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THE EFFECTS OF COMPETING COMMITMENTS ON THE RELATIONSHIP BETWEEN ORGANISATIONAL STRESS AND WELL-BEING

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A dissertation submitted to the Department of Industrial Psychology, at the University of the Witwatersrand, Johannesburg in partial fulfilment of the requirements for the degree of Masters of Arts.

Johannesburg, 2005

Declaration

I hereby declare that this dissertation is my own work. It is submitted for the Masters degree in Industrial Psychology at the University of the Witwatersrand, and has not been submitted to any other university, or for any other degree.

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Michelle Chazen

February 2005

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Abstract

This study aimed to investigate the nature of the relationship between organisational stress, in terms of individual's emotional reactions to their jobs, and physical and psychological well-being. It then aimed to expand upon previous research in this area, by considering the effects of potential mediators such as job and family involvement on this relationship. In addition to this it aimed to explore the possible differences in the emotions at work, well-being and job and family involvement as experienced by individuals of different demographic groups. Questionnaires containing a biographical information sheet and four well-established measures, including the Job-Related Affective Well-Being Scale, the Well-Being Scale, as well as the Job Involvement Questionnaire and Family Involvement Scale, were distributed to the male and female employees at a large organisation in Johannesburg. This sampling method yielded a final sample of 249 respondents, consisting of 120 men and 129 women.

The results of this study illustrated significant differences in the physical well-being of the men and women in the sample, with men reporting experiencing greater levels of positive physical well-being than their female counterparts. A significant difference was also demonstrated in the emotions at work experienced by the Black and White respondents of the study, with the Black individuals reporting more positive emotions at work than their White counterparts. In addition, the findings of this study indicated that there was a positive relationship between the constructs of emotions at work and physical and psychological well-being and that emotions at work mediated the relationships between job and family involvement and well-being.

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Introduction

The costs and consequences of workplace stress are particularly relevant to many individuals in the South African population, as work has and continues to become a fundamental part of their existence (Jenner, 1986). In contemporary society, work activities not only consume a large proportion of individual's time, but also constitute a fundamentally important aspect of their lives (Brown, 1996). This, and the transition that has occurred in the South African workforce, from one that was once dominated by White males, to one that is now representative of the general population, has resulted in a large majority of the workforce being composed of many individuals who are now responsible for taking on the roles of paid worker, spouse and parent simultaneously.

The changing nature of the workforce, as well as the increasing prevalence of phenomena such as dual career couples, single-parent families, and families taking on the responsibility of elder care, (Frone, Russell and Cooper, 1992) has therefore created an increasing need for up-to-date knowledge in the area of workplace stress, the effects that it is expected to have on an individual's health and well-being, and on the effectiveness of the organisation in which they are employed. Other factors, which should also be taken into consideration, namely job and family involvement, while essential to consider where the constructs of stress and well-being are concerned, have attracted relatively little attention from researchers in the area, thus creating a gap in our knowledge. This is problematic due to the importance of health and well-being for the every-day functioning of individuals in society.

The aim of this study is to investigate the nature of the relationship between organisational stress, in terms of individuals' emotional reactions to their jobs, and physical health and psychological well-being. It will then aim to expand upon previous research in the area by observing the possible influence that mediators such as job involvement and family involvement may have on this relationship. In addition to this, it will aim to investigate whether there are differences in the emotions at work, well-being and job and family involvement, as experienced by individuals of different demographic groups, especially where the variables of gender and race are concerned.

The report presented below will begin by providing an overview of the available literature in the area of the constructs of physical and psychological well-being, stress and emotion, and job and family involvement. Having set out the theoretical foundation for the study, it will then continue by focusing upon the four main hypotheses to be investigated in the study. This discussion will then be followed by the methodology chapter, in which the research design, procedure, sample and ethical considerations that were used in the study will be highlighted and critically evaluated. The results that were obtained in the study will then be presented in tabular form, where they will be evaluated and briefly described. This will then be followed by the final chapter of this report, which will consist of an in-depth discussion, where the results of the study will be discussed and contextualised in relation to previous research, followed by a consideration of the theoretical implications of the findings, and an overview of the limitations of the study.

Chapter 1: Literature Review

Introduction

Research in the area of work-related stressors and strains have increased dramatically over the past few decades (Gavin and Axelrod, 1977). The research findings over this period have highlighted many of the physiological, psychological and behavioural (De Cenzo and Robbins, 1996) costs and consequences of work-related stress, which range from job dissatisfaction, anxiety and depression, to severe mental and physical illnesses (Gavin and Axelrod, 1977). However, the majority of research, where organisational stress is concerned, has neglected to focus upon the link between stress and emotion, an area that is now beginning to spur on a great amount of interest from contemporary researchers, and industrial/organisational psychologists in particular (Larsen, Diener, and Lucas, 2002). The lack of research in this area is problematic, in the sense that the construct of emotion is said to influence a wide array of organisational phenomena, including job satisfaction, leadership and group processes, (Lord and Kanfer, 2002) thus highlighting the need for, and importance of, a comprehensive understanding of the construct of emotion, in order to gain an in-depth understanding of the underlying individual processes that occur within the organisation.

The costs and consequences of workplace stress, as previously mentioned, are particularly relevant to many individuals in the South African population, as work has and continues to become a fundamental part of their existence (Jenner, 1986). In contemporary society, "work activities consume a large proportion of time and constitute a fundamentally important aspect of life for most people" (Brown, 1996, p. 235). This, and the transition that has occurred in the South African workforce, from

one that was once dominated by white males, to one that is now representative of the general population, has resulted in a large majority of the workforce being composed of individuals who are now responsible for taking on a number of varied commitments simultaneously, including the roles of paid worker, spouse and parent. The changing nature of the workforce, as well as the increasing prevalence of phenomena such as dual career couples, single-parent families, and families taking on the responsibility of elder care, (Frone, Russell and Cooper, 1992) has therefore created an increasing need for up-to-date knowledge in the area of workplace stress, the effects that it is expected to have on individual's health and well-being, and on the effectiveness of the organisation in which they are employed. Many of the studies that have been conducted in this area have tended to focus upon the effects of organisational stress on either physical health or psychological well-being, while failing to consider these constructs simultaneously. While this kind of research has elicited very important information, which has greatly facilitated our knowledge in the area of health and well-being, it fails to consider the fact that these types of well-being are intricately linked to one another, as will be demonstrated in the discussion on well-being later in this review.

Previous research studies in the area have also tended to focus upon the work-family conflict that is observed to arise as a result of occupying roles in the domains of family and work simultaneously. Few studies have focused on the constructs of job involvement and family involvement, and the effects that they are likely to have on the relationship between workplace stress, health and well-being. In fact, much of the existing literature in the area of involvement, has centred around the domain of work, with research in the area of family involvement being particularly scarce. As such

there is a definite gap in previous literature with regards to the impact of varied commitments on the relationship between individuals reported levels of stress, in terms of their emotional reactions at work, and their levels of health and well-being.

This literature review will begin with an in-depth discussion of the construct of well-being, which will be defined, and its importance explored. This discussion will focus upon both context free and job-specific well-being, which will not only be linked to physical and psychological well-being, but also to the construct of emotions at work. As the relationship between the constructs of emotions at work and well-being is expected to be affected by a number of issues, this discussion will then continue with an exploration of the construct of stress, where the main definition of, and approach to stress, will be highlighted and discussed. This section of the review will then be followed by a consideration of other mediators to the relationship between emotions at work and well-being, where factors such as multiple role involvement, job involvement and family involvement will be discussed. The review will then conclude by listing the hypotheses to be considered in the current study. The construct of well-being will be explored in more detail below.

Health and Well-Being

This section of the review will begin with a discussion regarding current perspectives on health and well-being, wherein the construct of well-being will not only be defined, but its importance explored. It will then continue by exploring the two main sources of well-being, namely context free well-being and job-specific well-being. This will then be followed by an in-depth analysis of the constructs of psychological well-being, physical well-being, and mental health, the main types of well-being

documented in contemporary literature in the area of health and well-being. These types of well-being will then be linked to the sources of well-being, as previously mentioned, and the chapter will be concluded with a discussion regarding the construct of emotions at work.

A number of perspectives have been developed regarding health and well-being. While attempts have been made to progress from the traditional perspective, which views health and well-being in terms of the absence of illness, (Jahoda, 1958 cited in Ryff, 1989) it is useful to make use of the traditional perspective in this analysis, as it is clearly able to explain why health is often observed as "a state of being that everyone would wish to achieve and maintain" (Doyal, 1995, p. 8). Illness, which is not only detrimental to individual's physical health, but also to their mental health, due to the stress that it engenders, is likely to result in anguish in the form of pain, fear, anxiety and depression. This is likely to have a devastating effect on individuals' feelings of themselves, others, and the world around them, (Doyal, 1995) making it unsurprising that health and well-being should form an integral component of contemporary research on human behaviour.

Despite the importance of issues surrounding health and well-being, individuals are seldom aware of the "delicate balance between being well and unwell, the many facets of being unwell, and the challenge of maintaining well-being in the environment" (Fisher et al., 2003, p. 120). This is a cause of concern as the health and well-being of individuals in modern-day society, are constantly threatened by complex factors that exist in their physical, social and psychological environments (Fisher et al., 2003). Contemporary research on well-being, which has focused

predominantly on an examination of individuals' feelings regarding themselves as well as the environments in which they work and live, has identified two main sources of well-being, namely context free well-being and job-specific well-being (Fisher et al., 2003). These sources of well-being will be considered in more detail below, followed by a discussion in which the importance of knowledge in this area, for both the individual and organisation, will be explored.

Context free well-being refers to the individuals' feelings about life in general, and as such disregards any particular setting (Fisher et al., 2003). This type of well-being measures factors such as "life satisfaction, happiness, positive affect, negative affect, anxiety, depression, general dysphoria, self-esteem and other types of feeling" (Diener, 1984 cited in Warr, 1990, p. 194). Job-specific well-being, on the contrary, which refers to the specific feelings of individuals regarding themselves in relation to their job, (Fisher et al., 2003) measures a number of aspects including "satisfaction, alienation from work, job attachment, job tension, depression, burnout, involvement and job morale" (Cook, Hepworth, Wall and Warr, 1981 cited in Warr, 1990, p. 194). However, well-being in a specific area of one's life is not limited to one's job, meaning that it may occur in a number of domains of an individual's life, including family, marriage and parenthood. The term domain-specific well-being will therefore be used interchangeably with job-specific well-being, for the remainder of this review.

While there is a definite distinction between context free well-being and job-specific well-being, one should not overlook the fact that individuals' feelings about their jobs are likely to form an integral part of their feelings about life in general, making it

unsurprising that research in the area has, time and again, highlighted consistent statistical relationships between these sources of well-being (Fisher et al., 2003). This phenomenon may be explained in terms of spillover, a term used by researchers to refer to the way in which individuals carry the emotions, attitudes, skills and behaviours that are established in one area of their lives into another (Lambert, 1990). Spillover may be positive or negative, meaning that the various areas of individuals' lives may serve to enrich or deplete one another, (Sumer and Knight, 2001) making it unsurprising that individuals' levels of well-being in one, or a number of domains of their lives (e.g. work or family) would influence their general levels of well-being, including factors such as life satisfaction and positive and negative affect, (Diener, 1984 cited in Warr, 1990) as considered above.

Having knowledge of the relationship between context free and job-specific well-being is essential at both the individual and organisational level. Individuals may use this knowledge to better their health, and in doing so increase the likelihood of being able to function at their full potential in their daily activities (Fisher et al., 2003). This is further explained by the so-called drift hypothesis, which proposes that "highly motivated workers drift to better jobs accompanied with more job autonomy, more support, and fewer demands", as opposed to workers in poor health or with motivational deficits, who are more likely to "drift to worse jobs due to their bad personal record of sickness, absenteeism or even disability" (de Jonge, 2001, p. 31). Having knowledge of the relationship between context-free and job-specific well-being, will therefore further benefit these individuals in that it may provide them with insight into the consequences of their poor health for them, and those in their immediate surroundings.

This knowledge is also important and beneficial at the organisational level, in that it may be used to combat the potential organisational costs that are believed to be brought about by factors, which stem from poor health and well-being, such as poor levels of employee "commitment, application and productivity" (Fisher et al., 2003, p. 122). Individuals who demonstrate low motivation, emotional exhaustion or dissatisfaction at work, may receive less social support from others, owing to the fact that individuals with poor well-being are often observed as being unable to reciprocate by those with whom they work (de Jonge et al., 2001). As a result, these individuals may be observed as lacking drive and motivation, resulting in their being given less autonomy in their work. This is likely to result in individuals developing poorer perceptions of their work environments as well as their colleagues and superiors (de Jonge et al., 2001). This makes the organisational outcomes listed above, as well as factors such as high absenteeism and turnover, interdepartmental conflict, deterioration in industrial relations, as well as general dissatisfaction and low morale, (Health and Safety Authority, 2003) relatively unsurprising.

Having broadly considered the construct of well-being and the contexts or settings in which it is found, this review will now continue by portraying the link that exists between context free and job-specific well-being, and three of the most prominent types of well-being documented in contemporary literature in the area, namely psychological well-being, physical well-being and mental health. Having an in-depth understanding of these types of well-being is necessary for the current study, in that it will provide greater insight into the main relationship to be investigated in this study, namely between the constructs of organisational stress and well-being.

Psychological well-being is primarily concerned with the causes and consequences of positive functioning, or pleasant emotional experiences among individuals (Diener, 1984 and Ryff, 1989). However, psychological well-being is not a unitary construct, (Baruch and Barnett, 1986) and is as such defined in terms of a number of aspects, including high levels of self-esteem, mental health, life satisfaction, and vigour, together with low levels of depression and frustration (Muller, 1993). This is important to consider, in that it highlights the fact that psychological well-being is not just concerned with the absence of negative factors in an individual's life, but is also found to include positive measures (Diener, 1984). Additionally, it points to the fact that psychological well-being encompasses all of the aspects of one's existence, and is therefore observed as an integrated judgement of the individual's life (Diener, 1984). Psychological well-being is therefore subjective, and as such "resides within the experience of the individual" (Campbell, 1976 cited in Diener, 1984, p. 543). This is particularly interesting in that it implies that objective conditions, which are expected to have an influence over well-being such as health, comfort, virtue and wealth, while important, are not observed as being an integral part of one's well-being (Diener, 1984).

Psychological well-being may be broken down into two main components, namely the affective component along with its two broad aspects of positive and negative affect, and the cognitive component, which is associated with life satisfaction and the satisfaction that individuals experience in the various domains of their lives. Harrington and Loffredo (2001) observe positive and negative affect as being two independent personality variables, and note that they are directly related to life satisfaction, thus implying that the affective and cognitive components of

psychological well-being, are intricately linked to one another. The two components of psychological well-being will be considered in more detail below, followed by a discussion in which they will be linked to the sources of well-being, as previously discussed.

The first component of psychological well-being, namely emotion or affect is a relatively difficult construct to define, as it is not a single unit, but rather a combination of "physiological, subjective, and behavioural responses that cohere as a unified construct" (Weiss, 2002, p. 23). The multi component nature of emotion is effective when one considers its role as serving an adaptive function, in that one would generally expect the need for the use of multiple systems when dealing with adaptive problems (Weiss, 2002). The definition of emotions as "specific neuropsychological phenomena, shaped by natural selection, that organise and motivate physiological, cognitive and action patterns that facilitate adaptive responses to the vast array of demands and opportunities in the environment", (Weiss, 2002, p. 35) is therefore found to be an adequate representation of the nature and scope of emotion.

Positive emotions or affect refers to an individual's positive levels of functioning, and the positive experiences that come about as a result of this functioning (Hart, 1999). Positive emotions, including being at ease, cheerful, elated, happy, inspired, pleased, satisfied and relaxed, (Van Katwyk, Fox, Spector and Kelloway, 2000) are typically associated with "slower and more variable responses" from their negative counterparts (Lord and Kanfer, 2002, p.10). Researchers are often able to extract information regarding individual's positive affect, by asking them to reflect upon the

feelings that they may have experienced after achieving something positive, such as reaching an accomplishment (Ryff, 1989).

Negative emotions or affect, on the contrary, refers to the individual's negative levels of functioning, and the negative experiences that come about as a result of this functioning (Hart, 1999). Negative emotions, which include, but are not limited to, being angry, bored, confused, discouraged, frustrated, gloomy, intimidated and miserable, (Van Katwyk et al., 2000) are often strongly associated with specific types of behaviour that are likely to occur without guidance or direction from cognitive processing, primarily due to the fact that they occur too fast for processing to take place (Lord and Kanfer, 2002). Here researchers would commonly ask individuals to reflect upon the feelings that were elicited, after experiencing something negative, such as criticism (Ryff, 1989).

The affective component of well-being therefore links in with domain-specific well-being, the second source of well-being considered above. Examples of this may be drawn from the preceding discussion, regarding positive and negative affect. Individuals reaching an accomplishment in the workplace, for example, would be expected to experience a number of specific feelings regarding themselves in relation to their jobs. These feelings, which may include increased job satisfaction, job attachment, job involvement and morale, and decreased alienation from work, job tension, depression and burnout, would be expected to contribute to positive levels of job-specific well-being. This example also clearly illustrates the distinct relationship between the two sources of well-being, as previously discussed, in that positive levels of job-specific well-being would be expected to contribute to positive levels of

context free well-being, in the form of increased levels of life satisfaction, happiness, positive affect and self-esteem, and decreased levels of negative affect, anxiety and depression, thereby contributing to an overall sense of health and well-being. While the example provided above only focuses upon positive affect, one would expect the opposite to hold true, had the individual encountered a negative experience, such as criticism.

The second component of psychological well-being, namely the cognitive component is often associated with life satisfaction and the satisfaction that individual's experience in the various domains of their lives (Hart, 1999). Where life satisfaction is concerned, the responsibility to determine what is good in life rests with the individual, making it unsurprising that life satisfaction and psychological well-being should be described as "a global assessment of a person's quality of life according to his own chosen criteria" (Shin and Johnson, 1978 cited in Diener, 1984, p. 543). This fits in quite closely with research conducted by Andrews and Withey (1976 cited in Bryant and Veroff, 1982) who found that an individual's satisfaction with the self is possibly the most important indicator of overall life satisfaction.

The cognitive component of well-being relates to domain-specific well-being in a similar nature to the affective component, in that individuals experiencing life satisfaction in one domain, or a number of domains in their lives, would be expected to experience positive levels of domain-specific well-being. This would, once again, be expected to link in with context free well-being, in that it would be expected to influence their levels of life satisfaction, happiness, affect, depression, and anxiety, factors which would then be expected to contribute to their feelings about life in

general. Other factors that are likely to impact upon individual's well-being include their physical and mental health, which will be considered in more detail below.

Verbrugge (1983) defines physical health in terms of both health status and health behaviour, and therefore includes a number of factors in his definition of what is encompassed in good health. These factors include "positive self-rated health status, low morbidity (few symptoms and conditions), little restricted activity, low chronic limitation, little health-services use or lay consultation, and low medical drug use" (Verbrugge, 1983, p. 17). Physical health is observed as being crucial for individuals, in that a lack thereof will greatly impact upon their ability to interact with others in society, and benefit positively from this interaction (Doyal, 1995).

Physical health links in with the first source of well-being to be considered above, namely context free well-being. This may be observed by focusing upon the factors believed to be encompassed in good health. Individuals experiencing low levels of illness, little restricted activity, little health services and medical drug use, for example, would therefore be expected to view themselves as having a positive self-rated health status, thereby affecting their feelings about life in general. This would consequently be expected to affect their levels of domain specific well-being, in that individuals' levels of physical well-being have been shown to affect their relationships and interactions with others. Positive levels of physical well-being will therefore be likely to provide individuals with the ability to interact with others more effectively, thereby affecting the well-being to be experienced in other domains of their lives. However, while physical health is crucial to individuals' levels of well-being, it has been found to be insufficient when in isolation, leading researchers in the

area to note that physical health should be accompanied by mental health, in order to create an ultimate sense of well-being.

Mental health, which forms an integral component of psychological well-being, is important for an overall sense of well-being in that it provides individuals with the cognitive and emotional capacity to negotiate with their social and physical realities, and in doing so manage to make, and act upon informed choices (Doyal, 1995). Warr (1990) identifies two main behavioural components of the construct of mental health, namely competence and aspiration. Competence, the first behavioural component of mental health, is measured in terms of individuals' abilities to cope with, and overcome the difficulties that are experienced in their lives, and focuses upon their beliefs regarding self-efficacy and personal mastery (Warr, 1990). An individual considered as being competent would therefore be able to make use of his or her adequate psychological resources to deal with difficulties in the environment (Warr, 1990). Competence is distinguished in terms of context-free competence and domain-specific competence, and is measured accordingly (Warr, 1990).

The second behavioural component of mental health, namely aspiration, is often used in psychological research to measure psychological growth and self-actualisation, and is also distinguished in job and non-job related terms (Warr, 1990). A mentally healthy individual is therefore viewed in terms of "having an interest in, and engaging with, the environment" (Warr, 1990, p. 197). Additionally he or she is found to establish goals and make an active effort "to attain them, through motivated behaviour, alertness to new opportunities, and efforts to meet challenges that are personally significant". This differs significantly for a mentally unhealthy individual

who will be likely to exhibit “reduced involvement and activity” and an “acceptance of present conditions even when they are unsatisfactory” (Warr, 1990, p. 197).

Having knowledge of the sources and types of well-being, as discussed above, is essential for the current study in that it is able to provide us with insight into the relationship between the well-being that individuals experience at work, and in the other domains of their lives, especially where factors such as job and life satisfaction are concerned. Here attention is, once again, drawn to the notion of spillover, a term used to describe the way in which the various domains of one’s life may affect one another.

However, recent research in the area of health and well-being has begun to transcend beyond surrogate measures of well-being such as job satisfaction, which tend to provide an indication of the attitudes of the respondent towards their job. Instead, this research has begun to place its focus upon affective measures of well-being thereby providing a reflection of the actual emotions that individuals experience at work (Potter, Smith, Strobel and Zautra, 2002).

Contemporary literature in the area of emotion has revealed a number of components that are unique to the construct. The first component of emotion to be discussed in literature in the area, namely the experiential component, is defined in terms of the subjective appreciation of the emotional state, (Weiss, 2002) and includes the experience of emotions such as pain, anger and joy, consequently manifesting “itself as an action tendency, a biasing of perceptions, or a feeling state” (Lord and Kanfer, 2002, p. 6). However, emotional reactions are by no means limited to that of pain,

anger and joy. The most common emotional reactions and experiences to be found in individuals, and in the work context in particular include *anxiety and apprehension*, emotions that are said to arise as a result of threatening or ambiguous situations (Buunk et al., 1998), *anger, irritation and resentment*, which arise as a result of frustrating situations, examples of which may include, being interfered with or failure to achieve a goal, as well as *depression, disappointment and grief*, which characterise situations in which loss or deprivation are experienced, such as the loss of a promotion or control in one's position (Buunk et al., 1998). *Envy and jealousy*, which usually arise as a result of an unfavourable social comparison, such as observing a co-worker receive a promotion that was wanted by oneself, and *feelings of shame and embarrassment*, which are likely to result in the event that morals are violated or goals are not accomplished due to faults on one's own part, (Buunk et al., 1998) are also common emotional experiences to be located within the organisation.

The second component of emotion expands on the subjective experiential element, as discussed above, by noting that it is always associated with or connected to an individual, object or event, as demonstrated in the negative emotions listed above (Weiss, 2002). Thirdly, there is general agreement amongst contemporary emotion researchers that emotional states include identifiable physiological body changes (Weiss, 2002). Negative emotions are therefore often accompanied by a number of physiological changes. When coped with effectively, however, these symptoms, which include "increased heart rate and blood pressure, increased secretion of certain hormones, and rapid breathing", (Buunk et al., 1998, p.150) will not have long-term consequences for physical or mental health. Ill health will, however, be expected to result in the event that the individual "experiences prolonged, intense emotions that

s/he considers undesirable, and when s/he is unable to remove or avoid the cause of these emotions or to reduce the negative feelings themselves" (Buunk et al, 1998, p. 151). Finally, these emotions usually contain particular action tendencies (Weiss, 2002). However, the type of behaviour to be elicited by emotions is largely dependent on whether they are positive or negative (Lord and Kanfer, 2002).

The recent emphasis on emotions at work has therefore created a need to establish the link between emotions at work and other indicators of well-being. It was therefore felt to be appropriate to measure the well-being experienced at work by the respondents of this study by way of a job-related affective well-being scale, thereby providing a reflection of the actual emotions that were elicited by any part of their job, including the work that they were required to complete, the remuneration that they received, as well as through the actions of their co-workers, supervisors and clients (Van Katwyk et al., 2000).

Having discussed the constructs of health and well-being, this review will now continue with a discussion regarding the constructs of stress and emotion.

Stress and Emotions at Work

This section of the review will highlight the main definition of, and most prominent approach to stress. The discussion will then be taken one step further by considering the relationship between the constructs of stress and emotions at work and one's levels of health and well-being, where mediators of the stress, well-being relationship will be highlighted and discussed.

The mediational approach to stress is one of the most widely recognised and accepted approaches to stress in the literature. It focuses upon the cognitive, evaluative and motivational processes that mediate the relationship between the stressor, a term used to describe the stressful event in the environment, and the individual's reaction to that stressor (Buunk et al., 1998). The underlying premise of this approach is that individuals' emotional responses to potential stressful stimuli are largely dependent on their cognitive appraisal of the situation, and their available resources. This kind of approach is therefore particularly beneficial in that it goes beyond merely focusing upon the nature of stressors and stress reactions, to focus upon the psychological processes that mediate the relationship between stressors and well-being (Buunk et al., 1998). The definition of stress as "the emotional, cognitive, behavioural and physiological reaction to aversive and noxious aspects of work, work environments and work organisations" making stress "a state characterised by high levels of arousal and distress and often by feelings of not coping", (Safework, 2003, p. 2) is derived from the mediational approach to stress, and is felt to be an adequate definition of the construct of stress, for the purposes of this study.

A vast majority of the contemporary body of literature surrounding stress tends to follow the mediational approach, as considered above. That is to say that stress at work and work stressors are now viewed as being involved in the production of a number of negative emotions, including the likes of anger and disappointment (Buunk et al., 1998). As such, there is now general agreement among theorists in this area, that "negative emotions are usually elicited by the evaluation that an event is a threat to, or blocks the attainment of important needs and goals" (Oately and Jenkins, 1992 cited in Buunk, 1998, p. 150). The perception that a stimulus or situation is

potentially harmful, risky or frustrating therefore causes an emotional reaction, in which emotions such as anxiety or anger are displayed (Buunk et al., 1998).

The integration of the constructs of stress and emotion has therefore been observed to spur on a great amount of interest from contemporary researchers, and industrial or organisational psychologists in particular (Larsen, Diener and Lucas, 2002). The construct of emotion has been observed to influence a wide array of phenomena that are of extreme relevance to organisational and workplace behaviours, including "altruism, creativity, learning and memory, social perception and interaction, social comparison, resource allocation, self-evaluation, moral reasoning, attraction and liking, attributions and expectations, judgement and decision-making, self-regulation and coping, irrational beliefs and rumination" (Larsen, Diener and Lucas, 2002, p. 65).

Additionally, emotion is able to provide insight into areas of industrial psychology, such as job satisfaction, leadership, group processes, employee violence and employee reactions to organisational justice, (Lord and Kanfer, 2002) as well as the role of personality characteristics in influencing behaviour in the workplace (Larsen, Diener and Lucas, 2002). As such, it was therefore felt to be appropriate to measure stress in this study in terms of the emotional reactions elicited in individuals by any part of their jobs, including the work itself, co-workers, supervisors, clients and pay (Van Katwyk et al., 2000).

As demonstrated above, the constructs of stress and emotion are expected to have a great influence over an individual's sense of health and well-being. For this reason, occupational stress researchers have begun to place increasing emphasis upon investigating well-being (Burke, 2002), as a function of job stressors, which are typically measured in terms of organisational variables, or workers' assessments of their conditions at work (Dooley, Rook and Catalano, 1987). The increased interest in the area of stress, emotion and well-being has resulted in a number of studies spanning a wide range of occupations and organisations (Steffy, Jones and Noe, 1990). However, the findings of this research do not always correspond, this according to Newton (1995) who notes that this has resulted in uncertainty regarding the nature, magnitude and direction of the link between stress and health, meaning that there is still a debate with regards to whether stress influences one's levels of well-being, or whether well-being influences one's levels of stress. However, the majority of studies in this area, such as those conducted by Newton (1995) and de Jonge et al., (2001) have found stress to be a major health risk.

An essential aspect of the response of individuals to stress, which is often ignored by psychologists and professionals alike, involves the fact that there are vast differences in the reactions that individuals have to certain stressors, and to stress in general. Thus, while certain individuals may have a low tolerance to stressors, there are others who may flourish under stressful conditions (Strumpfer, 1987). A discussion of this nature would thus be incomplete without considering factors that may mediate the response that individuals have to stress. The mediator function of a third variable is, according to Baron and Kenny (1986, p. 1173) representative of the "general mechanism through which the focal independent variable is able to influence the

dependent variable of interest", meaning that the factors to be discussed below, would be expected to have an influence over the relationship between individuals' levels of stress or emotions at work and their levels of physical and psychological well-being.

Factors which are expected to mediate one's responses to stress include *gender*, an important factor to consider in that women have been found to score higher on measures of negative affect (Burke, Brief and George, 1993) and typically experience different role stressors (Quick, Nelson and Quick, 1990) from their male counterparts, *age*, in that adolescents and older workers have been found to cope less well with stressful situations (Safework, 2003), as well as factors such as *race or ethnicity*, (Quick, Nelson and Quick, 1990) *disability and harsh socio-economic conditions* (Safework, 2003). Research in the area of stress has also highlighted factors such as *personality characteristics*, (Buunk et al., 1998, Morgan, 1986 and Strumpfer, 1987) *cultural antecedents*, (Strumpfer, 1987) *coping mechanisms*, (Handy, 1995 and Strumpfer, 1987) *levels of social support*, (Beehr et al., 2000 and Buunk et al., 1998) *individual needs and values* (Schuler, 1982) and *multiple role involvement*, (Field and Bramwell, 1998 and Kets de Vries, 2001) as being essential modifiers in the response of individuals to stress. Additionally, one should also consider the *type of occupation* in which the stress is taking place, in that stress is likely to vary from one major occupational category to another (Keenan and Newton, 1987).

Research of a similar nature has also identified certain factors that are expected to mediate the levels of well-being experienced by individuals. This research has highlighted a number of factors, including *gender*, which is an essential aspect to consider when discussing well-being, primarily due to the different health concerns

experienced by men and women. Research by Strickland, (1988 cited in Rodin and Ickovics, 1990, p. 1019) which focused on rates of mortality among men and women, found that "at every moment across the life span, from conception to death, girls and women are on average biologically more advantaged and live longer than boys and men". However, while this is the case women are said to experience higher levels of morbidity than men, meaning that they generally experience poorer levels of health than their male counterparts. This trend is explained as follows "although women are more frequently ill, they suffer from problems that are serious but not life threatening; these conditions lead to symptoms, disability, and medical care, but not death. Men are sick less often, but their illnesses and injuries are more severe; men have higher rates of chronic diseases that are the leading causes of death" (Verbrugge, 1989 cited in Rodin and Ickovics, 1990, p. 1021).

Stress-related illnesses in particular, tend to manifest themselves "more as physical ill health for men and mental ill health for women", (Walters, 1993 cited in Davidson and Fielden, 1999, p. 418) which may also be able to explain the findings of research, which found that 70 percent of all psychoactive medications, such as antidepressants and tranquillisers, are prescribed to women, due to the stereotype that women's health complaints are more emotionally laden than that of men (Ogur, 1986 and Travis, 1988 cited in Rodin and Ickovics, 1990). Other important factors to consider when discussing well-being include *marital status*, (Coverman, 1989 and Noor, 1995) *maternal and paternal status*, which refers to the number of and ages of one's children, and *employment status* with research findings indicating that "currently employed people tended to have lower rates of acute illness, chronic conditions,

restricted activity, physician visits, and psychotropic drug use than nonemployed people". (Verbrugge, 1983, p. 16)

While there is an abundance of research with regards to the mediators of stress, health and well-being, as demonstrated above, there is a definite gap in the current body of literature where the mediators of job and family involvement are concerned. The lack of research in this area is problematic, largely due to the number of roles that are currently taken on by individuals in society, thereby creating a need for a comprehensive understanding of the amount of time and energy that is invested in these domains. The following section of this review will now focus upon the benefits and costs of multiple role involvement, followed by a discussion of job and family involvement, as constructs, which are likely to act as mediators to the relationship between individuals' emotional reactions to their work and their health and well-being.

Role Involvement

Contemporary literature in the area of multiple role involvement and role conflict has been found to demonstrate a number of benefits and liabilities of participating in the roles of worker, parent and spouse, simultaneously. That is to say that multiple role involvement may either benefit the individual or serve as a potential source of stress, owing to the conflict that is expected to arise when participating in a number of competing roles (Wiersma, 1990). The relationship between multiple role involvement and psychological well-being is therefore a matter of some controversy (Marks, 1977). Long and Porter (1984 cited in Rout, Cooper and Kerslake, 1997, p. 2) note that this is the case as "the psychological consequences of role accumulation,

depend not only on the number of roles occupied but on the nature of particular roles, because roles differ in social value and in the patterning of privileges and obligations associated with them". Both the benefits and liabilities of multiple role involvement will be considered in more detail below.

Contemporary literature in the area of social roles and psychological well-being has highlighted a number of difficulties that are likely to arise as a result of multiple role involvement. These difficulties, which include role strain, role overload and role conflict are believed to manifest themselves in "possible conflicts among the demands of children, husbands, and employers" for women, and the demands of family life that compete with "expectations from the world of work" for their male counterparts (Menaghan, 1989, p. 693). The competing demands of work and family life are therefore likely to result in time-based conflict, which is said to occur when "the amount of time devoted to one role (e.g. worker) makes it difficult to fulfil the requirements of another role (e.g. father)" (Greenhaus and Beutell, 1985 and Major, Klein, Ehrhart, 2002, p. 427). Multiple role strain is expected to be highest among "mothers of young children, full time workers, and married women whose husbands contribute relatively little to the household labour and childcare" (Repetti, Matthews and Waldron, 1989, p. 1394).

The difficulties of multiple role involvement are explained particularly well by a model developed in the mid 1970's, commonly referred to as the scarcity hypothesis. The scarcity hypothesis is based on the belief that individuals do not have the energy that is required in order to fulfil their role obligations, and thus make compromises to relieve the role strain that they experience. This model implies that an individual's

experiences with role overload and conflict are likely to increase, along with the number of roles that they occupy. This would be expected to result in poor psychological well-being and health, as role overload and role conflict are typically associated with psychological distress (Barnett and Baruch, 1985). These adverse effects are not only likely to result in both physical and mental illnesses, which include depression, anxiety, high blood pressure and headaches, but are also said to result in increased substance abuse, poor personal relationships with others, a change in sleeping patterns and poor work performance (Davidson and Fielden, 1999).

The benefits of engaging in multiple roles, on the contrary, is explained by Coverman (1989) who notes that multiple role involvement may lead to a meaningful sense of self, which will ultimately serve to enhance one's well-being. This is expanded upon by Verbrugge (1986 cited in Coverman, 1989) who reported that the physical health of both men and women is expected to improve as role involvement increases, and Thoits (1983 cited in Coverman, 1989) and Barnett and Baruch (1986 cited in Coverman, 1989) who reported similar findings with respect to psychological health and well-being.

Research in the area of multiple role involvement and psychological well-being, as conducted by Barnett and Baruch, (1985) has demonstrated the far reaching benefits of multiple role involvement for women, in particular, by noting that it may go beyond merely enhancing their sense of accomplishment and levels of self-esteem to provide them with new social contacts, and contribute towards their families' financial resources. Multiple role involvement may further benefit women, in that it may provide them with more than one arena in which to "obtain the role-related

rewards that directly influence psychological well-being" (Barnett, Marshall and Singer, 1992, p. 635). This compared to non-working women who occupy roles that are said to be relatively low in status, isolating and constricting, and are thus likely to result in women suppressing "their own initiative and negative emotions in the interests of others" (Helson and Picano, 1990, p. 311).

The benefits of multiple role involvement are explained particularly well by the expansion hypothesis, a model developed in the mid-1970's, which prefers to focus upon the net positive gains that are attached to involvement in a number of roles. That is, the privileges, and not obligations as suggested by the scarcity hypothesis, which are attached to one's involvement in a number of roles. This model has been successful in demonstrating a positive relationship between the number of roles that one occupies and psychological well-being, thus implying that multiple role involvement may be associated with better health and well-being in women (Barnett and Baruch, 1985).

While research in this area has generally supported the expansion hypothesis by demonstrating that women with a greater number of social roles typically experience higher levels of self-esteem, (Rout, Cooper and Kerslake, 1997) it is important to consider the fact that very little is in fact known about the long-term, or cumulative effects of multiple role involvement on one's health (Barnett, Marshall and Singer, 1992), thus creating a need for further research in the area in order to determine whether it has long-term effects. Further research is also required in this area, where men are concerned, in that past research in the area of multiple role involvement has

tended to focus specifically on women, thus creating a gap in our current knowledge base where the health and well-being of men is concerned.

Having considered the benefits and costs of multiple role involvement, this review will now continue with a discussion, in which the construct of job involvement will be introduced and defined. This discussion will then touch upon areas such as the importance of having knowledge of the construct of job involvement, the lack of available research in this area and the consequences of job involvement, where factors such as work behaviours and outcomes, job attitudes and side effects will be discussed. As involvement is not limited to an individual's job, this discussion will then continue by introducing and defining the construct of family involvement, which will be viewed in terms of the changing nature of the workforce. This will then be followed by a consideration of the limited availability of research in the area of family involvement.

Job involvement, which is at times referred to in the literature as career identity salience, (Major, Klein and Ehrhart, 2002) is designed to measure the extent to which an individual's job is central to his or her self-concept or sense of identity (Frone, Russell and Cooper, 1992). While behavioural scientists have, time and again, highlighted job involvement as an area of interest, it has tended to take on a number of interpretations, and has as such been linked to a number of variables including "performance, absenteeism and turnover" (Blau, 1985, p. 19). The lack of agreement with regards to what is included in the notion of job involvement has resulted in a rather loosely defined construct. The definition of job involvement as a construct reflecting four main dimensions, including "(1) work as a central life interest, (2) the

extent of a person's active participation in the job, (3) extent of performance-self-esteem contingency, and (4) consistency of job performance with the self-concept" is found to illustrate this point effectively (Saleh and Hosek, 1976 cited in Brown, 1996, p. 236).

Job involvement differs from work involvement in the sense that it refers to the "specific or particular job context", and as such includes one's beliefs about the job and is usually a function of the extent to which the job is able to satisfy one's present needs (Kanungo, 1982, p. 342). This is quite different from work involvement, which refers to the "generalised work context" and as such includes one's beliefs about "the value of work in one's life" therefore meaning that it is more a function of an individual's "past cultural conditioning or socialisation" (Kanungo, 1982, p. 342). Having knowledge of job involvement and its underlying psychological processes is important in that individuals tend to become more involved in specific activities or institutions, when they perceive the potential for satisfying their psychological needs (Brown, 1996). This has been identified as a dominant theme that lies beneath many forms of involvement, including involvement in the areas of marriage, family, parenthood, religion and recreation (Brown, 1996).

Despite the importance of the construct of job involvement, there is limited psychological research in this area, owing to what Kanungo (1982, p. 341) terms "conceptual ambiguities and measurement inadequacies". That is to say that the lack of suitable research in this area may be attributed to both the excess meaning contained in the construct of job involvement, and the lack of adequate construct validity in many of its current measures. This makes it relatively unsurprising that the

data obtained on current measures of job involvement should be described as being "misleading and difficult to interpret" (Kanungo, 1982, p. 341). This is problematic in the industrial arena, in the sense that job involvement has not only been identified as being a key factor in stimulating employee motivation, but has also been associated with creating a competitive advantage in the business market, (Lawler, 1986 cited in Brown, 1996) thereby highlighting the need for more research in this area.

From the individual perspective, job involvement has been observed to be a key factor in "personal growth and satisfaction within the workplace, as well as to motivation and goal-directed behaviour" (Hackman and Lawler, 1971 cited in Brown, 1996, p. 235). Increasing levels of job involvement in the workplace are therefore likely to benefit both the organisation and its employees, the former who will benefit in terms of organisational effectiveness and productivity, and the latter who will benefit by becoming more engaged in their work, which will in all likelihood make work a "more meaningful and fulfilling experience" (Brown, 1996, p. 235). When one considers the amount of time spent at work, it becomes relatively unsurprising that this would influence individuals' general experiences with life, which would ultimately impact upon their health and well-being. This is noted aptly by Brown (1996, p. 235) who states the following,

> People may be stimulated by and drawn deeply into their work or alienated from it mentally and emotionally. The quality of one's entire life experience can be greatly affected by one's degree of involvement in or alienation from work. A state of involvement implies a positive and relatively complete state of engagement of

> core aspects of the self in the job, whereas a state of alienation implies a loss of individuality and separation of the self from the work environment.

Brown (1996) notes that job involvement is likely to result in a number of consequences, which are grouped into three main areas. The first category of consequences, which is termed *work behaviours and outcomes*, highlights the assumption that a cognitive state of identification with the job, based on individuals' perceptions of its ability to satisfy their salient psychological needs, triggers a number of motivational processes, which then influence factors such as motivation and effort, and ultimately influence factors such as performance, absenteeism and turnover.

The second category of consequences, referred to as job *attitudes*, includes factors such as satisfaction with one's work, job, supervisors, colleagues, and pay, factors which are all important to consider as one's cognitive appraisal of the potential for need satisfaction usually follows on from actual need satisfaction (Brown, 1996). Other factors included in this category include commitment to the organisation and intention to turnover, with the former being likely to result in the event that individuals "become familiar with and involved in particular jobs and then develop commitment to the organisation as their psychological needs are satisfied over time", and the latter being likely to result from "a psychological state of alienation from the job, the organisation, or both" (Brown, 1996, p. 239).

The final category of consequences includes, *side effects*, a term that is used to describe the negative social, psychological, and physiological effects of job involvement (Brown, 1996). Research in the area of job involvement has focused upon the construct in relation to a number of factors including stress, somatic health complaints, and anxiety, which are all likely to arise as a result of individuals becoming preoccupied with their work, (Brown, 1996) as well as work-family conflict, as individual's involvement in their jobs may lead to a trading off of their other commitments in favour of their commitment to work. These types of variables are considered consequences of involvement in that "excessive commitment of personal resources to and preoccupation with work may cause or aggravate these negative outcomes" (Brown, 1996, p. 239). Additionally, "high levels of job involvement could possibly lead to trading off family commitments in favour of job commitments" which may in turn result in the experience of stress, anxiety and health complaints (Brown, 1996, p.239). While the majority of the available research in this area tends to focus upon job involvement, one would expect similar results to pertain to family involvement. This is supported by previous research in this area, which has "explicitly recognised that relationships between work and family are bi-directional. That is, work can interfere with family, and family can interfere with work" (Adams, King and King, 1996, p. 411).

These consequences are essential to consider in the current study, which asked respondents to reflect upon the emotional reactions that were elicited by any part of their job, including the work itself, co-workers, supervisors, clients and pay (Van Katwyk et al., 2000). This kind of information is beneficial in that one would generally expect individuals' perceptions regarding the ability of their jobs to satisfy

their needs, their satisfaction with the many facets of their work, and the negative health outcomes that are expected to arise as a result of excessive commitment to a certain role, to impact upon the main relationship to be investigated in this study. The construct of job involvement would therefore be expected to mediate the relationship between individuals' levels of stress, specifically, their emotional reactions to their jobs, and their state of health and well-being.

However, as demonstrated above, involvement is not limited to an individual's job and can include other aspects of one's life, including "family, marriage, parenthood, religion and recreation" (Brown, 1996, p. 235). Kopelman, Greenhaus and Connolly (1983) discuss the importance of viewing individual's work life needs in terms of their family and personal concerns. In spite of the importance of such a stance, the majority of research in the area has tended to focus upon and "treat the problem of work in isolation from the total life space of the individual", resulting in an inadequate level of understanding where the relationship between work, and the other domains of an individual's life are concerned (Schein, 1976 cited in Kopelman, Greenhaus and Connolly, 1983, p. 198). The second mediator to be examined in the current study, namely family involvement will now be considered in more detail below.

The construct of family involvement is defined by Yogev and Brett (1985, p. 755) as "the degree to which a person is identified psychologically with family roles, the importance of family to the person's self-image and self-concept, and the individual's commitment to family roles". Family involvement, which in this study refers to an individual's spousal involvement (marital status) and parental involvement (number

and ages of children), has become an essential aspect to consider where health and well-being are concerned, owing to the increase in the prevalence of dual career couples, single-parent families, and families taking on the responsibility of elder care (Frone, Russell and Cooper, 1992). However, while important, past research in the area of family involvement is found to be particularly scarce, with the majority of research in this area focusing upon work family conflict.

The changing nature of the workforce, from one that was once solely dominated by men to one that is now significantly occupied by women, has not only resulted in a questioning of the traditional family construct, (Googins and Burden, 1987) but has also resulted in a number of changes in lifestyle, as mentioned in the discussion above. These changes have therefore created a need for individuals in society to create a balance between the domains of work and family life, a responsibility, which was not required when women took on the more traditional roles. Additionally, these changes have resulted in an increasing need for research in the area of family-related stressors where men are concerned, and the toll that these stressors are likely to take on their lives.

Past research focusing upon a comparison of the contributions of family and work-related stress to both mental and physical health outcomes has produced interesting results (Baruch, Biener and Barnett, 1987). The results of one such study found women to experience higher levels of work-related stress than family-related stress. Additionally these results indicated that family-related stress and not work-related stress was more strongly related to negative mental health for women, with depression

being listed as the most prominent health concern (Kandel, Davies and Raveis, 1985 cited in Baruch, Biener and Barnett, 1987).

Other research in this area found family-related stressors to be more strongly related to psychological distress and poor physical health for women than work-related stressors, as compared to their male counterparts who reported work-related stressors as being more strongly related to psychological distress than family-related stressors. These research findings also indicated that family-related stressors were more likely to result in actual physical illness for men than for their female counterparts (Dytell, Pardine and Napoli, 1985 cited in Baruch, Biener and Barnett, 1987).

Research findings, such as those mentioned above, have highlighted the need for further research in the area of family involvement, especially due to the changing nature of the workplace and the effects that these changes have had on individuals' roles and responsibilities in and around the household. Research in this area will not only be expected to be effective in expanding our understanding of the construct of family involvement, but will also be expected to facilitate our knowledge regarding its effects on other constructs, such as perceived levels of stress in the form of emotions at work, and health and well-being.

This kind of information is particularly beneficial for the current study in that one would generally expect the degree to which individuals feel that they are able to identify psychologically with their family roles, and the importance placed on these roles by individuals to impact upon the main relationship to be investigated in this study. The construct of family involvement would therefore be expected to act as the

second mediator to the relationship between individuals' emotions at work and their levels of health and well-being.

This literature review has aimed to present an overview of the available research in the areas of stress in terms of one's emotional reactions at work, physical and psychological well-being, and job and family involvement. In addition to this, it has aimed to demonstrate the link and potential relationships between these variables, while highlighting the areas of the above-mentioned constructs in need of development.

The current study will aim to expand upon the current body of literature in the area of stress, health and well-being in a number of ways. Firstly, it will address the lack of research in the area of emotion by focusing upon the construct of stress in terms of individuals' emotional reactions to their jobs. It will also expand upon previous research in the area of health and well-being, by focusing upon both physical health and psychological well-being, as opposed to other studies that have focused upon one, while neglecting the other. Having explored the relationship between individuals' levels of stress in terms of their emotional reactions to their jobs and their levels of health and well-being, the current study will then go one step further by examining the potential role of the constructs of job and family involvement in mediating the relationship between the main variables to be investigated above thereby, once again, expanding upon previous research in the area, which has tended to focus upon work family conflict. Having completed this discussion, this review will now present the three main hypotheses to be examined for the purposes of this study.

Hypotheses

1. Ho: There is no relationship between an individual's emotions at work and their levels of physical and psychological well-being

   Hi: There is a relationship between an individual's emotions at work and their levels of physical and psychological well-being

2. Ho: Job involvement does not mediate the relationship between emotions at work and physical and psychological well-being

   Hi: Job involvement does mediate the relationship between emotions at work and physical and psychological well-being

3. Ho: Family involvement does not mediate the relationship between emotions at work and physical and psychological well-being

   Hi: Family involvement does mediate the relationship between emotions at work and physical and psychological well-being

Chapter 2: Methodology

This chapter aims to provide a detailed description of the process that was followed throughout the duration of the study. The research design, procedure, sampling methods, data analysis and ethical considerations that were used in this study to test the hypotheses mentioned in the literature review, will be discussed in more detail below.

Research Design

This study made use of a quantitative research methodology. As the independent variable (emotions at work) could not be manipulated by the researcher, this study may be classified as a non-experimental, ex-post facto research design. This study may be further classified as a cross-sectional design (Babbie and Mouton, 2001) as it is based on an observation of a number of variables (emotions at work, job involvement, family involvement and physical and psychological well-being) occurring at the same point in time, without repeat measures (Rosenthal and Rosnow, 1991).

While the use of a cross-sectional design may have served as a potential limitation of this study, due to the susceptibility of cross-sectional designs to the time of measurement effects, (Breakwell, Hammond and Fife-Schaw, 1995) where the results of the study may have been influenced by an uncontrollable event, it appeared to be the most suitable design to use for the purposes of this study, primarily due to the researchers limited availability of resources and time. The measuring instruments that were used in the current study will be discussed in more detail below.

Measuring Instruments

The following section aims to explore the measures that were used in this study, including the biographical information form, which was used to elicit background information from the respondents of the study, as well as the Job-Related Affective Well-Being Scale, the Job Involvement Questionnaire, the Family Involvement Scale, and the Well-Being Scale, which were used to measure the constructs of emotion at work, job involvement, family involvement and physical and psychological well-being, respectively.

Biographical Information Form

The biographical information form was designed to elicit certain background information from the participants of the study. Participants were asked to fill in information regarding their age, gender, race, marital status and number of, and ages of their children. Participants were also asked to provide certain information regarding their history in the organisation, such as the position that they occupied within the organisation, as well as the duration in which they had been employed both by the organisation, and within their current position within the organisation. In addition to this, respondents were asked to specify how many hours, on average, they and their partner or spouse worked in a typical working week. This information was observed as being important in that it not only allowed the researcher to group the respondents and their spouses or partners into different employment status categories (full time, part time and non working), but was also useful in the data analysis, where the respondents of the study could be compared on the basis of a number of extraneous variables.

The Job-Related Affective Well-Being Scale

The Job-Related Affective Well-Being Scale (JAWS), as developed by Van Katwyk, Fox, Spector and Kelloway (2000) is a 30-item measure, which is designed to assess individual's emotional reactions to any part of their job, including the work itself, co-workers, supervisors, clients and pay (Van Katwyk et al., 2000). Each of the 30-items in the scale represents a positive or negative emotion. Participants are required to consider how often they have experienced each emotion at work over the past 30 days, and respond on the following 5-point response format: Never (1), Rarely (2), Sometimes (3), Quite often (4), Extremely often or always (5) (Van Katwyk et al., 2000). The following items of the Job-Related Affective Well-Being Scale are reverse scored, 2, 3, 4, 5, 8, 10, 11, 12, 18, 19, 20, 21, 22, 24 and 26 (Van Katwyk et al., 2000). This instrument is scored in such a way so that high scores indicate high levels of each emotion (Fox, Spector and Miles, 2001), meaning that those respondents who report high levels of emotions at work are more prone to experiencing greater levels of positive emotion than their lower scoring counterparts.

The emotions listed in the scale are placed into four categories (subscales), which fit into the dimensions of pleasurableness and arousal (intensity). The four subscales therefore include, High Pleasurable-High Arousal (HPHA), High Pleasurable-Low Arousal (HPLA), Low Pleasurable-High Arousal (LPHA) and Low Pleasurable-Low Arousal (LPLA) (Van Katwyk et al., 2000). While there is little available literature in the area of these subscales, in terms of descriptions of what they are actually designed to measure, Van Katwyk et al. (2000) make mention of the qualities to be measured by each of the respective subscales. However, the 4 subscales of the Job-Related Affective Well-Being Scale are only found to measure 20 of the 30 items in the scale.

The reasons for this are unclear and no additional information could be found, as to explain why the subscales were structured in this manner.

The Job-Related Affective Well-Being Scale has demonstrated the following internal consistency reliability estimates (coefficient alpha), negative emotion .92, positive emotion .94, high pleasurable-high arousal (HPHA) .90, high pleasurable-low arousal (HPLA) .81, low pleasurable-high arousal (LPHA) .80, low pleasurable-low arousal .80 and a total JAWS (all 30 items) internal consistency reliability estimate (coefficient alpha) of .95 (Van Katwyk et al., 2000). The internal consistency reliability estimate provided for the total JAWS is similar in nature to the coefficient alpha obtained in the current study, which was reported as .96.

According to Van Katwyk et al. (2000) the Job-Related Affective Well-Being Scale may be scored in three main ways, which include (i) an overall score of all of the items (30) with the negative items reverse scored, (ii) separate scores of all 15 negative items and all 15 positive items combined separately without reverse scoring, and (iii) four scores matching the four subscales, as considered above, with each subscale containing five items. In this study, it was found most appropriate to use the first scoring option, owing to the fact that the researcher wished to compare a total score of the emotional reactions of the respondents to their jobs, with their scores on physical and psychological well-being.

Job Involvement Questionnaire

The Job Involvement Questionnaire, as developed by Kanungo (1982) is designed to measure the extent to which individuals' jobs are central to their self-concept or sense

of identity (Frone, Russell and Cooper, 1992). The Job Involvement Questionnaire consists of 10-items and requires participants to respond on a 6-point Likert scale on an agree to disagree response format. Two of the items on the Job Involvement Questionnaire are reverse scored, namely item 2 ("To me, my job is only a small part of who I am") and item 7 ("Usually I feel detached from my job") (Blau, 1985). This instrument is scored in such a way that high scores indicate that high levels of job involvement are experienced. Individuals reporting high levels on this questionnaire would therefore be expected to find their job to be central to their self-concept or sense of identity (Frone, Russell and Cooper, 1992). The Job Involvement Questionnaire demonstrated an internal consistency reliability (coefficient alpha) of .87 and a test-retest reliability of .85 (Kanungo, 1982). The internal consistency reliability estimate for the Job Involvement Questionnaire, as reported above, is similar in nature to the coefficient alpha that was obtained in the current study, which was reported as .84.

Family Involvement Scale

The Family Involvement Scale, which was developed by adapting Lodahl and Kejner's (1965 cited in Yogev and Brett, 1985) Job Involvement Instrument, consists of 11-items, which assess the individual's spousal and parental involvement. While Lodahl and Kejner's instrument has been criticised by researchers such as Kanungo (1982) for example, who has highlighted a number of flaws with the instrument, the lack of research in the area of family involvement has resulted in a limited availability of suitable instruments to measure this construct. The main criticisms of Lodahl and Kejner's instrument will be considered in more detail below.

Firstly, this instrument is said to contain items that confuse the issue of job involvement with that of intrinsic motivation on the job, (Kanungo, 1981 cited in Kanungo, 1982) as demonstrated by two items stating "I live, eat and breathe my job" and "Sometimes I'd like to kick myself for the mistakes I make in my work", with the former being indicative of the individual's psychological identification with the job, and the latter being representative of individual's intrinsic motivation at work for fulfilling their needs with regards to self-esteem (Kanungo, 1982). Secondly, this instrument has been criticised for describing job involvement in terms of both a cognitive and positive emotional state for the individual. Items contained in this instrument, which illustrate this effectively, include that of "The most important things that happen to me involve my work" and "The major satisfaction in my life comes from my work". Finally, this instrument has been subject to criticism, owing to the fact that it fails to differentiate between the two contexts in which an individual may demonstrate personal involvement, namely between the domains of the specific or particular job context, (Kanungo, 1982) leading one to question whether these inherent weaknesses of the instrument would not carry over into the adapted family involvement instrument.

In spite of these criticisms, this adapted version of the Job Involvement Instrument has been used successfully in previous research focusing upon work-family involvement (Yogev and Brett, 1985). Participants are required to respond to the 11-items, on a 5-point Likert scale on an agree to disagree response format. One of the items of the Family Involvement Scale, namely item 8 ("If I had to do it all over again I would not have married my present spouse") is reverse scored. This scale is scored in such a way that a high score is indicative of high levels of family involvement.

Achieving a high score on this instrument would therefore indicate that individuals identify psychologically with their family roles, find their family roles to be important to their self-concept and self-image, and report being committed to their family roles (Yogev and Brett, 1985). The Family Involvement Scale demonstrated an internal consistency reliability (coefficient alpha) of .80 (Yogev and Brett, 1985). This internal consistency reliability estimate is similar in nature to the coefficient alpha obtained for the current study, which was reported as .77.

Well-Being Scale

The Well-Being Scale as drawn from the OARS Multi-dimensional Functional Assessment Questionnaire (Pfeiffer, 1976 cited in Davidson and Cotter, 1982) is designed to measure various aspects of psychological and physical well-being. The Well-Being Scale consists of 18-items, with the first nine items being designed to measure psychological well-being and the remaining nine items being designed to measure physical well-being. Participants are required to respond to the 18-item scale on a forced-choice response format. The following items of the Well-Being Scale are reverse scored, item 2, 3, 4, 5, 6, 8, 11, 12 and 14. The Well-Being Scale is scored in such a way that high scores on the items measuring both physical and psychological well-being are indicative of the respondent's experience of positive levels of well-being. The Well-Being Scale demonstrated item-scale correlations ranging from .38 to .63 and .30 to .76 for the items measuring psychological well-being and physical well-being, respectively (Davidson and Cotter, 1982). In this study, it was found most appropriate to make use of the individual scores for physical and psychological well-being, as opposed to using the total well-being score, owing to the fact that the researcher wished to differentiate between the different types of well-being, when

observing their relationship with the respondent's emotional reactions to their work. The internal reliability consistency estimates for physical and psychological well-being in the current study were reported as .81 and .86, respectively.

While each of these measures have demonstrated reliability and validity, and are therefore proven to have good psychometric properties, no evidence is available in the literature regarding the suitability of these tests for use in the South African context. The procedure that was followed in the current study will now be discussed in more detail below.

Procedure

Having discussed the measuring instruments that were employed in the current study, this section will now continue by providing an analysis of the exact process that was followed throughout the study, thereby touching upon aspects such as the process of gaining access, as well as the distribution and collection of the questionnaires.

The researcher approached a member of staff at a large organisation in Johannesburg, where she sought out permission to conduct her research. The researcher was granted access on the condition that the organisation remained anonymous throughout the duration of the study. The questionnaires, which consisted of a subject information sheet, a biographical information form, and the Job-Related Affective Well-Being Scale, the Job Involvement Questionnaire, the Family Involvement Scale, and the Well-Being Scale, were therefore distributed to the employees of the organisation in Johannesburg. The questionnaires were distributed in the form of an e-mail, as sent out by the member of staff within the organisation. This was found to be the most

suitable method in which to collect the data to be used in the study. This questionnaire may be observed in Appendix 1.

The subject information sheet was sent out to a random sample of students, clerical staff, supervisors and management, in the form of an e-mail sent from a member of staff at the organisation. It was found to be most appropriate to send this document from the organisation, as opposed to from the personal e-mail of the researcher, due to the convenience of them having immediate access to the e-mail addresses of their employees. The subject information sheet contained a link, which directed the employees who wished to participate in the study to a website, which contained the biographical information form, as well as the four scales to be used in the study. The employees who wished to complete the questionnaire were then asked to do so on the website and submit it back to the researcher, who was then able to locate the completed questionnaires from a protected database on the website. This database was only accessible by the researcher and was not seen by anyone in the organisation at any time.

The respondents were asked to provide their e-mail addresses so as to ensure that their response was only captured once in the database. These e-mail addresses were deleted immediately after having placed the information from the completed questionnaires on a spreadsheet. However, as this procedure was unable to guarantee complete anonymity, those who wished to participate in the study were also given the option to complete the questionnaire, print it out, and place it in a box situated within a strategic place within the organisation. This box was cleared out by the researcher. However, as building alterations were taking place at the organisation during the data

collection period, it could not be ascertained that the box was always available, resulting in an unreliable method of data collection. While this could not be directly controlled by the researcher, it would have been expected to have an effect on the number of questionnaires to be returned in the study.

The questionnaire was sent out to the employees, followed by a reminder letter after a period of 11 working days. This reminder letter, which was once again e-mailed to the individuals within the organisation, thanked all of the individuals who had already participated in the study, while reminding those who still wished to participate, that they could still do so, while, once again, providing them with details on how to return their completed questionnaires. An additional reminder letter was then e-mailed to the employees within the organisation after a period of 12 working days. This was then followed by a final letter 7 working days later, which informed the employees that the data collection had been closed off, whereby all participants were thanked for their participation in the study. The sample to be used in this study will be considered in more detail in the section below.

Sample and Sampling

The following section of this chapter aims to provide an in-depth discussion of the sample and sampling methods that were employed in this study. It will therefore begin by discussing and analysing the sampling methods that were used in the study, a discussion, which will then be followed by a description of the actual sample that was obtained in the study. The sampling methods to be used will be considered in more detail below.

The study made use of a non-probability sampling method, namely purposive sampling, which is a method of sampling that it based upon both the judgement of the researcher, and the purpose or aims of the study (Babbie and Mouton, 2001). Non-probability sampling was observed as being the most effective and feasible sampling method for this particular study due to the researchers limited availability of resources and time.

One thousand six hundred employees from a large organisation in Johannesburg were invited to participate in the study by filling in a questionnaire. While no questionnaires were returned by being placed in the box, a total of 256 questionnaires were returned by e-mail, with seven being unusable, reducing the sample to 249, and thus demonstrating a response rate of 16 percent. This response rate, which is found to be relatively small, may have served as a potential limitation to the current study in that a small response rate is not only expected to increase the sampling error (Babbie and Mouton, 2001) but is subsequently expected to affect the overall findings of the study. While this sample was observed as being effective for this particular study, it is not fully representative, making it impractical to generalise the findings of this study to the general population.

The final sample includes 120 (48.2%) men and 129 (51.8%) women. Of these individuals 18 (7.2%) were Asian, 76 (30.5%) Black, 9 (3.6%) Coloured, and 146 (58.6%) White. As the number of questionnaires to be returned by the Asian and Coloured participants was found to be limited, the researcher then classified the respondents of the study into two main groups, namely Black, consisting of the Asian, Black and Coloured individuals, thus comprising 103 individuals in total and making

up 41.4% of the sample. The remaining individuals were classified as being White, thus comprising 146 individuals, and making up the remaining 58.6% of the sample. This classification was found to be suitable for the purposes of the current study, especially due to the context in which it was conducted, where legislation such as employment equity and affirmative action distinguishes individuals in the workplace on the basis of being Black or White.

The age of the men and women in the sample ranges from 24 to 64, with a mean of 41.88 and a standard deviation of 9.43. Of the individuals in the sample, 160 (64.3%) were married, 35 (14.1%) divorced, 45 (18.1%) single, 4 (1.6%) widowed, and 5 (2%) reported that they were living with a partner. Of these individuals, 44 (17.7%) reported having no children, 46 (18.5%) reported having one child, 99 (40%) reported having two children, 46 (18.5%) reported having three children, 11 (4.4%) reported having four children, with only 3 (1.2%) individuals reporting having five or more children.

When asked to report on their job title within the organisation, 5 (2%) respondents noted being a student, 75 (30.1%) reported fulfilling a clerical position, 46 (18.5%) reported fulfilling a supervisory role, with the remaining 123 (49.4%) reporting being in a managerial position. The individuals within the sample reported having been employed in the organisation for a duration ranging from 4 months to 37 years, with a mean of 13.81 years, and within their current position for a duration ranging from 1 month to 20 years, with a mean of 4.83 years. The average number of hours worked per week by the individuals in the sample ranged from 8 to 80, with a mean of 43.34, and a standard deviation of 10.27, while the average number of hours worked by their

spouses or partners ranged from 0 to 80, with a mean of 37.82, and a standard deviation of 17.70. A full set of biographical details for the sample may be observed in Table 1 below. This will then be followed by a section detailing the data analysis to be employed in this study.

Table 1: Biographical Details of the Sample

	Mean	SD	Median	Range
Age	41.88	9.43	41	24 – 64 (40)
Age Child 1	16.95	9.12	17	0.5 – 39 (38.5)
Age Child 2	15.04	8.66	15	0.5 – 33 (32.5)
Age Child 3	13.85	8.40	14	0.5 – 31 (30.5)
Age Child 4	15.75	9.79	16	1 – 28 (27)
Age Child 5	15.00	10.58	19	3 – 23 (20)
Average Hours/ Week	43.34	10.27	40	8 – 80 (72)
Spouse Average Hours/Week	37.82	17.70	40	0 – 80 (80)
Employment Duration	13.81	8.53	14 (yrs)	4 months – 37 years
Current Position Duration	4.83	4.11	4 (yrs)	1 month – 20 yrs

		N	%
Gender	Male	120	48.19
	Female	129	51.81
Race	Black	103	41.37
	White	146	58.63
Marital Status	Married	160	64.26
	Divorced	35	14.06
	Single	45	18.07
	Widowed	4	1.61
	Living With Partner	5	2.01
Number of Children	None	44	17.67
	One	46	18.47
	Two	99	39.76
	Three	46	18.47
	Four	11	4.42
	Five or More	3	1.20
Current Position	Student	5	2.01
	Clerical	75	30.12
	Supervisor	46	18.47
	Management	123	49.40

Data Analysis

The following section aims to discuss the techniques that were employed in order to analyse the data that was collected in this study. It will therefore begin with a discussion of the descriptive statistics that were employed, where the frequency procedure and summary statistics will be discussed. This will then be followed by a discussion of the statistical techniques that were used to test the hypotheses to be

investigated in this study, where ANOVA's, correlations, regression and partial correlations will be considered.

Descriptive Statistics

The frequency procedure was employed in this study to measure the variables of gender, race, marital status, number of children, as well as the position currently held by the individuals within the organisation. Additional summary statistics were then conducted in order to measure the mean, standard deviation, and range of a number of variables in the study, including, age, ages of children, the average number of hours worked per week by the respondent and their spouse or partner, as well as the number of months that the respondents has been employed by the organisation, and within their current positions. These techniques were conducted for descriptive purposes, thereby enabling the researcher to adequately describe the sample and gain a comprehensive understanding of the composition of the sample.

ANOVA

The statistical technique analysis of variance (ANOVA) is said to provide a method for measuring the differences in the dependent variable(s), by observing two or more groups formed by the independent variable. ANOVA was therefore used in this study to determine whether there were significant differences between different groups (specifically gender and race) on the measures of emotions at work, job involvement, family involvement and physical and psychological well-being. This was observed as a suitable statistical technique for this particular study, in that it was able to test the differences in the dependent variables (emotions at work, job involvement, family involvement and physical and psychological well-being), by observing two or more

groups formed by the independent variables (gender and race). The analysis was therefore aimed at determining the extent to which the respondent's general levels of emotions at work, job involvement, family involvement and physical and psychological well-being differed according to these extraneous variables.

The assumptions underpinning an ANOVA, that must be met in order to use this statistical technique include, (1) the normal distribution of the sample, (2) equality of variance in each group, (3) random selection of the sample from the population, and (4) the statistical independence of the groups of scores that are to be analysed (McCall, 1990).

Correlations

Pearson's Product Moment Correlation is the most common measurement of correlation for both interval and ratio data (Neuman, 2000). The Pearson *r* is a number ranging from –1.00 through .00 to +1.00, which reflects the extent of a linear relationship. The Pearson's Product Moment Correlation is called a coefficient, as it is a unitless index, meaning that it is expressed in terms of a quantity that varies according to the direction and degree of the linear relationship, as opposed to specific units of measurement (McCall, 1990). As such, a positive *r* means that an increase in one variable (X) is associated with an increase in another variable (Y), while a negative *r* means that an increase in one variable (X) is associated with a decrease in another variable (Y). Here a value of .00 is indicative of no linear relationship between variables (Cronbach, 1984 cited in Diraz, 2003).

Pearson's correlation was therefore used in this study to determine whether there was a relationship between emotions at work, job involvement, family involvement, physical and psychological well-being, as well as between some of the demographic variables to be used in the study, including age and average hours worked by the respondent and their partner or spouse.

Regression

Regression analysis is the statistical procedure that is employed in order to determine the association between two variables (Babbie and Mouton, 2001). The regression formulae $Y = f(x)$ therefore portrays "Y as a function of X", meaning that values of Y may be determined and explained in terms of variations in X (Babbie and Mouton, 2001, p. 464). The linear regression model, one of the most common forms of regression analysis, is used to represent a perfect linear association between two variables by way of a graphic picture of the association between the two variables, and the regression equation, which effectively summarises the association. When effective in describing the association between the two variables, linear regression may also be employed to predict other sets of values (Babbie and Mouton, 2001).

Linear regression was employed in this study in an attempt to represent the relationship between the independent variable (emotions at work) and the dependent variables (physical and psychological well-being) of the study.

Partial Correlations

The statistical technique of partial correlations is employed in an attempt to measure the correlation between two variables, after each variable's relationship with a third, extraneous variable has been removed (McCall, 1990). Partial correlations were

therefore employed in this study in an attempt to measure the extent to which the variables of job involvement and family involvement influenced the main relationship between emotions at work and physical and psychological well-being. The ethical considerations that were used in this study will be explored in more detail below.

Ethical Considerations

The final section of this chapter will consider the ethical considerations that were taken into account throughout the duration of this study. The ways in which the dignity and respect, anonymity and confidentiality and right to privacy, of the participants of this study were ensured, as well as the way in which informed consent was gained will be considered in more detail below.

The researcher ensured that the participants were treated with dignity and respect throughout the duration of the study, and did not deceive the participants of the study in any way. This was achieved by ensuring that the sampling methods that were used, and the treatment that the participants received, was of a high standard and was maintained throughout the duration of the study.

Informed consent was obtained from all of the participants taking part in the study. The respondents were informed that by completing and returning the questionnaire, they were giving their consent to participate in the study.

Moreover, the researcher ensured that the anonymity and confidentiality of the participants was maintained, by ensuring that no personal details were taken from the participants, and that the information that was gathered through the questionnaires,

was only analysed by the researcher involved in order to develop the findings of the study. The e-mail addresses that were requested from the participants returning the questionnaire electronically were only used in the study to ensure that the questionnaire of each participant was only submitted once, and were deleted as soon as the information was entered onto a spreadsheet. As this data collection technique could not ensure complete anonymity, the researcher provided the respondents with the option to return the questionnaire by way of printing it out and placing it in the box provided in the organisation, thereby ensuring complete anonymity.

While the respondents were asked to reflect upon their personal views and experiences, they were not forced into answering the questions in the questionnaire, thereby protecting their right to privacy. The respondents were not placed under any pressure to answer the questionnaire and were not advantaged or disadvantaged in any way for choosing to participate or not participate in the study.

Chapter 3: Results

This chapter aims to present the results that were obtained for this study. It will therefore begin by discussing the reliability of each of the measures to be used in this study, and will then continue by describing the results of the various statistical techniques that were employed in order to test the hypotheses of the study. For ease of reading and clarity the results of the statistical techniques that were used will be presented in tables, which will be briefly elaborated upon in the text.

Reliability

The internal consistency of the variables that were used in the present study, were tested. Internal consistency methods are used to "estimate the reliability of a test based solely on the number of items in the test, and the average intercorrelation among test items" (Murphy and Davidshofer, 2001, p. 118).

Table 2: Internal Consistency Reliability

Measuring Instruments	Number of Items	N	Alpha	Mean	Standard Deviation	Range (Min-Max)
EMOT	30	249	0.96	98.34	21.80	30 – 150 (120)
JI	10	249	0.84	33.53	10.43	10 – 60 (50)
FI	11	249	0.77	45.61	7.47	11 – 55 (44)
(i) PHYS	9	249	0.81	28.05	4.78	5 – 45 (40)
(ii) PSYC	9	249	0.86	23.94	5.61	5 - 45 (40)

EMOT = Emotions at Work, JI = Job Involvement, FI = Family Involvement, PHYS = Physical Well-Being, PSYC = Psychological Well-Being

As demonstrated in Table 2, the internal consistency measures for the four scales that were used are highly satisfactory, with the alpha coefficients for the measures of emotions at work, job involvement, family involvement and well-being scales being reported as .96, .84, .77 and .90 respectively. The alpha coefficients of the 2 dimensions of the well-being scale were reported as follows, Physical Well-Being .81, and Psychological Well-Being .86.

While not directly hypothesised in the current study, it was felt that it would be of interest to establish whether there was a difference in the emotions at work, job involvement, family involvement and physical and psychological well-being, as experienced by respondents of different demographic groups. In order to test for this, the researcher made use of the statistical technique of ANOVA, which measured whether the male and female, and Black and White respondents of the study experienced different levels of the constructs mentioned above. The results of these analyses will be considered in more detail below.

The results of this investigation, where gender is concerned, indicate that there is no significant difference between men and women on the measures of emotions at work, with $\underline{F} = 0.34$, $\underline{p} = 0.5577$, job involvement, with $\underline{F} = 1.74$, $\underline{p} = 0.1882$, and family involvement with $\underline{F} = 0.93$, $\underline{p} = 0.3361$. Non significant results were also found on psychological well-being, with $\underline{F} = 2.68$, $\underline{p} = 0.1027$. It may therefore be concluded that there is insufficient evidence to prove that gender influences an individuals' emotions at work, job involvement, family involvement or psychological well-being. However, the results for this hypothesis indicate that there is a significant difference between the men and women on the measures of physical well-being, with $\underline{F} = 6.25$,

p = 0.0131. There is therefore sufficient evidence to suggest that gender influences an individuals' levels of physical well-being. This may be observed in Table 3 below.

Table 3: A comparison between men and women on the measures of emotions at work, job involvement, family involvement and well-being

Measuring Instruments	Means	df	F	P-level
EMOT	98.34	1	0.34	0.5577
JI	33.53	1	1.74	0.1882
FI	45.61	1	0.93	0.3361
PHYS	28.05	1	6.25	0.0131*
PSYC	23.94	1	2.68	0.1027

*Mean difference significant at 0.05 level

EMOT = Emotions at Work, JI = Job Involvement, FI = Family Involvement, PHYS = Physical Well-Being, PSYC = Psychological Well-Being

The means of the men and women were then compared in order to determine which group scored higher on physical well-being. The comparison of the means showed that men had higher levels of physical well-being, with a mean of 28.825, as compared to their female counterparts who demonstrated a mean of 27.326. As discussed previously in Chapter 2, a high score on the measure of physical well-being would be an indicative of the respondents experience of positive levels of the construct, meaning that the male respondents of this study reported experiencing more favourable physical well-being than their female counterparts, who were found to report poorer levels of physical well-being.

The results for this investigation, where race is concerned, indicate that there is no significant difference between individuals of different racial groups on the measures of job involvement, with $F = 0.29$, $p = 0.5918$, and family involvement, with $F = 0.13$, $p = 0.7144$. Non significant results were also found on physical and psychological well-being, with $F = 0.07$, $p = 0.7892$, and $F = 2.11$, $p = 0.1476$, respectively. It may therefore be concluded that there is insufficient evidence to suggest that individuals of different racial groups experience different levels of job involvement, family involvement and physical and psychological well-being.

However, a significant difference was found between individuals of different racial groups on the measure of emotions at work, with $F = 5.47$, $p = 0.0201$. There is therefore sufficient evidence to suggest that individuals of different racial groups experience different levels of emotions at work. This may be observed in Table 4 below.

Table 4: A comparison between individuals of different racial groups on the measures of emotions at work, job involvement, family involvement and well-being

Measuring Instruments	Means	df	F	P-level
EMOT	98.34	1	5.47	0.0201*
JI	33.53	1	0.29	0.5918
FI	45.61	1	0.13	0.7144
PHYS	28.05	1	0.07	0.7892
PSYC	23.94	1	2.11	0.1476

*Mean difference significant at 0.05 level

EMOT = Emotions at Work, JI = Job Involvement, FI = Family Involvement, PHYS = Physical Well-Being, PSYC = Psychological Well-Being

The means of the different racial groups were then compared in order to determine, which group scored higher on the measure of emotions at work. The comparison of the means showed that Black individuals (Asian, Black and Coloured) had higher scores on the measure of emotions at work, with a mean of 102.16, as compared to their White counterparts who demonstrated a mean of 95.65. As discussed previously in Chapter 2, a high score on the measure of emotions at work would be indicative of the respondents experiences with positive levels of emotions at work, meaning that the Black respondents of this study reported experiencing greater levels of positive emotion than their White counterparts.

Having established that there are significant differences in the physical well-being as experienced by the male and female respondents of the study, and differences in the emotions at work as experienced by the Black and White respondents, the researcher continued to test for the first hypothesis to be investigated in this study. The aims and results of this hypothesis will be considered in more detail below.

Hypothesis 1

The first hypothesis to be investigated in this study aimed to determine whether there was a relationship between individuals' emotions at work and their levels of physical and psychological well-being. In order to test this hypothesis the researcher conducted 2 regression analyses, which measured whether there were relationships between the constructs of emotions at work and physical and psychological well-being. The results of these analyses will be discussed in further detail below.

The results of this hypothesis indicate there is a significant relationship between the independent variable (emotions at work) and the dependent variables (physical well-being and psychological well-being), with $F = 75.94$, $p < .0001$ and $F = 124.03$, $p < .0001$, respectively. There is therefore sufficient evidence to suggest that an individuals emotional reactions at work influence their levels of physical and psychological well-being. Additionally, it may be noted that these variables are positively related to one another, meaning that large values of well-being would be associated with large values of emotions at work. The r-square values obtained in the results of this analysis further illustrate that approximately 24 percent of individual's physical well-being and 33 percent of their psychological well-being may be explained by their reported emotions at work. These results may be observed in more detail in Table 5 and 6 below.

Table 5: An analysis of the relationship between emotions at work and physical well-being

Analysis of Variance				
Source	df	SS	F	P-level
Model	1	1332.71	75.94	<.0001
Error	247	4334.72		

R-Square	0.2352

Parameter Estimates				
Variable	df	Parameter Estimate	t Value	P-level
Intercept	1	17.590	14.31	<.0001
Emotions at Work	1	0.106	8.71	<.0001

Table 6: An analysis of the relationship between emotions at work and psychological well-being

Analysis of Variance				
Source	df	SS	F	P-level
Model	1	2610.15	124.03	<.0001
Error	247	5197.94		

R-Square	0.3343

Parameter Estimates				
Variable	df	Parameter Estimate	t Value	P-level
Intercept	1	9.30	6.91	<.0001
Emotions at Work	1	0.15	11.14	<.0001

Having established that there is a relationship between the constructs of emotions at work and physical and psychological well-being, the researcher continued to test the second hypothesis of this study. This will be considered in more detail below.

Hypothesis 2

The second hypothesis to be investigated in this study aimed to establish whether the construct of job involvement mediated the relationship between emotions at work and physical and psychological well-being. In order to test this hypothesis the researcher conducted a number of correlations and partial correlations. The results of these statistical analyses will be discussed in further detail below.

Correlations were conducted in an attempt to determine the nature of the relationship between the constructs of emotions at work, physical and psychological well-being, and job involvement. The results of these correlations suggest that there is a moderate positive correlation between emotions at work and job involvement, with $r = .36$, $p < .0001$, and between emotions at work and physical well-being, with $r = 0.48$, $p < .0001$. A strong positive correlation was also found between emotions at work and psychological well being, with $r = 0.58$, $p < .0001$, with these results suggesting that an increase in individuals' emotional reactions to their jobs are associated with an increase in their levels of job involvement, physical and psychological well-being. These results may be observed in more detail in Table 7, below.

Table 7: Pearson's Correlation Coefficients for the Research Variables

	EMOT	JI	FI	PHYS	PSYC
EMOT	1.00				
JI	0.36***	1.00			
FI	-0.01	-0.04	1.00		
PHYS	0.48***	0.10	0.11	1.00	
PSYC	0.58***	0.09	0.11	0.70***	1.00

* Correlation significant at 0.05 level

*** Correlation significant at 0.0001 level

EMOT = Emotions at Work, JI = Job Involvement, FI = Family Involvement, PHYS = Physical Well-Being, PSYC = Psychological Well-Being.

Having gained an understanding of the nature of the relationships between the constructs of emotions at work, physical and psychological well-being, and job involvement, the researcher then conducted partial correlations in order to test whether job involvement served as a mediator to the relationship between emotions at

work and physical and psychological well-being. However, the results of this statistical technique suggested that removing job involvement from the analysis did not affect the relationships between the other variables in the study, meaning that job involvement does not mediate the relationship between emotions at work and physical and psychological well-being. These results may be observed in more detail in Table 8, below.

Table 8: Partial correlation coefficients for the relationship between the respective variables in the study, when job involvement is removed from the analysis

	EMOT	FI	PHYS	PSYC
EMOT	1.00			
FI	0.01	1.00		
PHYS	0.48***	0.11	1.00	
PSYC	0.59***	0.11	0.70***	1.00

* Correlation significant at 0.05 level

*** Correlation significant at 0.0001 level

EMOT = Emotions at Work, FI = Family Involvement, PHYS = Physical Well-Being, PSYC = Psychological Well-Being

As no significant results were found, the researcher conducted additional partial correlations, in order to test for the directionality of the mediators to be investigated in this study. The results of these additional tests indicated that there is a negative weak relationship between job involvement and psychological well-being, when the relationship of each of these variables with emotions at work is removed from the analysis, with $r = -0.15$, $p = 0.0185$, meaning that when emotions at work is excluded from the analysis, an increase in job involvement is accompanied by lower levels of psychological well-being and vice versa, thereby suggesting that the construct of

emotions at work mediates the relationship between job involvement and psychological well-being. These results may be observed in more detail in Table 9, below.

Table 9: Partial correlation coefficients for the relationship between the respective variables in the study, when emotions at work is removed from the analysis

	JI	FI	PHYS	PSYC
JI	1.00			
FI	-0.04	1.00		
PHYS	-0.09	0.13*	1.00	
PSYC	-0.15*	0.14*	0.59***	1.00

* Correlation significant at 0.05 level

*** Correlation significant at 0.0001 level

JI = Job Involvement, FI = Family Involvement, PHYS = Physical Well-Being, PSYC = Psychological Well-Being

While not directly hypothesised in this study, it was felt that it would be of interest to explore the relationship between job involvement and the remaining continuous variables (age, average hours worked by the respondent and their partner or spouse, employment duration, and current position duration) to be requested from the respondents in the biographical information form. The results of these correlations found there to be a weak positive correlation between job involvement and age and between job involvement and the average number of hours worked by the respondent, with $r = .14$ and .13, $p < .05$, respectively, meaning that an increase in one's age and average number of hours worked is associated with an increase in one's levels of job involvement. This may be observed in Table 10 below.

Table 10: Pearson's Correlation Coefficients for the Research Variables

	JI	FI	AGE	AVE	SAVE	EDUR	PDUR
JI	1.00						
FI	-0.04	1.00					
AGE	0.14*	-0.07	1.00				
AVE	0.13*	-0.00	0.02	1.00			
SAVE	-0.10	-0.02	-0.28*	0.32***	1.00		
EDUR	0.06	0.05	0.67***	0.01	-0.12	1.00	
PDUR	0.01	-0.17*	0.37***	0.00	-0.10	0.41***	1.00

* Correlation significant at 0.05 level

*** Correlation significant at 0.0001 level

JI = Job Involvement, FI = Family Involvement, AGE = AGE, AVE = Average Hours Worked Per Week, SAVE = Average Hours Worked Per Week by Spouse/ Partner, EDUR = Duration of Employment Within the Organisation, PDUR = Duration of Employment Within Current Position Within the Organisation

Having established that the construct of emotions at work is found to mediate the relationship between job involvement and psychological well-being, the researcher continued to test the third hypothesis of this study. This will be considered in more detail below.

Hypothesis 3

The third hypothesis to be tested in this study aimed to establish whether the construct of family involvement mediated the relationship between emotions at work and physical and psychological well-being. As with the second hypothesis, discussed above, the researcher carried out a number of correlations and partial correlations in order to test this hypothesis. The results of this analysis will be considered in more detail below.

Correlations were conducted in an attempt to determine the nature of the relationship between the constructs of emotions at work, physical and psychological well-being, and family involvement. As discussed previously in this chapter, the results of these correlations suggest that an increase in individuals' emotional reactions to their jobs is associated with an increase in their levels of job involvement, physical and psychological well-being. No correlation was found between these variables and the construct of family involvement.

Partial correlations were therefore carried out in an attempt to establish whether family involvement served as a mediator to the relationship between emotions at work and physical and psychological well-being. The results of these analysis, once again, demonstrated that removing the construct of family involvement did not affect the relationship between the variables in the study, meaning that family involvement did not mediate the relationship between emotions at work and physical and psychological well-being. This may be observed in more detail in Table 11, below.

Table 11: Partial correlation coefficients for the relationship between the respective variables in the study, when family involvement is removed from the analysis

	EMOT	JI	PHYS	PSYC
EMOT	1.00			
JI	0.36***	1.00		
PHYS	0.49***	0.11	1.00	
PSYC	0.58***	0.10	0.70***	1.00

* Correlation significant at 0.05 level

*** Correlation significant at 0.0001 level

EMOT = Emotions at Work, JI = Job Involvement, PHYS = Physical Well-Being, PSYC = Psychological Well-Being

As no significant results were found, the researcher , once again, conducted additional partial correlations, in order to test for the directionality of the mediators to be investigated in this study. The results of these additional tests indicated that when the construct of emotions at work is removed from the analysis, positive weak correlations were found between family involvement and physical and psychological well-being, with $r = 0.13$, $p = 0.0400$ and $r = 0.14$, $p = 0.0333$, respectively. These results suggest that when emotions at work is excluded from the analysis, an increase in individuals' levels of family involvement is associated with increased levels of physical and psychological well-being, thereby suggesting that the construct of emotions at work mediates the relationship between family involvement and physical and psychological well-being. These findings may be observed in more detail in Table 9 of this chapter.

As with the second hypothesis above, the researcher then conducted additional correlations in the area of family involvement and the remaining continuous variables to be requested from the respondents of the study. These analyses indicated that there is a weak negative correlation between family involvement and the duration in which the respondent had been employed within their current position within the organisation, with $r = -.17$, $\underline{p} < .05$. This result suggests that as individual's duration of employment within their current position increases, so do their levels of family involvement decrease. This may be observed in more detail in Table 10 of this chapter. A summary of the results that were obtained in this study will now be provided below.

Summary of Results

The findings of this study, where gender and race are concerned, indicated that there were no significant differences in the emotions at work, job involvement, family involvement or psychological well-being as experienced by the male and female respondents of the study. Similarly, non significant findings were demonstrated for the individuals of different racial groups on the constructs of job involvement, family involvement, physical well-being and psychological well-being. Significant differences were, however, demonstrated between the physical well-being experienced by the male and female respondents of the study, with further analysis in this area indicating that the male respondents were generally found to experience more positive or favourable levels of physical well-being than their female counterparts. Significant differences were also demonstrated between the emotions at work experienced by individuals of different racial groups, with a comparison of the mean scores of these individuals demonstrating that the Black individuals in the sample generally reported experiencing more positive emotions at work than their White counterparts.

The findings for the first hypothesis to be tested in the current study found the construct of emotions at work to be related to an individual's levels of physical and psychological well-being. In both cases, these constructs were found to be positively related, meaning that the individual's experience of positive emotion at work was found to be associated with positive or favourable levels of physical and psychological well-being. Having established a relationship between these constructs the researcher then continued to measure the second hypothesis of the study, the findings of which will be considered below.

The second hypothesis, which aimed to determine whether the construct of job involvement mediated the relationship between emotions at work and well-being, found the construct of job involvement to form one of the main variables in the analysis, and not the mediator or third variable, as originally anticipated. Further analysis in this area revealed the fact that emotions at work was responsible for mediating the relationship between job involvement and psychological well-being.

Similar results were found to pertain to the third, and final hypothesis to be investigated in this study, which aimed to determine whether family involvement mediated the relationship between emotions at work and well-being. While it was originally anticipated that family involvement would act as the mediator or third variable in this relationship, the results indicated that emotions at work, was once again, responsible for mediating the relationship between family involvement and both physical and psychological well-being.

Chapter 4: Discussion

This chapter aims to provide an in-depth discussion of the results that were obtained in the study, in the light of the literature presented in the literature review. It will begin with a discussion in which the characteristics of the sample to be used in this study will be explored and discussed. Each of the hypotheses that were tested in the study will then be highlighted and discussed in more detail below, followed by a consideration of the theoretical implications of these findings, and a discussion regarding the inherent limitations of the study.

Research Findings

Characteristics of the Sample

Before moving on to a discussion of the actual results that were obtained in the current study, this discussion will now focus upon the nature of the sample that was used in this study. A discussion of this nature is of great importance to the current study in that it is likely to provide us with an indication of the inherent characteristics of the sample that was obtained, information which when combined with the information elicited by the measures of emotions at work, well-being and job and family involvement, may provide alternative explanations for the findings that were obtained in the study.

The age of the men and women in the sample is observed as an important factor to consider in a discussion of this nature, in that it is likely to provide us with additional insight and possible explanations for the results that were obtained in this study. The age of the individuals in the sample, which ranged from 24 to 64, with a mean of 41.88 and a standard deviation of 9.43, is especially useful in this analysis where the

constructs of stress and emotion are concerned, this due to the findings of Safework (2003), which report adolescents and older workers as being less capable of dealing and coping with stressful situations than their middle-age counterparts. The fact that the mean age of the sample was recorded as being approximately 42 years of age is therefore important to consider in that it suggests that the majority of the sample would fit into the middle-age category, therefore suggesting that they would be able to cope well with the stress elicited by their place of work.

Of the individuals in the sample, the majority (64.3%) reported being married, with the remaining individuals (35.7%) reporting being divorced, single, widowed or living with a partner. This kind of information is important to consider, especially where the construct of well-being is concerned, in that it may provide us with insight into the underlying well-being experienced by the individuals in the sample, before taking the effects of emotions at work and job and family involvement into consideration. This is supported by the research findings of Coverman (1989) and Noor, (1995) for example, which demonstrate the link between marital status and the construct of well-being.

However, the benefits of taking factors such as marital status into account tend to transcend beyond well-being, in that they may also provide us with insight into the degree of family involvement that would typically be experienced by these individuals. The fact that the majority of the respondents of the study reported being married, would therefore lead us to expect that most of the individuals in the sample would generally report experiencing greater levels of family involvement, in terms of spousal and parental involvement, than a study focusing on a group of single

individuals, for example. While single individuals may also be argued to experience family involvement, they would not typically experience spousal and parental involvement, as was measured for in this particular study. A focus upon the mean scores that were obtained by the respondents on the measure of family involvement, which was reported as 45.61 confirms this point by illustrating that the individuals in the sample were found to experience very high levels of family involvement, meaning that they would be expected to associate with, and be committed to their family roles.

Another important factor to consider in a discussion of this nature, namely that of maternal and paternal status, including the number of, and ages of one's children, would also be likely to provide us with insight, especially where well-being and family involvement are concerned. The findings of studies conducted by Barnett, Marshall and Singer, (1992) for example, illustrate this point effectively by highlighting the differences in the well-being of those with and without children, with the majority of studies in this area reporting women with children as experiencing poorer levels of health and well-being than their single counterparts. The fact that the majority (82.3%) of the respondents in this sample reported having one child or more, is therefore important in that it not only suggests that the health and well-being of the individuals in the sample may be affected by factors extrinsic to the job, but also raises our awareness to the fact that the respondents of the current study would be likely to have direct experience with family involvement in the form of spousal and parental involvement, as was measured for in this study.

The reported job title of the respondents in the study is another important factor to consider in a study of this nature, especially where stress and emotion are concerned. The fact that the majority (49.4%) of the sample reported fulfilling a managerial or executive position in the organisation is likely to elicit important information, especially with regards to the kinds of organisational stressors to affect individuals within the organisation. This is clearly demonstrated by Strumpfer (1987) who not only highlights the way in which executives are known to be affected by factors intrinsic to the job, such as having responsibility for the lives of others, but also demonstrates the toll taken by other organisational stressors, especially where relationships at work and factors such as delegation, are concerned.

However, with that said, the mean score that was obtained by the respondents on the measure of emotions at work, which was reported at 98.34, suggests that the respondents of the sample were generally found to experience very high levels of positive emotion in the workplace. However, this mean score goes beyond merely raising our awareness to the very high levels of positive emotion experienced by these individuals in the workplace. Instead this score also implies that these individuals are found to experience particularly low levels of negative emotions at work, thereby suggesting that they are generally happy with the many facets of their jobs, including the work itself, co-workers, supervisors, clients and pay.

Another explanation for these findings could, however, point to the scale that was used to measure emotions at work. That is to say, that the Job-Related Affective Well-Being Scale that was employed in order to measure the construct of stress as related to emotion, may have failed to pick up on the actual levels of stress

experienced by the respondents of the study. This may be explained in terms of the fact that while stress and emotion may be related to one another, they are still separate constructs, and should be measured accordingly. Alternatively, it may point to the fact that the scale was able to pick up on the levels of stress experienced by the respondents of the study. The high levels of positive emotions at work reported by the respondents may therefore either point to the fact that these individuals experienced relatively low levels of stress, or, on the contrary, that they experienced high levels of stress, which may have served as a source of exhilaration for them, thereby providing an alternative explanation for their positive experiences at work. It is therefore possible that this scale should not have been used in isolation, but should rather have been accompanied by a scale measuring the actual levels of stress experienced by the respondents, information, which when combined, would have been very useful for a discussion of this nature.

The fact that the respondents of the study reported experiencing very high levels of positive emotions at work, as previously discussed, may also lead us to question the actual levels of pressure placed on these individuals in their place of work. This tends to link in with the next factor to be considered in this discussion, namely the average number of hours worked per week by the respondents and their partner or spouse. This information is important to consider, in that it may serve as an indication of the actual amount of time spent by the respondents at work, information, which may not only enhance our understanding of the constructs of stress and emotion, but also of job involvement.

Research conducted by Kirkland (2000) in the area of average weekly hours revealed that the United States labour force was found to work approximately 34.5 hours per week. While the mean score for the average hours worked by the respondents of this study, which was reported as being 40 hours, is found to lie above the industry standard for workers in the United States, it may be noted that these workers are still not expected to work exceptionally long hours. In fact, 40 hours per week, implies that these individuals are required to work approximately 8 hours per day, which tends to be the industry standard in contemporary South African workplaces. The fact that the majority of the respondents in the study reported not being expected to work unreasonable hours may therefore provide an alternative explanation for the fact that these individuals were found to experience very high levels of positive emotions in the workplace.

The final factor to be considered in this section of the discussion, namely the respondent's reported duration of employment within their current position and within the organisation is found to be important, in that it may provide some indication of the levels of job involvement to be experienced by the individuals in the sample. The fact that the majority of the sample reported being employed within their current position for approximately 5 years and within the organisation for approximately 14 years, therefore suggests that these individuals are likely to associate with their jobs and therefore demonstrate high levels of job involvement. This is confirmed by focusing upon the mean score that was achieved by the respondents on the Job Involvement Questionnaire, which was reported at 33.53, a score, which suggests that the sample typically experienced high levels of involvement in their place of work.

While not directly hypothesised for in the current study, it was felt that it would be interesting to measure whether there were any significant differences in the emotions at work, job involvement, family involvement and physical and psychological well-being, as experienced by individuals of different demographic groups, especially where gender and race are concerned. The results of this analysis, where gender is concerned, found there to be a significant difference between the physical well-being of men and women, with further analysis in this area demonstrating that men experienced higher levels of physical well-being than their female counterparts. No other significant differences were found. The research findings discussed above, while consistent with previous research findings in certain instances, tend to be relatively inconsistent in others. This will be explored in more detail below, in the light of the available literature in the area.

The research findings that were obtained in the current study with regards to well-being, while consistent with previous research findings where physical well-being is concerned, tend to be inconsistent with regards to psychological well-being. Previous research in the area of physical well-being would therefore support the findings of this study, which demonstrate men as reporting greater physical well-being than their female counterparts. Research conducted by Strickland, (1988 cited in Rodin and Ickovics, 1990) for example, illustrates this effectively by noting that women are known to experience greater morbidity than men, meaning that they are known to experience illnesses, including hypertension, obesity, poor vision, diabetes, anaemia and respiratory problems, more frequently than their male counterparts.

However, this is unable to explain the discrepancies between the findings of this study, and previous research findings in the area of psychological well-being. While no significant differences were demonstrated between the psychological well-being of the men and women in this study, previous research in the area has found women to experience more mental ill health than their male counterparts, especially where stress-related illnesses are concerned. This is clearly illustrated in the research findings of Ogur (1986 cited in Rodin and Ickovics, 1990) and Travis, (1988 cited in Rodin and Ickovics, 1990) which found 70 percent of psychoactive medications, such as tranquillisers and antidepressants, to be prescribed to women.

A possible explanation for the discrepancy between the results for psychological well-being in this study, and previous research findings, especially where the South African context is concerned, could be the prevalence of the employment of permanent domestic workers, a trend that has been observed to expand along with the increasing number of women entering the workforce. Contemporary women in the employment sector would therefore be relieved of some of their more traditional or domestic roles and responsibilities in the household, which would now be fulfilled by the domestic worker. This would not only be expected to result in women feeling that they have more support in household responsibilities than they did in the past, but may also result in them feeling that they are placed under less stress, leaving them more capable to cope with their responsibilities.

This discussion relates back to the definition of psychological well-being as including a number of aspects, including high levels of self-esteem, mental health, life satisfaction and vigour, together with low levels of depression and frustration (Muller,

1993). The support received by these women in the family domain would therefore be expected to contribute to low levels of depression and frustration, due to the fact that they may feel that they are more able to cope with their responsibilities, thereby contributing to greater self-esteem and confidence, factors which would ultimately contribute to a sense of mental health and well-being and satisfaction with one's life.

Research in the area of emotions and affect tends to be relatively inconsistent with regards to gender. Research by Eysenck and Eysenck (1968) and Parkes (1990 cited in Burke, Brief and George, 1993) for example, both reported women to experience higher levels of negative affect than their male counterparts. However, research findings to the contrary have also been documented, which report no significant gender differences in negative affect scores (Tellegen, 1982 cited in Burke, Brief and George, 1993). In spite of the inconsistent results discussed above, one would generally assume that women would experience greater negative emotions at work than their male counterparts, this owing in part to the fact that women's complaints are usually documented as being more emotionally laden than the complaints of men (Ogur, 1986 and Travis, 1988 cited in Rodin and Ickovics, 1990).

A possible explanation for this trend could be the fact that women are more likely to seek medical attention due to emotional complaints than their male counterparts, making it unsurprising that the percentage of issued prescriptions should be swayed towards women. This would be able to provide an explanation for the findings of the current study, which found there to be no differences in the emotions at work experienced by the male and female respondents of the study.

The results that were obtained with regards to job and family involvement are relatively surprising given previous research findings in the area, which typically demonstrate there to be differences in the involvement and conflict experienced by men and women in the domains of work and the family. Here reference is made to the research findings of Kandel, Davies and Raveis (1985 cited in Baruch, Biener and Barnett, 1987) who not only highlighted the differences in the experiences of men and women with regards to work and family-related stress, but also found there to be consistent differences in the health complaints as reported by these individuals.

The changing nature of the workforce, and the fact that women are now responsible for taking on workplace roles, over and above their responsibilities in the home, would therefore be expected to result in men and women experiencing different levels of involvement in these domains. This is stated aptly by Huggett et al (1985 cited in Wilson, 1995, p. 10) who in discussing the female model of work take note of the fact that "women's paid employment does not exist in isolation" but is instead "inextricably linked to" their "unpaid work in the household and community". As such, women are now responsible for the traditional roles, which involve childcare and maintenance of the home, their community roles, and their roles in the employment sector.

Gove and Geerken (1977) expand upon this point by noting that working women typically experience greater demands than that of their husbands and non-working counterparts, due to the fact that they are required to perform most of the household chores, in addition to their paid employment. Research on families with preschool children, for example has demonstrated that mothers work an additional 16 to 24

hours than their husbands, meaning that these women work approximately 90 hours per week (Scarr, Phillips and McCartney, 1989). It is therefore unsurprising that these women should report experiencing more conflict between their work and family roles than their male counterparts, a trend which is not only expected to impact upon their health, but also upon their levels of life satisfaction (Kossek and Ozeki, 1998).

Given the discussion above, it is surprising that the men and women in this study should reportedly experience the same levels of job and family involvement. A possible explanation for this, may be related back to the discussion regarding domestic workers above, in that the employment of a domestic worker would be expected to relieve women of some of their more traditional or domestic roles and responsibilities in the household, allowing them to become more involved in family-related tasks. This would not only be able to explain why the women in the current study should report experiencing similar levels of family involvement to their male counterparts, but may also be able to explain why these individuals would report experiencing similar levels of job involvement, a trend that may be explained in terms of the fact that men and women may now equally partake in activities within the domain of the family, thus allowing women to become more involved in their jobs.

The findings discussed above may also be explained in terms of the changing nature of the roles taken on by men in the household. That is to say, that while men may still not take on equal responsibilities in the household, they are generally more involved in family-related tasks and activities than they were in the past. While unintended, this information may have been elicited by the scale that was used to measure the construct of family involvement in this study. That is to say that while the scale was

intended to measure the actual family involvement experienced by the male and female respondents of the study, thereby providing a reflection of the actual amount of time spent on activities in the home, it rather elicited information regarding their perceived involvement in this domain. This serves as a potential limitation to this study and would be likely to influence the results that were obtained, especially where the reported health and well-being of the respondents is concerned.

The results of this investigation, where race is concerned, demonstrated a significant difference in the emotions at work experienced by individuals of different racial groups, with further analysis indicating that Black (Asian, Black and Coloured) individuals typically experience more positive scores on the measure of emotions at work than their White counterparts. No other significant differences were found. These results will be considered in more detail below, where they will be related to the available research in the area.

While race is an important factor to consider, especially in a rich and diverse context such as ours, there tends to be a limited availability of research in the area of the differences experienced by individuals of different racial groups on the constructs of job involvement, family involvement and physical and psychological well-being.

The available research in this area tends to focus upon potential mediators, including factors such as age, (Safework, 2003) gender, (Burke, Brief and George, 1993) marital (Coverman, 1989 and Noor, 1995) and parental status (Barnett, Marshall and Singer, 1992), employment status (Verbrugge, 1983) as well as factors such as availability of social support (Beehr et al., 2000 and Buunk et al., 1998). The lack of research in the area of race and the constructs of job involvement, family involvement

and physical and psychological well-being is problematic, in the sense that these findings would be expected to add great value to the current body of literature in the area of health and well-being.

Research in the area of the construct of stress and race or ethnicity has, however, attracted the attention of researchers. This is demonstrated by the research findings of Ford (1976) and Brack, Staszak and Pati (1972 cited in Quick, Nelson and Quick, 1990) who in focusing upon the individual and organisational relationships between stress and ethnicity found there to be certain stressors that were unique to minority groups. This is noted by Quick, Nelson and Quick (1990, p. 42) as follows, "There are certain stressors unique to particular minority groups, including blatant racial prejudice and lack of access to the 'informal organisation'. In addition, the impact of commonly experienced forms of stress on minority groups may be magnified by cultural and social forces which result in less social support, lower self-esteem, or lack of familiarity with the business world". As this research tends to be quite outdated it is possible that each of the above factors would no longer pertain in the contemporary workplace. The blatant racial prejudice, which was found to plague apartheid South Africa, for example, would not be expected to be observed as a prominent stressor in contemporary workplaces, owing in part to legislation, which not only serves to protect the rights of all individuals within society, but also serves to provide all individuals with equal opportunities in the workplace.

However, with that said, one cannot disregard the cultural and social forces within the organisation when considering the experiences that individuals of different racial groups have within an organisation. That is to say that these experiences, will in all

likelihood be largely dependent upon the organisational culture itself, as well as factors such social support and relationships within the organisation. The fact that Black (Asian, Black and Coloured) individuals within this study reported experiencing greater levels of positive emotions at work than their White counterparts may thus be pointing to a change in the underlying culture that used to plague many South African organisations, by stratifying individuals according to their association with a particular ethnic group and judging them accordingly.

Hypothesis 1

The first hypothesis aimed to measure whether there was a relationship between the emotions at work experienced by individuals and their levels of physical and psychological well-being. The results of this analysis indicated that there is a significant relationship between emotions at work and physical and psychological well-being, with approximately 24 percent of individual's physical well-being and 33 percent of their psychological well-being being explained by their emotions at work. In addition it was found that these variables were positively related to one another, meaning that large values of well-being would be associated with large values of emotions at work. The findings for physical well-being will be considered in more detail below, followed by a discussion of the findings for psychological well-being.

The research finding discussed above, with regard to the relationship between emotions at work and physical well-being, tends to be consistent with past literature in the area, which has generally found emotional states to include, and result in a number of physiological body changes (Weiss, 2002). While this research has tended to focus upon the physiological changes spurred on by negative emotions, one would expect

the absence of negative emotions and/ or prevalence of positive emotions, to not only result in an absence of the physiological consequences of negative emotions, as considered above, but also to result in positive health benefits due to the positive emotions themselves. This viewpoint is supported by researchers such as McCubbin, Surwit and Williams, (1985 cited in Quick, Nelson and Quick, 1990) who in discussing the positive aspects of optimal or well-balanced stress, highlight the significant increase in one's levels of endorphins in the blood, which have been found to be directly associated with pain relief and the experience of feelings of well-being.

As with the discussion above, the finding of this analysis with regards to the relationship between emotions at work and psychological well-being, is found to be consistent with previous literature in the area, which has, time and again, highlighted a number of psychological symptoms that are known to arise as a result of the experience of stress or negative emotions (De Cenzo and Robbins, 1996, Safework, 2003, and Smit and Venter, 1996). These negative psychological consequences, which include but are by no means limited to factors such as fatigue, depression, frustration, aggressive outbursts and poor concentration, are expected to result in burnout, which is not only characterised by a state of sorrow, helplessness and despair, but is also known to result in an individual losing sight of his or her objectives and becoming obsessed with his or her problems, with the ultimate result of severe self-doubt and reactive depression (Strumpfer, 1987).

However, like the physiological effects of stress, as discussed above, there are also a number of positive psychological consequences of stress and emotion, especially where the workplace is concerned. This view is supported by Kets de Vries (2001)

who notes that work may be an anchor of psychological well-being for individuals, due to the fact that it is not only likely to provide them with a means of establishing their sense of identity, but may also assist them in maintaining their self-esteem. Given the discussion above, it is therefore unsurprising that the results of this study should report a positive relationship between the variables of emotions at work and psychological well-being.

Hypothesis 2

The second hypothesis aimed to explore whether job involvement mediated the relationship between individuals emotions at work and their levels of physical and psychological well-being. The results of the first analysis that was conducted in order to test this hypothesis indicated that there was a positive correlation between the construct of emotions at work and job involvement, physical and psychological well-being, meaning that as individuals' levels of emotional reactions to their jobs increase so do their levels of job involvement, physical and psychological well-being.

The findings discussed above tend to be consistent with previous literature and research findings in the area of emotion. The definition of emotion by Weiss (2002, p. 35) as the "specific neuropsychological phenomena, shaped by natural selection, that organise and motivate physiological, cognitive and action patterns that facilitate adaptive responses to the vast array of demands and opportunities in the environment", illustrates this effectively, in that it demonstrates the power held by emotion in influencing a number of processes and responses. The fact that those respondents in the study who reported experiencing greater levels of positive emotions at work were found to experience greater job involvement, is therefore

unsurprising, owing to the fact that individuals who experience positive emotions regarding their jobs are not only more likely to have positive beliefs regarding their jobs, but are also more likely to view their job as being able to satisfy their needs (Kanungo, 1982).

This would then be expected to have an impact upon individual's sense of health and well-being, in the sense that individuals' experiences at work are likely to influence their experiences with life in general, given the amount of time that individuals spend in the workplace (Brown, 1996). This is also supported by the clear link that is found between context free and job-specific well-being, thereby implying that individuals' feelings about their job are likely to form an integral part of their feelings about life in general, (Fisher, et al., 2001) making it unsurprising that the construct of emotions at work should be demonstrated as impacting upon one's levels of health and well-being.

The research findings of Buunk et al., (1998) for example, illustrate this effectively by highlighting the harmful effects that negative emotions are likely to have on the health and well-being of the individual. The toll that negative emotions are likely to take on one's heart rate, blood pressure, secretion of certain hormones, and rates of breathing, therefore make it unsurprising that individual's experiencing positive emotions in the workplace, would also experience greater levels of health and well-being than their lower scoring counterparts. This is clearly demonstrated in the findings of the current study, which show a positive correlation between the constructs of emotions at work and physical and psychological well-being, therefore suggesting that an increase in

one's levels of positive emotions at work is likely to be accompanied by an increase in one's levels of health and well-being.

Having established that there was a relationship between the constructs of emotions at work, physical and psychological well-being, and job involvement, the researcher then conducted additional statistical analysis in order to determine whether job involvement acted as a mediator to the relationship between emotions at work and well-being. The results of this analysis indicated that removing job involvement from the analysis did not affect the relationships between the other variables in the study, thereby suggesting that it did not act as a mediator in this study. This finding, once again, points to the influence held by the construct of emotions at work in affecting one's levels of well-being. That is to say that the reported emotional reactions of the respondents in the study to any aspect of their job, including the work itself, co-workers, supervisor, clients or pay, is sufficient to affect their levels of well-being, without taking factors such as job involvement into consideration. In addition, it became apparent that the construct of job involvement is actually related to emotions at work, meaning that it was found to form the dependent variable in this analysis, and not the mediator variable, as originally anticipated.

Additional analysis in this area was therefore conducted in order to determine, if any of the other constructs to be investigated in the study acted as a mediator. These results indicated that removing emotions at work from the analysis resulted in a negative relationship between job involvement and psychological well-being, meaning that when emotions at work is excluded from the analysis, an increase in job involvement is accompanied by lower levels of psychological well-being. This

research finding therefore suggests that one's emotions at work have an inherent role in mediating the relationship between job involvement and psychological well-being.

This is a particularly interesting finding in that it not only demonstrates the influence and power held by one's emotional reactions in affecting factors such as well-being, but also demonstrates the importance of positive emotional experiences in the work domain, if job involvement and well-being are to be experienced simultaneously. A possible explanation for the findings obtained in this analysis could therefore include the fact that when individuals perceive themselves as being highly involved in their job, without considering the positive emotional experiences and benefits that they gain from their job, they may perceive themselves as being affected by the negative psychological consequences of stress, as considered above, thereby resulting in lower levels of psychological well-being.

While not directly hypothesised in this study, it was felt that it would be interesting to explore the possible relationship between job involvement and the remaining continuous variables in the study, namely age, average hours worked by the respondents and their partners or spouse, as well as their duration of employment within the organisation and within their current position within the organisation. The results of this analysis indicated that there was a positive correlation between job involvement and the variables of age and the average number of hours worked by the respondent. These results suggest that an increase in individuals' levels of job involvement is accompanied by an increase in their age and average number of hours worked.

While the availability of research in the area of job involvement with variables such as age and the average number of hours to be worked in a typical work week, is found to be limited in the current body of literature where job involvement is concerned, the findings obtained above appear to be self-explanatory. The research findings discussed above, with regards to age and job involvement, may thus be explained in terms of the design of measures of job involvement to measure the extent to which individuals' jobs are central to their self-concept or sense of identity (Frone, Russell and Cooper, 1992). The findings discussed above therefore seem to be consistent with the literature in this area, in that one would generally expect an individual's job to become more of a central life interest as they develop in age. This may be explained in terms of the fact that certain interests, which may have taken up the individual's time in the past, such as child-rearing responsibilities, for example, may not be relevant anymore resulting in the individual's focusing their attention upon their other roles, which in this case may include their jobs.

The explanation for the findings regarding job involvement and the average number of hours worked by the respondent, on the other hand, may point back to the discussion of Saleh and Hosek, (1976 cited in Brown, 1996, p. 236) which found job involvement to reflect 4 main dimensions, with the second dimension including "the extent of a person's active participation in the job". One may therefore argue that individuals' perceptions regarding the extent of their participation in the workplace would be influenced by the amount of time that is spent at work, in terms of the actual number of hours worked in the typical work week, and vice versa. This would clearly be able to explain why these individuals would typically report greater levels of job involvement, than their colleagues who reported working fewer hours.

Hypothesis 3

The third hypothesis to be investigated in this study aimed to explore whether family involvement mediated the relationship between individuals' emotions at work and their levels of physical and psychological well-being. The results of the first analysis that was conducted in order to test this hypothesis indicated that there was a positive correlation between the constructs of emotions at work and physical and psychological well-being. While this analysis also indicated that these constructs were related to job involvement, as demonstrated in the discussion above, it found there to be no relationship between these constructs and family involvement, a finding that is surprising, due to the influence that emotions at work have been found to have on the other main constructs to be investigated in this study.

That is to say that one would generally expect one's levels of emotions at work to influence their levels of involvement in the domain of the family, this owing to spillover, a term used by researchers in the area to refer to the way in which individuals carry the emotions, attitudes, skills, and behaviours that are established in one domain of their lives (e.g. work or family) into another (e.g. family or work) (Lambert, 1990). From this it would follow that one would generally expect individuals' emotions at work to spillover into the domain of the family, thereby either increasing or decreasing their levels of family involvement.

Sumer and Knight (2001) expand upon this viewpoint by noting that spillover may be positive or negative, meaning that one domain of an individual's life (e.g. work or family) may either serve to enrich (positive spillover) or deplete (negative spillover) another domain of one's life (e.g. family or work). The effects of emotions at work

on the construct of family involvement would therefore be expected to be twofold, meaning that it could be explained in terms of the experience of both positive and negative emotions.

The experience of positive emotions at work, for example, would therefore be expected to either result in greater or poorer levels of family involvement. Greater levels of family involvement would therefore be expected to come as a result of the more favourable levels of health and well-being elicited by the experience of positive emotion, thereby contributing to greater levels of involvement in all of the domains of one's life. This as compared to poorer levels of family involvement, which would be expected to come as a result of the increased levels of job involvement spurred on by the positive emotions experienced by individuals at work, thereby resulting in less time availability for involvement in the other domains of one's life.

The experience of negative emotions, on the other hand, may also be expected to result in greater or poorer levels of family involvement. Here, greater levels of family involvement would be expected to arise due to the fact that individuals may refrain from becoming involved in their jobs, in an attempt to avoid the negative emotion elicited by that domain, leaving them with more time availability to get involved in family-related tasks. This as compared to poorer levels of family involvement, which would be expected to come as a result of the unfavourable levels of health and well-being elicited by the experience of negative emotion, thereby rendering these individuals unable to partake and get actively involved in the domain of the family.

A possible explanation for the discrepancy in findings with regards to the expected relationship between emotions at work and family involvement, may be explained in terms of the scale that was used to measure the construct of family involvement in the current study. While this scale was originally employed to measure involvement, in terms of the actual amount of time spent in the domain of the family, it may have alternatively measured and provided a reflection of the individual's perceived involvement in the family domain. This is illustrated clearly by focusing upon many of the items in the Family Involvement Scale, an example of which including the first item, which states the following, "A great satisfaction in my life comes from my role as a parent".

This would be able to provide an explanation for the fact that no relationship was found between the constructs of emotions at work and family involvement, in that individuals' levels of positive or negative emotions at work, while expected to influence the amount of time devoted to one's job or family, as supported by the available literature on spillover, would not be expected to influence one's perceptions regarding their family. That is to say that individual's emotional responses to any part of their jobs including the work itself, co-workers, supervisors, clients and pay would not be expected to influence the way that individuals feel about fulfilling the role of a parent or spouse, for example. The fact that the Family Involvement Scale did not actually measure what was originally intended in the study would be expected to impact upon the results that were obtained, thus serving as a potential limitation to this study.

Having established that there was a relationship between the constructs of emotions at work and physical and psychological well-being, the researcher then conducted additional statistical analysis in order to determine whether family involvement acted as a mediator to this relationship. The results of this analysis, once again indicated that removing family involvement from the analysis did not affect the relationships between the other variables in the study, thereby suggesting that it did not act as a mediator to the other constructs to be measured in this study. This may, once again, be explained in terms of the instrument that was employed in order to measure family involvement.

Additional analysis in this area was therefore conducted in order to determine, if any of the other constructs to be investigated in this study, acted as a potential mediator in this hypothesis. These results, once again, indicated that removing emotions at work from the analysis resulted in positive correlations being found between family involvement and physical and psychological well-being. These results suggest that when emotions at work is excluded from the analysis, an increase in individuals' levels of family involvement is associated with an increase in their levels of physical and psychological well-being. The finding of this analysis, which highlights the positive relationship between the variables of family involvement and physical and psychological well-being, may be explained in similar terms to the finding for job involvement, as previously discussed. This finding may, however, be explained in terms of the experience of both positive and negative emotions, each of which will be considered in more detail below.

Where positive emotion at work is concerned, one would expect the individual to wish to become more involved in their job to reap the benefits of these positive emotional experiences, a desire, which is then likely to result in time-based conflict, especially where time commitments between one's work and family are concerned (Greenhaus and Beutell, 1985 and Major, Klein, Ehrhart, 2002). Removing the effects of the positive emotions brought about by individuals' jobs, is therefore not only likely to result in individuals becoming more willing to participate in activities with their family, but is also likely to result in them gaining a sense of satisfaction from doing so, thereby making it unsurprising that these individuals should experience greater levels of well-being as their family involvement increases.

The experience of negative emotions at work, on the contrary, is likely to result in spillover, as previously discussed. Removing the effects of the negative emotions experienced in the work domain is therefore not only expected to reduce the carry-over of these emotions into the domain of the family, resulting in a higher quality of family involvement being experienced, but is also likely to result in increased well-being, owing to the reduction in conflict between these two domains, and the greater levels of satisfaction that would be obtained from being involved with one's family.

While not directly hypothesised in this study, it was felt that it would be interesting to explore the possible relationship between family involvement and the remaining continuous variables in the study. The results of this analysis indicated that there was a negative correlation between family involvement and the duration in which the respondents had been employed within their current position within the organisation. This result suggests that as the duration in which individuals are employed within

their current position within the organisation increases, so does their family involvement decrease.

A possible explanation for the results obtained above, could include the research findings of Adams, King and King, (1996) which found that the relationship between work and the family to be bi-directional, meaning that while work may interfere with family, family may also interfere with one's responsibilities at work. This may be related to the discussion for the second hypothesis above, in that an increase in the individual's duration within their current position in the organisation is likely to lead to increased job involvement, which will then be expected to interfere with their responsibilities where their family are concerned. This corresponds with the findings of Brown (1996, p. 239) who uses his research in the area to explain the way in which job involvement is often found to lead to, what he terms, a "trading off" of family commitments in favour of one's job commitments. Having considered each of the three hypotheses to be tested in this study, this discussion will now continue with a section in which the theoretical implications of the findings of this study will be highlighted and discussed.

Theoretical Implications

This section of this chapter aims to highlight and discuss the theoretical implications of the research findings that were obtained in this study, with regards to the theory of spillover as well as the scarcity and expansion hypotheses.

As demonstrated in the preceding discussion with regards to role involvement, there are a number of associated benefits and liabilities of participating in the roles of worker, parent and spouse, simultaneously. The scarcity hypothesis focuses upon the liabilities associated with multiple role involvement, which arise as a result of individuals not having the energy that is required in order to fulfil their role obligations (Davidson and Fielden, 1999). This hypothesis therefore proposes that the role overload and role conflict that is experienced by individuals, increases along with the number of roles that they occupy, resulting in psychological distress (Barnett and Baruch, 1985) and ill mental and physical health (Davidson and Fielden, 1999). This hypothesis was supported in the current study, in the findings regarding the negative relationship between the constructs of job involvement and psychological well-being, when emotions at work was removed from the analysis. The scarcity hypothesis would explain this finding, in terms of the fact that an increase in individual's job involvement increases the number of roles that they are obliged to fulfil, thereby resulting in poor levels of psychological well-being.

The research findings regarding the positive relationship between family involvement and physical and psychological well-being, when emotions at work was removed from the analysis, is also supported by literature in the area. However, this finding is supported by the expansion hypothesis, which points to the benefits of multiple role involvement, and not the liabilities, as discussed by the scarcity hypothesis above. The expansion hypothesis therefore proposes that individuals' levels of well-being are found to increase, along with the number of roles that they occupy (Barnett and Baruch, 1985). This would clearly be able to explain why an increase in the

respondents' levels of family involvement was associated with an increase in their levels of health and well-being.

The findings discussed above therefore provide support for spillover theory, which describes the way in which individuals carry the emotions, attitudes, skills and behaviours that are established in one domain of their lives into another. (Lambert, 1990). This theory projects that spillover may be positive or negative, meaning that the various areas of individuals' lives may serve to enrich or deplete one another (Sumer and Knight, 2001). This discussion, which relates back to the different sources of well-being, to be considered in Chapter 1, is clearly illustrated above. The first research finding to be discussed above, would therefore provide support for the fact that one domain of an individual's life may serve to deplete another. In this case, the respondents increased involvement in their jobs is found to deplete their levels of well-being, which would consequently be expected to influence their involvement in the other domains of their lives, due to their depleted resources and decreased ability to cope effectively with the demands of their many roles. However, with that said, the results above also provide support for the fact that one domain of an individual's life may serve to enrich another. This is clearly illustrated by focusing upon the second research finding to be discussed above, which suggested that increased levels of family involvement were found to enrich the respondents' levels of well-being, a trend that would be expected to result in increased involvement in the other domains of their lives, due to the gains attached to having a positive health status.

The kind of information to be elicited by the current study may therefore prove to be particularly beneficial in the development of a number of coping strategies and interventions, which will aim to assist individuals within the organisation in coping with the experience of stress and negative emotion in the workplace. These strategies and interventions will not only be expected to assist the individuals who directly experience the costs and consequences of negative emotions and stress, but will also be expected to prevent their symptoms from spreading to the other individuals within the organisation, thereby preventing the amplification of the problem. However, the effects of these interventions and strategies will be expected to be far-reaching, meaning that they will be expected to go further than to simply assist the individuals within the organisation in coping with their experience of negative emotions. These interventions will be expected to enhance the health and well-being of individuals, thereby allowing them to achieve optimal-functioning within the organisation. This will not only be expected to further benefit these individuals, who may derive pleasure in being able to carry out their work roles with precision and ease, but will also be expected to benefit the organisation itself, which will be more likely to demonstrate favourable levels of employee satisfaction and productivity, as opposed to the past where it would have been likely to demonstrate high levels of absenteeism and staff turnover.

Limitations of the Study

There are a number of limitations that may have affected the final results of the study. These limitations, which may be divided into areas such as the research design, sample and sampling, the instruments used to measure the main constructs to be

investigated in the study, and the procedure that was followed will be briefly considered below.

The cross-sectional research design that was used may have influenced the results that were obtained in this study. Cross-sectional research designs, which involve observing subjects at a single point of time, (Babbie and Mouton, 2001) are usually susceptible to what Breakwell, Hammond and Fife-Schaw (1995) refer to as the time of measurement effects. The findings obtained in this study with regards to the relationship between emotions at work and physical and psychological well-being, as well as the effects of the variables of job and family involvement on this relationship, may have been influenced by an uncontrollable event, which may have influenced the overall findings of the study. An example of this may have included a team building programme that may have taken place at the organisation prior to the data collection period. This kind of uncontrollable event may have influenced the respondents' feelings toward their jobs, which would have been expected to influence their levels of emotions at work and job involvement, at the time in which the study was being conducted.

The sample size that was obtained in this study was found to be relatively small, which is problematic in that a small sample is not only more likely to increase the sampling error, (Babbie and Mouton, 2001) but is subsequently expected to affect the overall findings of the study. The low response rate that was achieved in this study, which was attributed both to the fact that the study did not choose to make use of a focused sample group, and to the e-mail format of the questionnaire, also proves to be a limitation of this study. Both the sample size and response rate, as considered

above, are therefore expected to have had an influence on the representative nature of the sample, meaning that it would not be expected to be fully representative of the population from which it was drawn, creating difficulty in adequately generalising its results to this population.

The degree to which the findings of this study could be generalised to the general population is also limited by the geographic location in which the research was conducted. The results of this study would therefore not be able to be generalised to other organisations within the South African context, a limitation, which could not be controlled for in this study, due to the researchers limited time and availability of resources.

The use of volunteer sampling, which relies on the availability of subjects (Babbie and Mouton, 2001) is also a potential limitation to this particular study in that the employees within the organisation who may have been experiencing particularly high levels of stress, and/ or low levels of physical and psychological well-being may have refrained from completing the questionnaire, a trend that is likely to have influenced the findings of the study. While this is the case, it is a part of social research that cannot be controlled, and could not be avoided in a study of this nature.

The Family Involvement Scale that was employed in this study was developed by adapting Lodahl and Kejner's (1965 cited in Yogev and Brett, 1985) Job Involvement instrument. While the effectiveness of this measure of family involvement has been demonstrated, as in a study conducted by Yogev and Brett, (1985) the original Job Involvement instrument from which it was drawn has been heavily criticised by

researchers such as Kanungo (1982) for example, who has highlighted a number of flaws with the instrument, as discussed previously in Chapter 2. However, as family involvement is not a widely researched construct (Yogev and Brett, 1985) there are a limited number of suitable instruments that have been designed to measure the construct. The instrument was therefore employed in this study, despite the negative reports that have been received regarding Lodahl and Kejner's original instrument, as it was found to be consistent with the aims of this particular study. In addition to this, it appears that many of the flaws of the original instrument have been overcome, especially where the final criticism discussed above is concerned, in that the measure of family involvement used in this study is specifically designed to measure both parental and spousal involvement.

Another consideration to be made, where the Family Involvement Scale is concerned, could be the fact that the scale may have failed to measure what was originally intended in the study. On reflection it is felt that this scale failed to measure involvement in terms of the actual amount of time spent in the domain of the family, which is found to be problematic in the sense that it provides a reflection of individuals perceived involvement, as opposed to their actual involvement in the role. This could possible provide an alternative explanation for the fact that the male and female respondents of the study did not report differences in the area of family involvement.

Another limitation where the measures used in this study are concerned involves the fact that the respondents of the study were required to simultaneously report upon their levels of job and family involvement. This may have impacted upon the results

of the study, in the sense that these respondents may have felt that one cannot simultaneously experience high or low levels of involvement in these domains. Respondents reporting that they typically experienced very high levels of job involvement, for example, may have reported experiencing low levels of family involvement, so as to avoid the feeling that they were contradicting themselves in their responses.

A final limitation with regards to the measures used in this study, is that while these instruments demonstrate favourable reliability and validity, there is no evidence of their suitability within the South African context, thus highlighting the need for further research in the area in order to establish if this is the case.

A final limitation to the current study, involves the fact that it could not be ascertained whether the box, which was placed at the organisation as an alternative to completing and submitting the questionnaire by e-mail, was always available to the respondents of the study, due to building alterations that were taking place at the organisation during the data collection period. While this was not controllable by the researcher it would have been expected to have an effect on the number of completed questionnaires that were returned in the study thereby providing an alternative reason for the small sample size that was obtained in the study.

Conclusion

The changing nature of the South African workforce, as well as the resulting changes that this has been observed to have on the more traditional lifestyle patterns of individuals in society, has resulted in an ever-increasing need for up-to-date knowledge in the area of workplace stress, health, well-being, and involvement in the many domains of one's life. The increased interest in this area may be attributed to the fact that individuals are now required to take on a number of roles simultaneously, including the roles of worker, parent and spouse, demands that are likely to greatly impact upon their levels of health and well-being, both in and outside of the workplace.

This study aimed to investigate the nature of the relationship between organisational stress, in terms of one's emotional reactions to their job, and physical and psychological well-being. Having established that there was a relationship between emotions at work and both physical and psychological well-being, it them aimed to establish whether mediators such as job involvement and family involvement may have had an influence on these main relationships. While the constructs of job involvement and family involvement were originally anticipated to act as mediators to the main relationships to be investigated in this study, due to spillover theory, the findings of this research suggested that emotions at work was responsible for mediating the relationship between involvement in the domains of work and the family, and well-being. This finding is important for our current knowledge base, where health and well-being are concerned, in that it demonstrates the power held by individuals' emotions in not only influencing their levels of health and well-being, but also their levels of involvement in the various domains of their lives.

The findings of the current study, as mentioned above, are therefore essential in that they may assist industrial/organisational psychologists in developing coping strategies and interventions, which will aim to assist individuals within the organisation in coping with the experience of stress and negative emotion in the workplace. This will not only be expected to benefit individuals who directly experience the costs and consequences of stress, thereby benefiting their families and those in their immediate surroundings, but will also be expected to benefit the organisation, who will not only be comprised of more healthy individuals, but will also be likely to demonstrate, and reap the benefits of, more favourable levels of productivity.

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Appendix 1

Subject Information Sheet

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19 August 2004

My name is Michelle Chazen, and I am conducting research for the purpose of obtaining my Masters degree in Industrial Psychology at the University of the Witwatersrand. My area of focus is on the relationship between organisational stress and well-being, and the influence that factors such as job involvement and family involvement may have on this relationship. I would like to invite you to participate in this study.

Participation in this research will entail completing the attached questionnaire. The questionnaire will take approximately 15 to 20 minutes to complete, and may be returned in one of two ways, either by e-mail or by placing the completed questionnaire in the box provided. Participation is voluntary, and no person will be advantaged or disadvantaged in any way for choosing to complete or not complete the questionnaire. While returning the questionnaire by e-mail cannot guarantee complete anonymity, the researcher will attempt to respect your right to anonymity by printing out your questionnaire as soon as it is received, and deleting your e-mail address. Additionally, while questions are asked about your personal circumstances, no identifying information, such as your name or I.D. number, is asked for, and as such you will remain anonymous. Your completed questionnaire will not be seen by any person in this organisation at any time, and will only be processed by myself. Your responses will only be looked at in relation to all other responses. This means that feedback that will be given to the organisation will be in the form of group responses and not individual responses.

If you choose to participate in the study please complete the questionnaire located at www.intuito.co.za as carefully and honestly as possible. Once you have answered the questions, either submit it back to me or print out the questionnaire and place it in the sealed box provided in D3Y40 . I will collect the questionnaires from the box at regular intervals. This will ensure that no one will have access to the completed questionnaires, and will ensure your confidentiality. If you do return your questionnaire, this will be considered consent to participate in the study.

Your participation in this study would be greatly appreciated. This research will contribute to a larger body of knowledge on organisational stress and health and well-being, which will ultimately contribute to the health and well-being of individuals in society.

Kind Regards

Michelle Chazen

Biographical Information Form

Please complete the following information, which will be used for descriptive purposes:

Age _____

Gender	Male	Female

Race	Asian	Black	Coloured	Indian	White

Marital Status	Married	Divorced	Single	Widowed	Cohabiting	Other

If Other, please specify:_____

No. of Children	None	One	Two	Three	Four	Five or More

Ages of Children _____

What position do you hold?	Student	Clerical	Supervisor	Management

On average, how many hours do you work per week? _____

On average, how many hours does your spouse or partner work per week? _____

How long have you been employed in this organisation?(in months) _____

How long have you been employed in your current position?(in months) _____

Section A: Job-Related Affective Well-Being Scale

Below are a number of statements that describe different emotions that a job can make a person feel. Please indicate the amount to which **any part of your job (e.g. the work, co workers, supervisor, clients, pay) has made you feel** that emotion in the past **30** days.

Please check **one** response for each item that best indicates how often you've experienced each emotion at work over the past 30 days.	Never	Rarely	Sometimes	Quite often	Extremely often
1. My job made me feel at ease					
2. My job made me feel angry					
3. My job made me feel annoyed					
4. My job made me feel anxious					
5. My job made me feel bored					
6. My job made me feel cheerful					
7. My job made me feel calm					
8. My job made me feel confused					
9. My job made me feel content					
10. My job made me feel depressed					
11. My job made me feel disgusted					
12. My job made me feel discouraged					
13. My job made me feel elated					
14. My job made me feel energetic					
15. My job made me feel excited					
16. My job made me feel ecstatic					
17. My job made me feel enthusiastic					
18. My job made me feel frightened					
19. My job made me feel frustrated					
20. My job made me feel furious					
21. My job made me feel gloomy					
22. My job made me feel fatigued					
23. My job made me feel happy					
24. My job made me feel intimidated					
25. My job made me feel inspired					
26. My job made me feel miserable					
27. My job made me feel pleased					
28. My job made me feel proud					
29. My job made me feel satisfied					
30. My job made me feel relaxed					

Section B: Job Involvement Questionnaire

Place an 'X' over the statement that best describes your present agreement or disagreement with each statement. Please remember that there are not right or wrong answers.

		Strongly disagree	Disagree somewhat	Disagree slightly	Agree slightly	Agree somewhat	Strongly agree
1	The most important things that happen to me involve my present job						
2	To me, my job is only a small part of who I am						
3	I am very much involved personally in my job						
4	I live, eat and breathe my job						
5	Most of my interests are centred around my job						
6	I have very strong ties with my present job which would be very difficult to break						
7	Usually I feel detached from my job						
8	Most of my personal life goals are job-oriented						
9	I consider my job to be very central to my existence						
10	I like to be absorbed in my job most of the time						

Section C: Family Involvement Scale

Place an 'X' over the statement that best describes your present agreement or disagreement with each statement. Please remember that there are not right or wrong answers.

		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable
1	A great satisfaction in my life comes from my role as a parent						
2	A great satisfaction in my life comes from my role as a partner/ spouse						
3	Quite often I plan ahead the next day's family activities						
4	For me, days at home really fly by						
5	I am very much involved personally with my family members' lives						
6	I would be a less fulfilled person without my role as a partner/ spouse						
7	The most important things that happen to me are related to my family roles						
8	If I had it to do all over again I would not have married my present spouse						

		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Not Applicable
9	I would be a less fulfilled person without my role as a parent						
10	Nothing is as important as being a partner/ spouse						
11	I enjoy talking about my family with other people						

Section D: Well-Being Scale

Please rate yourself on the following scale by placing an 'X' over the option that you believe to be most appropriate:

1. How often would you say your worry about things?

Very Often	Often	Sometimes	Seldom	Never

2. In general, do you find life exciting, pretty routine or dull?

Very Exciting	Exciting	Routine	Dull	Very Dull

3. Taking everything into consideration, how would you describe your satisfaction with life in general at the present time?

Very Satisfied	Satisfied	Neutral	Dissatisfied	Very Dissatisfied

4. How would you rate your mental or emotional health at the present time?

Excellent	Good	Neutral	Poor	Very Poor

5. Is your current mental or emotional health better/ about the same/ worse than it was five years ago?

Much Better	Better	The Same	Worse	Much Worse

6. Is your daily life full of things that keep you interested?

Definitely Yes	Yes	Neutral	No	Definitely No

7. Does it seem that no one understands you?

Definitely Yes	Yes	Neutral	No	Definitely No

8. Are you happy most of the time?

Definitely Yes	Yes	Neutral	No	Definitely No

9. Do you feel useless at times?

Definitely Yes	Yes	Neutral	No	Definitely No

10. Do you feel that you need medical treatment beyond what you are receiving at this time?

Definitely Yes	Yes	Neutral	No	Definitely No

11. How would you rate your overall health at the present time?

Excellent	Good	Neutral	Poor	Very Poor

12. Is your current health better/ about the same/worse than it was five years ago?

Much Better	Better	The Same	Worse	Much Worse

13. How much do your health troubles stand in the way of your doing things you want to do?

Very Often	Often	Sometimes	Seldom	Never

14. Do you wake up fresh and rested most mornings?

Very Often	Often	Sometimes	Seldom	Never

15. Have you had periods of days/ weeks/ months when you couldn't take care of things because you couldn't get along?

Very Often	Often	Sometimes	Seldom	Never

16. Do you feel weak all over much of the time?

Very Often	Often	Sometimes	Seldom	Never

17. Are you troubled by headaches?

Very Often	Often	Sometimes	Seldom	Never

18. Are you troubled by your heart pounding and shortness of breath?

Very Often	Often	Sometimes	Seldom	Never