resources data base as single mothers. The results showed that 96 (50%) participants lived in their own homes with their husbands or partners and children. Many of the participants, both single and married, lived with extended family, 46 (24%) and 44 (23%) respectively. A small percentage of the participants had children who lived away from them during the week [14 (7%)],

Table 4.4 presents the results pertaining to the specifics related to childcare for the single and married mothers who work in the call centre. These include care of the children while the mothers are at work, whether the mothers have difficulty finding care for their children when they are at work, and specifically when working shifts, and whether they worry about their children while they are at work.

**Table 4.4: Descriptions of married and single mothers and care of children during the week**

<b>Variables</b>	<b>Total sample</b>	<b>n=192</b>	<b>(%)</b>
<b>Child care while mothers are at work</b>			
Daycare/crèche		68	(35%)
Nanny/maid		13	(7%)
Family member		82	(43%)
Spouse/partner		19	(10%)
Left on their own		10	(5%)
<b>Difficulty finding care for children when required to work shifts</b>			
All the time		23	(12 %)
Often		43	(22 %)
Seldom		60	(31%)
Not at all		26	(14%)
I do not work shifts		40	(21%)
<b>Worry about child well-being while at work</b>			
Not at all		16	(8%)
Rarely		31	(16%)
Only on late or weekend shift		39	(20%)
Often		44	(23%)
All the time		62	(32%)

The results show that the majority of the participants, [65 (35 %)] and 82 (43 %) respectively, had their children either in daycare facilities or were looked after by a family member. The balance were looked after by their spouse or partner [19 (10 %)], a nanny [13 (7%)] or were left on their own [10 (5%)]. Those who worked shifts had no difficulty at all, or seldom had difficulty finding care for their children when they worked shifts [26 (14 %) and 60 (31 %)]. A majority of participants [43 (22 %)] often had difficulty finding care for their children when they worked shifts. Participants' responses to worrying about their children while they were at work, showed that a majority of 62 (32 %) worried about their children all the time and 39 (20 %) only



worried about their children when they worked late or weekend shifts. A minority of 16 (8 %) of parents did not worry about their children at all.

#### 4.4.2 Means and standard deviations of ages of mothers and children

Table 4.5 shows the means (*M*) and standard deviations (*SD*) of the participants' age, the mean number of children that they have and the ages of their children.

**Table 4.5: *M* and *SD* of participants age, number of children and ages of the children**

	<b>n</b>	<b>Min</b>	<b>Max</b>	<b>M</b>	<b>SD</b>
How old are you?	192	20	52	29	5.4
The number of children you have	192	1	4	1.5	.74
Age of child 18+	192	0	2	.04	.21
Age of child 16-18	192	0	1	.03	.16
Age of child 13-15	192	0	1	.07	.26
Age of child 9-12	192	0	2	.2	.40
Age of child 6-8	192	0	2	.3	.51
Age of child 3-5	192	0	2	.4	.60
Age of child 0-2	192	0	2	.4	.51

The results show that the average age of the participants was 29 years old, ( $M=29$ ,  $SD= 5.4$ ).

The youngest participant was 20 years old and the oldest was 52 years old. The mean number of children the participants had was 1.5 ( $M = 1.5$ ,  $SD = .74$ ), and maximum number of participant's children was four. A majority of the participants had children in the age categories of 0-2 ( $M =.4$ ,  $SD = 51$ ) and 3-5 ( $M =.4$ ,  $SD = .60$ ). The means were the same in each of these age categories.

The next largest age category was the 6-8 year-old age category ( $M = .3$ ,  $SD = .51$ ). The means taper after the 9-12 age category ( $M=2$ ,  $SD = 40$ ). The minority age category was the 16-18 year-

old category ( $M=.03$ ,  $SD =.16$ ). The results indicate that the majority mean age of the participants' children ranged from 0 to 8 years old.

#### 4.4.3 Descriptive frequencies of marital status, shift work status and the living arrangements of the participants' children

Table 4.6 presents the results of participants who are married and single, whether or not they work shifts and where their children live during the week while the participants are at work.

**Table 4.6: MS, SW and the living arrangements of the participants' children**

MS	SW	n	Children live at home	Children live away from home
Married	Yes	70 (36%)	68 (35%)	2 (4%)
	No	40 (21%)	40 (21%)	0 (0%)
	Total	110 (57%)	108 (96%)	2 (4%)
Single	Yes	65 (34%)	53 (28%)	12 (6%)
	No	17 (9%)	17 (9%)	0 (0%)
	Total	82 (43%)	70 (36%)	12 (6%)
Total	Yes	135 (70%)	121 (63%)	14 (7%)
	No	57 (30%)	57 (30%)	0 (0%)
	Total	192 (100%)	178 (93%)	14 (7%)

Table 4.6 shows the frequency results of mothers who are married mothers and single mothers, those mothers who work shifts and those mothers who do not work shifts and how many mothers live away from their children during the week while they are at work and those mothers who do not live away from their children during the week. Of the 110 (57%) married mothers who work shifts [70 (36%)], two (4%) have their children living away from them during the week. There are 82 (43%) single mothers, and 65 (34%) of these mothers work shifts. Of those single mothers working shifts, 12 (6%) have their children living away from them during the week.

Table 4.7 presents the results of the marital status of the mothers, shift work status, and who is responsible for the care of the participants' children while they are at work.

**Table 4.7: Descriptive statistics of participants' MS, SW and child care while at work**

MS	SW		Daycare / crèche	Nanny / maid	Family member	Spouse / partner	Left on their own	n
	Y	N						
Married	70 64%	40 36.%	35 31.%	8 7.%	49 45%	12 11%	6 6%	110 100%
Single	65 79.%	17 21.%	33 40.%	5 6.%	33 40.%	7 9%	4 10%	82 100%

The results show that of 110 married mothers and 82 single mothers, a majority of 49 (45%) married mothers, and a minority of 33 (40.2%) single mothers, have their children taken care of by a family member. A large majority of mothers have their children in daycare or crèche: 35 (31.2%) married mothers and 33 (40.3%) single mothers make use of these facilities. A minority of the children are taken care of by a nanny, specifically, eight (7.3%) children of married mothers and five (6.1%) children of single mothers. Six (5.5%) children of married mothers and four (4.9%) children of single mothers are left entirely on their own during the day while their mothers are at work.

## 4.5 Psychological well-being of the participants

### 4.5.1 Descriptive statistics of the psychological well-being of the participants

The instruments used to measure psychological well-being of the participants were RSES and SWL and this section presents the descriptive results of the SWL and RSES. The means (*M*) and standard deviations (*SD*) for these scales are presented in the tables in order to evaluate the four objectives of the study.

#### 4.5.2 Satisfaction with life scores

Tables 4.8 shows *M* and *SD* of the total sample (n=192) of the SWL scale.

**Table 4.8: *M* and *SD* of SWL of total participants (n=192)**

	n	Min	Max	M	SD
In most ways my life is close to ideal	192	1	7	4.10	1.8
The conditions of my life are excellent	192	1	7	4.00	1.7
I am satisfied with my life	192	1	7	4.50	1.7
So far I have gotten the important things I want in life	192	1	7	4.60	1.9
If I could live my life over, I would change almost nothing	192	1	7	3.9	2.0

The results presented in Table 4.7 show that a maximum score of 7 could be allocated for each category. The statement that received the highest rating was: “So far I have gotten the important things I want in life” ( $M=4.6$ ,  $SD = 1.9$ ). The lowest score was the statement: “If I could live my life over, I would change almost nothing” ( $M = 3.9$ ,  $SD = 2.0$ ). The table shows that most statements received scores of between 4 and 5. The label 4 represents “Slightly agree” and the label of 5 represents “Agree.” Table 4.8 shows that the maximum score for SWL in this study was 31 and a minimum score was 5. The mean results for SWL, for the total sample (n = 192) shows that the participants’ satisfaction with life falls above the mid-point ( $M=21$ ,  $SD =6.4$ ).

#### 4.5.3 Self-esteem scale scores

Table 4.9 represents the descriptive statistics of *M* and *SD* of RSES of the total number of participants.

**Table 4.9: *M* and *SD* of RSES of total participants (n=192)**

	<b>n</b>	<b>Min</b>	<b>Max</b>	<b>M</b>	<b>SD</b>
On the whole I am satisfied with myself	192	1	4	3.0	.70
At times, I think I am no good at all	192	1	4	2.2	.90
I feel that I have a number of good qualities	192	1	4	3.4	.60
I am able to do things as well as most other people	192	1	4	3.3	.70
I feel that I do not have much to be proud of	192	1	4	2.0	.80
I certainly feel useless at times	192	1	4	2.2	.90
I feel that I am a person of worth, at least on an equal plane with others	192	1	4	3.2	.60
I wish I could have more respect for myself	192	1	4	2.10	.90
All in all, I am inclined to feel that I am a failure	192	1	4	1.70	.70
I take a positive attitude to myself	192	1	4	3.30	.70

The results in the above table present the scores for the 10 items of RSES. The scale ranges from 0-40. The maximum score that could be scored is 40 and in this study, the maximum of 40 was scored and a minimum score of 19 was scored for all 10 items. The majority of the mean scores were within the range of 3, representing the answer “agree.” One item that the majority responded to with “strongly disagree” was the statement: “All in all I am inclined to feel that I am a failure” ( $M=1.70$ ,  $SD = .70$ ). This was the lowest score of RSES in this study. A majority of the participants agreed with the statement: “I feel that have a number of good qualities.” This item had the highest mean score ( $M = 3.4$ ,  $SD = .60$ ). The total mean for all the participants ( $n = 192$ ) is above the mid-point of RSES ( $M= 31$ ,  $SD=4.6$ ) and suggests that the participants enjoy above-average self-esteem.

## 4.6 Comparison of psychological well-being of groups

### 4.6.1 Psychological well-being and marital status

The following table, Table 4.10 presents the descriptive results of marital status and the psychological well-being of the participants, measured by the instruments of SWL and RSES. Means and standard deviations are presented to compare the psychological well-being of married and single mothers. This was done in order to evaluate the second objective of the study, which was to compare the psychological well-being of single and married mothers who work in a call centre environment?

**Table 4.10: Descriptive statistics of *M* and *SD* of items SWL and RSES for married mothers compared to single mothers**

	MS	n	<i>M</i>	<i>SD</i>
RSES	Married	110	32	5
	Single	82	30	4
	Total	192	31	5
SWL	Married	110	22	7
	Single	82	20	6
	Total	192	21	6

The results of both SWL scale and RSES show that married mothers have higher scores than the scores of single mothers. The mean score of self-esteem of the married mothers ( $M = 31.7$ ,  $SD = 4.7$ ) is higher than the mean score of single mothers ( $M = 30$ ,  $SD = 4.2$ ). The mean score of satisfaction with life for married mothers ( $M = 22.1$ ,  $SD = 6.6$ ) is also higher than the mean score results for single mothers ( $M = 20$ ,  $SD = 5.9$ ).

#### 4.6.2 Psychological well-being and shift work

The following table, Table 4.11 presents the descriptive results of those participants who work shifts and those who do not work shifts and the psychological well-being of these participants, which was measured by the instruments SWL and RSES. Means and standard deviations are presented to compare the psychological well-being of mothers who work shifts and of mothers who do not work shifts. This was done in order to evaluate the third objective of the study, which was to compare the psychological well-being of shift-working mothers with that of mothers who do not work shifts in a call centre environment.

**Table 4.11: Descriptive statistics of *M* and *SD* of total scores for SWL and RSES for participants (n=192) who work shifts and who do not work shifts**

Variables	n=192	Total score for self-esteem		Total score for satisfaction with life	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Work shifts	135	31	5	20	4
Do not work shifts	57	32	5	23	4

The results show that of the total sample (n = 192), of this study, 57 mothers did not work shifts and 135 did work shifts. The means scores suggest that the mothers who do not work shifts have marginally higher mean scores for RSES ( $M = 32, SD = 5$ ) and SWL ( $M = 23, SD = 4$ .) than the scores of those participants who do work shifts RSES ( $M = 31, SD = 5$ ) and SWL ( $M = 20, SD = 4$ ).

The results in Table 4.12 below, show that the self-esteem of married mothers who do not work shifts ( $M = 32, SD = 5.0$ ) is higher than both married mothers ( $M = 31, SD = 5$ ) and single mothers who do work shifts ( $M = 30.1, SD = 4.4$ ). However, the results show that single mothers who don't work shifts ( $M = 30, SD = 4$ ) do not have lower self-esteem than those who do work shifts ( $M = 30.1, SD = 4.4$ ). The score presented shows that the self-esteem falls in the same

range. The total scores for self-esteem show that overall, mothers who work shifts have a lower self-esteem ( $M = 31, SD = 5$ ) than those who do not work shifts ( $M = 32, SD = 5$ ). These scores all fall above the midpoint in the RSES instrument, suggesting that the self-esteem of all the mothers is above average. The results for satisfaction with life show that the SWL of married mothers who do not work shifts ( $M = 23.2, SD = 5.8$ ), is also higher than the SWL of both married mothers who do work shifts ( $M = 22, SD = 7$ ) and single mothers who work shifts ( $M = 19.1, SD = 6$ ). The group with lowest SWL score is single mothers who work shifts ( $M = 19.1, SD = 6$ ).

**Table 4. 12: Descriptive statistics of  $M$  and  $SD$  of RSES, SWL, MS and SW**

	MS	SW	M	SD	n
Self-esteem	Married	Yes	31.3	4.4	70
		No	32.3	5.0	40
		Total	32.0	5.0	110
	Single	Yes	30.1	4.4	65
		No	30.0	4.0	17
		Total	30.0	4.2	82
	Total	Yes	31.0	5.0	135
		No	32.0	5.0	57
		Total	31.0	5.0	192
Satisfaction with life	Married	Yes	22.0	7.0	70
		No	23.2	6.0	40
		Total	22.1	6.6	110
	Single	Yes	19.1	6.0	65
		No	21.4	6.7	17
		Total	20.0	6.0	82
	Total	Yes	20.4	6.5	135
		No	23.0	6.1	57
		Total	21.0	6.4	192

#### 4.6.3 Interaction effects of psychological well-being

The tables in this section present the results of inferential statistics used to test and to determine the significance of the two hypotheses of the study, by means of an ANOVA. A MANOVA was done to compare the four groups and these were computed with the SPSS version 20. Table 4.13



presents an ANOVA showing the statistical significance between the variables of marital status and dependent variables, SWL and RSES.

**Table 4.13: ANOVA results of MS, RSES and SWL**

	MS	n	M	SD	df	Mean Square	F	Sig. (p)
<b>SWL</b>	Married	110	22.1	6.6	1	298.5	8.0	.007
	Single	82	20.0	6.0				
	Total	192	21.0	6.4				
Adjusted R Squared for SWL = .031 (3%)								
<b>RSES</b>	Married	110	32.0	5.0	1	141.7	7.01	.009
	Single	82	30.0	4.2				
	Total	192	31.0	5.0				
Adjusted R Squared for RSES = .033 (3%)								

The results suggest that marital status has an influence on self-esteem and satisfaction with life, as there is a significant difference between the mean scores of single mothers SWL ( $M = 20$ ,  $SD = 6$ ) and RSES ( $M = 30$ ,  $SD = 4.2$ ) and those of married mothers SWL ( $M = 22.1$ ,  $SD = 6.6$ ) and RSES ( $M = 32$ ,  $SD = 5$ ). Furthermore, the ANOVA test results show an overall and variable significance as  $p > .05$  for SWL ( $F = 7.481$ ,  $p = .007$ ) and RSES ( $F = 7.017$ ,  $p = .009$ ). The comparison between the groups accounted for 3% of the variance of marital status and psychological well-being.

Table 4.14 presents an ANOVA showing the statistical significance between the variables of shift work (SW) and dependent variables, SWL and RSES

**Table 4.14 ANOVA results of SW, RSES and SWL**

	SW	n	M	SD	df	Mean Square	F	Sig. (p)
<b>SWL</b>	Yes	135	20.4	6.5	1	204.9	5.07	.025
	No	57	23.0	6.1				
	Total	192	21.0	6.4				
Adjusted R Squared = .021 (2%)								
<b>RSES</b>	Yes	135	31.0	4.4	1	26.1	1.3	.264
	No	57	32.0	5.0				
	Total	192	31.0	5.0				
Adjusted R Squared = .001 (.01%)								

The descriptive results suggest that there is a significant difference between shift work (SW) and the participants' satisfaction with life, as there is a difference between the mean scores of mothers who do work shifts ( $M = 20$ ,  $SD = 6.5$ ) compared to those of mothers who do not work shifts ( $M = 23.1$ ,  $SD = 6.1$ ). Furthermore, the ANOVA test results show that there is a significant difference between shift work and SWL with a variable significance ( $F = 5.07$ ,  $p = .025$ ), as  $p > .05$  and the comparison between the groups accounted for 2% of the variance of shift work and SWL.

The results show that there is a one-point difference between the mean scores of self-esteem of mothers who do work shifts ( $M = 31$ ,  $SD = 4$ ) and of those mothers who do not work shifts ( $M = 32$ ,  $SD = 5$ ). The results suggest that shift work does not have a significant influence on self-esteem as  $p < .05$  ( $F = 1.3$ ,  $p = .264$ ) and the comparison between the groups accounted for 1% of the variance of shift work and RSES.

Table 4.15 presents the results of the MANOVA test between the four groups: married mothers, single mothers, mothers who work shifts and mothers who do not work shifts.

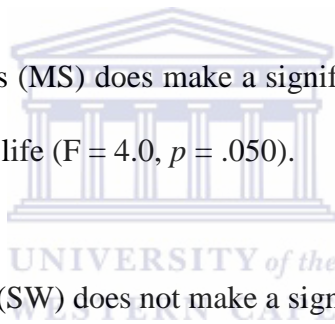
**Table 4.15: Multivariate test results of Between Subject Effects**

	RSES				SWL			
	df	F	Mean Square	Sig. (p)	df	Mean Square	F	Sig. (p)
MS	1	7.0	139.0	.009	1	151.3	4.0	.050
SW	1	.20	3.0	.700	1	135.0	3.0	.070
MS +SW	1	.80	17.0	.400	1	4.0	.1	.800
Intercept	1	6618	134086	.000	1	63980	1616	.000
Corrected Model	3	3.0	56.0	.040	3	145.3	4.0	.010

Adjusted R Squared for RSES = .027 (2%)

Adjusted R Squared for SWL = .040 (4%)

The results show that marital status (MS) does make a significant difference to self-esteem ( $F = 7.0, p = .009$ ) and satisfaction with life ( $F = 4.0, p = .050$ ).



The results suggest that shift work (SW) does not make a significant difference to psychological well-being, as the statistical significance for the scores is  $p < .05$  RSES ( $F = .20, p = .700$ ) and SWL ( $F = 135, p = .070$ ). The results show that at the point of interaction, marital status and shift work together have no significant influence on psychological well-being in that the scores for both RSES and SWL had a significance of  $> .05$  with RSES ( $F = .80, p = .400$ ) and SWL ( $F = .1, p = .800$ ). The MANOVA results of the four groups compared accounted for 2% variance between RSES, marital status and shift work and 4% between SWL, marital status and shift work.

## 4.7 Summary

Chapter 4 presented the results and analysis of the data, and submitted demographic data pertaining to the participants, descriptive statistics, and regressions between the groups. Marital status has been shown to have some significant influence on the psychological well-being of mothers who work shifts in a call centre environment, whereas shift work does not. When the four groups are compared altogether, marital status has a significant influence on psychological well-being, whereas shift work has no significant statistical influence on psychological well-being.

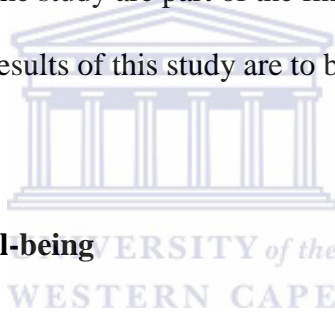


# CHAPTER 5

## DISCUSSION

### 5.1 Introduction

This chapter presents a discussion of the findings of the study in relation to the aims, objectives and hypotheses of the study as set out in Chapter 1 and integrates it with the review of the literature, as discussed in Chapter 2 and the theoretical framework of psychofortology (indicated by satisfaction with life and self-esteem) that underpins the study. The limitations and recommendations that arise out of the study are part of the final discussion of this chapter. It is important to bear in mind that the results of this study are to be interpreted with caution, because of the limitations of the study.



### 5.2 General psychological well-being

#### 5.2.1. Overview of psychological well-being

The theoretical approach that underpinned this study is psychofortology, which historically is also referred to as positive psychology and psychological well-being. The specific constructs of psychofortology examined in this research, were the constructs of self-esteem and satisfaction with life. The theory of psychofortology focuses on the skills that are needed by individuals to cope with the demands of stress. It examines positive human strengths and virtues (Breed et al., 2006; Compton, 2005) and focuses on the psychological wellness / well-being of an individual, which exists on the opposite spectrum of pathology and ill-being (Coetzee & Cilliers, 2001). The aim of this study was to examine and compare the psychological well-being of the participants (single and married mothers) in relation to their marital status and shift work in a call centre, an

environment that is demanding and stressful due to the nature, type and shift work required, as indicated in numerous studies (Hingst, 2006; Werner, 2006; Holman, 2002; Torvatn & Dahl-Jørgensen, 2003; Boonzaier & Boonzaier, 2008; Perrucci, 2007). In the attempt to determine the psychological their well-being (indicated by self-esteem and satisfaction with life) of working mothers in relation to their shift work and marital status who work in a call centre environment, it was found that the global mean scores for both constructs fell above the mid-point, suggesting that the participants have above average psychological well-being. This result coincides with research conducted by Murphy (2006), which stated that the higher the individual's satisfaction with life, the higher their positive affect. Furthermore it also states that a high level of satisfaction with life corresponds positively with other positive traits such as higher self-esteem, less stress and a greater sense of control (Meyers, 1992, as cited in Murphy, 2006). There is also evidence in some studies, that there are specific resilience factors which would contribute to high psychological well-being in a call centre environment. Some of these factors are greater support from family and friends (social support structures), greater control over choosing shifts, and good remuneration. (Perrucci et al., 2007) Furthermore, South African organisations have begun to use the constructs of psychological well-being in employee counselling, as well as in the development of individuals and whole organisations. It also appears to be effective in the South African context where there are high levels of stress, burnout and depression in a work environment (Breed et al. 2006). Counselling is available for call centre agents in the call centre where this study was conducted, and this could be a confounding variable which may have influenced the psychological well-being of the participants.

The results of this study, however also do appear to contrast with some studies that have been done, which are associated with the call centre work. These are studies focused on the pathology

of call centre agents and related their studies to the negative outcomes that an individual could suffer from in the form of stress-related issues, both physical and psychological. This would be as a result of the nature of the call centre environment, the type of work, shift and work home-life conflict, and additionally, specifically for mothers (Liu et al. 2011; Werner, 2006; Hingst 2006:2; Torvatn & Dahl-Jørgensen, 2003; Perrucci 2007). Furthermore, in a study conducted by Bohle et al. (2010) it was found that work-life conflict created by “high, stressful work intensity and low work schedule control” produced evidence of both fatigue and related psychological symptoms.

### **5.2.2 Satisfaction with life**

Satisfaction with life, which is a construct of psychofortology, is described by Diener et al. (1985) as the way in which an individual cognitively measures their quality of life as a whole, according that individual’s specific chosen criteria and that “individual’s overall appraisal of his/her quality of life which incorporates and transcends the immediate effects of life events and mood states” (Diener et al., 1993, p. 276). In this study the mean score for all the participants fell above the midpoint, however in accordance with Diener’s (2006) interpretation of scores which fall between the ranges of 21 and 25, it could be interpreted that the participants in this study are “slightly satisfied” with their lives. Furthermore, that although the majority is generally satisfied there could be areas of their lives that need improvement, or it also may indicate that the individuals would like to move to a higher level of satisfaction (Diener, 2006).

One of the items in the satisfaction with life scale, namely item 5, had mean score that fell below neutral/midpoint. According to Diener (2006) this could be interpreted to mean that the respondents would like to make changes to their lives if they had the chance to live their lives

over again. According research, satisfaction with life is most influenced by social relationships, and those individuals who have close supportive friends and family will have higher psychological well-being (Diener, 2006). The results of this study show that a large majority of the participants in this study, both married and single mothers, have support from their spouse, partner or extended family. Support could be included in the fact that many of the participants live with extended family.

### **5.2.3 Self-esteem**

The second construct of psychofortology examined in this study is self-esteem. Heatherton and Wyland (2003) consider self-esteem to be the attitude that individuals perceive towards themselves, which is an emotional response that will affect their belief in themselves and will influence their relationships, abilities and skills and their perception of their future.

The mean score results for self-esteem of the total respondents fell above the midpoint and therefore suggest that the total respondents had above-average self-esteem. High self-esteem is said to be related to happiness and previous research shows that those individuals who possess high self-esteem appear to be happier, cope better with challenges and negative situations and appear to be more successful in their work environment (Heatherton & Wyland, 2003). High self-esteem also equips individuals to engage positively in inter-personal relationships and appears to help them apply meaning and value to their lives more effectively (Ryan & Deci, 2000).

In this study the indicators for above average self-esteem need to be examined in the context of the research conducted. According to Rosenberg (1989), there are no “cut-offs” for self-esteem and the higher the score, the higher the self-esteem. Rosenberg (1989) urges the researcher to



look at the self-esteem scale scores in conjunction with the literature and in the context of the study, when reporting on the scores. The context of the study lies in the examination of psychological well-being as influenced by marital status and shift work in a call centre.

### **5.3 Psychological well-being and marital status**

The comparison of the psychological well-being of married mothers versus single mothers suggests that overall, married mothers have better psychological well-being than single mothers. This is indicated in the mean scores of both of the psychofortology constructs, self-esteem and satisfaction with life. A total of 192 mothers were participants in the study and the majority of the participants were married mothers (110) and a minority of the mothers who were single (82). The single mothers had lower scores in both life satisfaction and self-esteem. The mean score of satisfaction with life for single mothers fell in the neutral range, whereas the mean score of the married mothers fell into the slightly-satisfied range. The self-esteem scores fell above the midpoint for both groups; however, married mothers' self-esteem scores were higher than single mothers' scores, indicating that married mothers have slightly higher self-esteem than single mothers.

Possible explanations for the results in this study could be correlated with findings of previous research. According to Diener (2006), satisfaction with life is most influenced by social relationships and individuals who have close supportive friends and family have higher psychological well-being. According to Heatherton and Wyland (2003) good self-esteem is derived from three main components, one of them being positive social relationships. From a theoretical fortitude perspective, Pretorius (2004) states that an individual's ability to manage their stress, stay as well and be able appraises "the self" positively, results from the support

received from family and others. Cairney et al, (2003) state that married women have higher psychological well-being than single mothers because married mothers appear to live in conditions where there are better social support structures (Cairney et al., 2003) and have less financial stress because of a dual income (Dziak et al. 2010). Furthermore, the literature shows that single mothers appear to receive less social support, less social involvement and fewer friendships (Cairney et al. 2003).

The results of this study show that the married mothers have greater support structures in place when it comes to the care of their children. More than half of the married mothers have their children taken care of by a family member or by their spouse when they are at work. In addition, although the average age of the mothers is 29 years, just less than half of the sample still lives with extended family, which may possibly suggest that the participants would have financial and family support structures in place while they are at work and this would therefore assist with the work/home life conflict. This assumption could also be supported by studies done by Dziak et al. (2010) which shows that single mothers have significantly higher levels of psychological stress than married mothers as a result of having to juggle work and home-life responsibilities as a result of fewer emotional and instrumental supports which are “key resources” needed to reduce the stress of work-family conflict. Diener et al. (2000) conducted a study which examined the relationship between subjective well-being and marital status in different cultures. Psychological well-being was found to be high within marriage. However when single mothers had strong emotional and social support from extended family members, this support could substitute for the emotional support found in a marital relationship.

#### **5.4 Psychological well-being and shift work**

Psychofortology not only looks at positive institutions such as healthy marriages, but also healthy work environments as work plays a significant role in the functioning and psychological well-being of individuals and there is a significant relationship between life satisfaction (a construct of psychofortology) and job satisfaction of individuals (Prag, 2007). In South Africa, psychofortology and the research thereof, has developed within the work environment, specifically within the organizational context, where constructs of psychofortology are used to enhance employee well-being and the application of employee assistance and counselling, but also in the development and management of employees and organisations (Coetzee & Cilliers, 2001; Breed et al., 2006). Not only has psychofortology developed within the South African work environment, call centres have also developed exponentially (Boonzaier & Boonzaier, 2008) and hand in hand with call center work, is the requirement of the employees to work shifts (Bohle et al, 2010).

Shift work, which can be described as “the hours of employment during non-standard or alternative hours and for Saturdays and Sundays” (Perrucci et al. 2007, p. 601), was one of the variables in the context of this study and was found not to make an overall significant impact on the psychological well-being of the participants. It is important to note at the start of this section, that in this study, there was a significant difference in the numbers of mothers who work shifts (135) and the mothers who do not work shifts (57) which may have influenced the results and therefore the results need to be interpreted with caution.

The descriptive results of the two constructs of psychological well-being measured in this study showed that the mean scores of the mothers who do not work shifts have higher life satisfaction

and higher self-esteem than those mothers who do work shifts. The self-esteem scores, as mentioned earlier in this chapter were above average in total. The good self-esteem results in this study contrast with some of the previous studies that have been conducted on employee well-being in call centres. These studies show that call centre work and specifically shift work, which has been referred to as rigid and inflexible, monotonous, stressful, related to high performance monitoring and low autonomy amongst others issues, result in dysfunctions like: high absenteeism, high turnover, high burnout, emotional, physical and psychological disorders amongst others (Werner, 2006; Breed et al., 2006; Homan 2002; Bohle, 2010; Grebner et al., 2003; Hauptfleisch & Uys, 2006, Torvatn & Dahl-Jorgensen, 2003; Perrucci et al., 2007).

When comparing the mean scores of the groups' life satisfaction, the mothers who do not work shifts are more satisfied with life than those who do work shifts. The group of mothers who had the highest mean for psychological well-being (indicated by satisfaction with life and self-esteem) were those mothers who are both married and do not work shifts. Conversely, the groups with the lowest psychological well-being (indicated by the descriptive mean scores of satisfaction with life and self-esteem) were those mothers who are single and who do work shifts. Corresponding with these results are the descriptive results that show that the single mothers, although as indicated above, have some support from extended family, do not have the same support structures as married mothers, specifically when they are required to work shifts. Of the 80 single parents, 65 (79 %) work shifts. Of these 65 single mothers, 12 (10%) have their children living away from them during the week. More single mothers rely on daycare or crèche facilities to take care of their children when they are at work, which could potentially create problems when they work shifts, fewer single mothers leave their children with family members and more children of single parents are left at home by themselves when their mothers are at

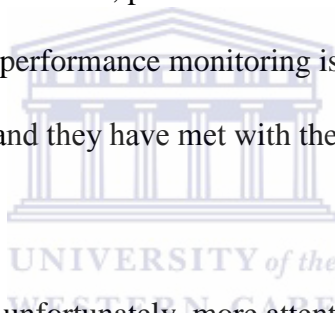
work. According to research conducted by Liu et al. (2011) shift work can contribute to parents (in this study mothers) feeling less successful as they have less time to spend with their children and less time to monitor their discipline. However, conversely, Perrucci et al. (2007), note that an individual's ability to cope better depends on moderating variables such as choice of shift options, remuneration and social support structures (Perrucci et al., 2007). It was also noted that the degree of the individual's personal resources plays a role in the way that the individual manages stressors and the stress of shift work and its subsequent effect on the individual's psychological well-being. One of the moderating variables in this study may possibly be the social support structures of the participants, but it could also be the support structures that have been created within the work environment, such as those put in place for counselling, the nursing sister and the Wellness team.

### **5.5 The interaction effects of marital status and shift work**

There were no interaction effects between married mothers, single mothers, shift workers and non-shift workers. The results of the MANOVA showed that working shifts does not have a significant influence on the mothers' self-esteem, but that marital status does have an influence on psychological well-being. As indicated in previous points in this chapter, the possibility of good support structures and resources could account for the lack of significance between shift work and psychological well-being. Furthermore, research has shown that specified moderating variables which can influence the effect of shift work on individuals have to be taken into consideration when assessing the impact of shift work on physical health, psychological well-being and family life. These variables are the type of shifts worked, the nature of the job and its demands, the individual's choices within the shift work context, marital and social support

structures and the extent of the ability to exercise control and choices over the shifts (Perrucci et al., 2007).

Liu et al. (2011) also point out that shift work does not necessarily have to influence the parent negatively. However, this is only when shifts are flexible and when the parents have control over their shifts and so are able to spend more time with their children. Therefore, employee psychological well-being will be higher if the work environment is predictable and manageable and if the employee has “a voice” and has the opportunity to participate in decisions that are made (Breed et al., 2006). Holman (2002) states that low employee well-being, in call centres is associated with low control over procedures, performance monitoring and lack of line manager support. In some environments the performance monitoring is regarded positively when it enhance the individuals’ strengths and they have met with their performance criteria (Holman, 2002).



Luthans (2002, p. 698) argues that, unfortunately, more attention has been paid to problems, deficiencies and dysfunctions of employees and managers in the work environment, as opposed to developing strengths and to the enhancement of psychological capacity to improve performance and to develop. The opposite can be said for the specific call centre used in this study. In this study, the call centre employs a team of people allocated to taking care of the wellness of the employees, including counsellors, nurse and doctor, sports co-coordinator, and people who take care of team-building, events and communications. This therefore could possibly account for the above-average psychological well-being of the single and married mothers who work in this call centre environment.

## 5.6 Limitations

The limitations of this study were indicative in the number of participants who made up the total sample (n=192). A quantitative study is more suitable for a sample of a larger number of people. The numbers for married (110) and single mothers (82), and mothers who work shifts (65) and do not work shifts (17) should have been more evenly spread and may not be representative of the total population.

The study was also limited to one call centre and therefore was call-centre specific. Assumptions were made with regard to the specific call centre environment problems which were literature-dependent. However, the research did not make allowances for variables such as the fact that the wellness of the call centre agents in the call centre was considered important to the company and that a team of people had been established to care for their physical health as well as their psychological well-being. The literature reviewed focused more on the negative influences of shift work and call centre work. More should have been written around the moderating/support variables of call centre agents. The cultural context of the home background of the agents was a variable that was not fully explored. Cultural and extended family support structures of certain race groups in South Africa are better, by the very nature of their living circumstances.

Another limitation of the study was specifically focusing on shift work and not taking into account the work culture within the company. The company drives strong core values like trust and loyalty and is concerned about the wellness of the employees. A wellness team, consisting of two counsellors, a nurse, an events planner, a communications officer and gym co-ordinator and service provider coordinator who looks after the restaurants, coffee shop, convenience shop, hairdresser and beauty therapist all of which service only call centre employees, could have

positively influenced the psychological well-being of the employees. Furthermore, the fact that the company uses incentives and rewards to motivate their staff is significant and could also have influenced the results of the study as the rewards may outweigh the negative influence of the shift work system.

## **5.7 Conclusion**

This study was a comparative study of the psychological well-being (indicated by satisfaction with life and self-esteem) of single and married mothers who work shifts and who do not work shifts in a call centre environment. Four groups that were compared: married mothers, single mothers, mothers who work shifts and mothers who do not work shifts. Although this study's results should be interpreted with caution, findings suggest that marital status does have a significant influence on psychological well-being of the participants; therefore this could be an indication that married mothers have higher psychological well-being than single mothers. Shift work, however, does not appear to have any significant influence on the psychological well-being of the participants in this study. Therefore it could be interpreted that whether or not the mothers work shifts in this call centre environment, the psychological well-being of the mothers is not influenced. However, the findings of this study thereof may not be generalised as the population is limited to one call centre and must be interpreted with caution. More research is needed.

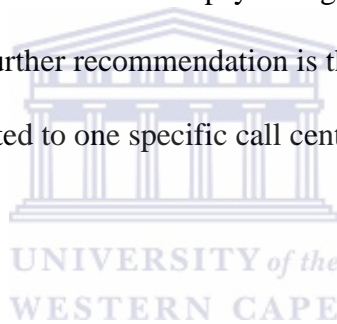
## **5.8 Recommendations**

Further studies should be conducted on the significance and influence of social support structures on the shift worker's psychological well-being, specifically within the cultural context. This could be done with reference to those married and single mothers who still live with extended



families, specifically with their parents or parents-in-law. Another situation to investigate could be families where a grandparent, who does not work or bring in an income, plays a significant role in the rearing of the children and doing domestic chores such as cooking, washing and shopping, while the mothers work to provide financially for the family.

Further studies could be done to examine what factors within the call centre environments are used or are in place specifically to enhance job/life satisfaction and self-esteem, and employee well-being. This could be examined in the light of the provision for the employees' wellness with specific relevance to an active wellness team in the call centre environment where employees work shifts and how this team would influence the psychological well-being of the employees, specifically working mothers. A further recommendation is that future studies could be done in several call centres and not be limited to one specific call centre.



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## APPENDIX A

### INFORMED CONSENT FORM

**TITLE OF THE RESEARCH PROJECT:** A comparative study of the psychological well-being of single and married mothers who work shifts in a call centre environment

**STUDENT NUMBER:** 3011551

**RESEARCHER:** Glynnis Green

**CONTACT NUMBER:** 0824428221

**EMAIL ADDRESS:** [glynnisann.green@gmail.co](mailto:glynnisann.green@gmail.co),

**SUPERVISOR:** Dr. N. Roman [nroman@gmail.com](mailto:nroman@gmail.com) or [nromans@uwc.ac.za](mailto:nromans@uwc.ac.za)

Dear Participant

I am a Masters student in the Social Work Department at the University of the Western Cape. Currently, I am doing a Masters in Child and Family Studies and am conducting a study to examine and compare the psychological well-being of single and married mothers who work shifts in a call centre environment. I would therefore like to conduct a survey using the employees of Direct Axis who are mothers.

The participation in the study is entirely voluntary and the name of the company and the employees shall remain anonymous and the information gathered will be confidential. The survey will be conducted in the form of a questionnaire that is divided into three sections: demographic information, Satisfaction with Life Scale, and Rosenberg's Self esteem Scale. The two scales will be used to ascertain the psychological well being of working mothers.

The findings of the survey and subsequent analysis and discussion will be made available to you. I appreciate the opportunity of being allowed to conduct this study at Direct Axis.

If you agree to participate in this study please complete the following questions.

Yours Sincerely

Glynnis Georgeu  
Student Researcher

Dr N. Roman  
Supervisor

## APPENDIX B

### QUESTIONNAIRES

This questionnaire is part of required research study for a mini thesis that forms part of a Social Work Masters Programme in Child and Family Studies at University of the Western Cape. Participation in this process is voluntary and confidential. The name of the company as well as the names of the employees participating in the process will be kept anonymous. You have the right to withdraw at any stage of the process.

#### A. Demographic Details

Please complete the questionnaire by placing an X in the block with the answer that applies to you

1. How old are you?								
2. Your race group		Asian	White	Black	Coloured			
3. Your monthly salary bracket		Less than R5000	R5000 - R10000	R10 000 - R15 000	R15 000 – R25 000	Above R25000		
4. The number of children you have		1	2	3	4	More than 4		
5. How old are your children?		0-2yr	3-5yr	6-8yr	9-12yr	13-15yr	16-18 yr	18 +
6. Your relationship status?		Married		Divorced (single)	Widowed (single)	Never married (single)	Living with a partner	
7. Your living arrangements	In our own home with husband /part &	Extended family/in-laws with husband / part & child/children	Alone with extended family/ in-laws & child /children	Own home with child /children	With friends	Other, please specify		
8. Do your children live away from you during the week?		Yes		No				
9. The area of the business that you work in		Loans		Collections	Offshore	Business Support	Other (Specify)	
10. Are you required to work shifts?		yes		no				

<b>11. Who takes care of your children while you are at work?</b>	Daycare / crèche	Nanny/maid	Family member	Spouse/partner	Left on their own
<b>12. Do you have difficulties finding care for children when you are required to work shifts?</b>	All the time	Often	Seldom	Not at all	I do not work shifts
<b>13. Do you worry about your child/ren's well-being while at work?</b>	Not at all	Rarely	Only on late / week-end shifts	Often	All the time

## B. Self Esteem Scale

Please highlight the relevant box with an X

Statement	Strongly Disagree	Disagree	Agree	Strongly Agree
On the whole, I am satisfied with myself	1	2	3	4
At times, I think I am no good at all	1	2	3	4
I feel that I have a number of good qualities	1	2	3	4
I am able to do things as well as most other people	1	2	3	4
I feel I do not have much to be proud of	1	2	3	4
I certainly feel useless at times	1	2	3	4
I feel that I am a person of worth, at least on an equal plane with others	1	2	3	4
I wish I could have more self respect for myself	1	2	3	4

All in all, I am inclined to feel that I am a failure	1	2	3	4
I take a positive attitude to myself	1	2	3	4

### C. Satisfaction with Life Scale

Please highlight the relevant box with an X

Statement	Strongly Disagree	Disagree	Slightly Disagree	Neither agree or disagree	Slightly Agree	Agree	Strongly Agree
In most ways my life is close to my ideal	1	2	3	4	5	6	7
The conditions of my life are excellent	1	2	3	4	5	6	7
I am satisfied with my life	1	2	3	4	5	6	7
So far I have gotten the important things I want in life	1	2	3	4	5	6	7
If I could live my life over, I would change almost nothing	1	2	3	4	5	6	7