

**STRESS AND ITS EFFECTS ON THE EMPLOYEES IN A FAST MOVING  
CONSUMER GOODS (FMCG) ORGANISATION**

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## ABSTRACT

Employees in the fast moving consumer goods (FMCG) industry are at risk of experiencing high levels of stress and burnout. Females are especially even more at risk due to their work-load as well as home-life balance and child rearing responsibilities which could have a spill over effect at work. Although sources of stress vary for employees due to their work as well as life experiences, it could still result in negative and detrimental outcomes in their personal as well as professional lives. Stress could further lead to burnout, resulting in an employee developing a lack of personal accomplishment, emotional exhaustion (the extent to which emotional resources are depleted), as well as depersonalisation (negative, cynical attitudes and feelings towards others).

This study highlights the significant relationship between occupational stress and burnout as experienced by males and females working in a factory in the Western Cape.

A sample of 120 employees was selected from a population of 1000 workers in the fast moving consumer goods industry. For this study, a quantitative research was undertaken, which involved the use of a probability sampling method. The measuring instruments included the *Experience of Work and Life Circumstances Questionnaire (WLQ)* for stress and the construct burnout was measured with the *Maslach Burnout Inventory Human Service (MBI)* respectively.

Results were obtained by using the Pearson Correlation Coefficient, Analysis of Variance (ANOVA) and T-tests. Permission to conduct this research study on employees was obtained from the management of the factory. Informed consent, as well as anonymity and confidentiality of the employees' responses were ensured.

This research has shown that no relationship exists between the variables (age, gender and educational level) and stress as none of the variables mentioned were significantly related with stress or burnout at the workplace. Therefore, in conclusion, occupational stress is considered to be a major source of stress for employees and could lead to burnout which thus needs to be

addressed more vigorously. The recommendations are based on the conclusions drawn from the study as well as research conducted.



## DECLARATION

I DECLARE THAT, STRESS AND ITS EFFECTS ON THE EMPLOYEES IN A FAST MOVING CONSUMER GOODS (FMCG) ORGANISATION, IS ORIGINAL AND MY OWN WORK.

FURTHERMORE, IT HAS ALSO NOT BEEN SUBMITTED BEFORE FOR ANY OTHER MODULE OR COURSE IN THIS OR AT ANY OTHER UNIVERSITY AND ALL SOURCES HAVE BEEN INDICATED AND ACKNOWLEDGED AS COMPLETE REFERENCES.



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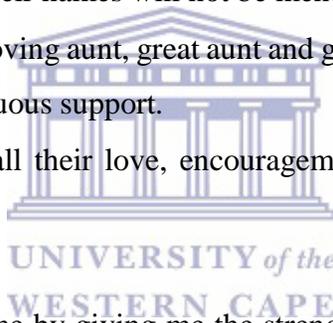
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- My mom and brother for all their love, encouragement and assisting me to pursue my passion.



My Heavenly Father, for helping me by giving me the strength, determination and perseverance to complete this thesis.

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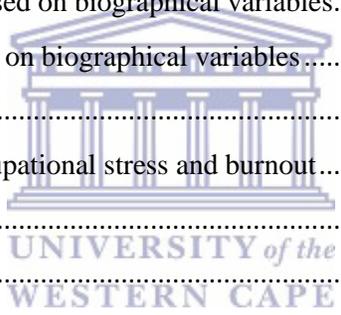
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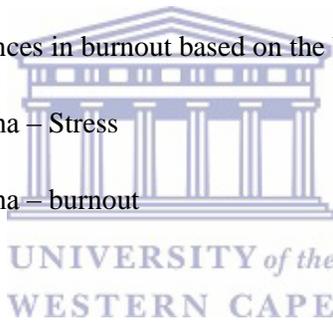
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# CHAPTER ONE

## INTRODUCTION AND BACKGROUND OF THE STUDY

### 1.1 INTRODUCTION

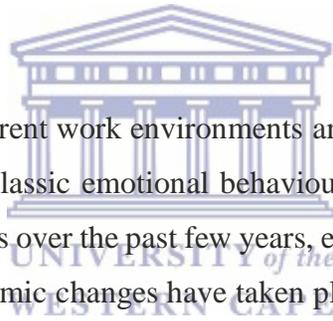
Stress occurs at work amongst colleagues and even in the home within the structure of a family (Brown & Harvy, 2006). Stress is prevalent in almost all spheres of people's lives. Hence Seyle (1956) (cited in Olivier & Venter, 2003, p. 186) asserted that the only reason for "being completely free from stress is death." In the modern era over-population, competition, economic crises, lack of meaningful relationships and time pressures all contribute to psychological stress, there is further reference made to "too much or too little stress can reduce a person's productivity" (Olivier & Venter, 2003, p. 186; Pienaar, 1998, p. 1; Van Zyl, 2002). A certain amount of stress is vital for effective working. However, too much stress becomes counterproductive (Pienaar, 1998)

Previously the effects and consequences of job stress and burnout were not considered as a prominent workplace problem by management and more organisations are realizing the impact these conditions have on the cost of employee health (Faragher, Cooper, Cartwright, 2004). The presence of stressors does not, however, result automatically in a negative impact such as stress or burnout on individuals.

Adequate levels of stress are beneficial for individuals to operate effectively, but too much will result in detrimental consequences where productivity levels could be adversely affected (Van Zyl, 2002). In Western society, work has been singled out to be the primary cause of high levels of stress. According to Stein (2001), in the United States occupational stress is a widespread phenomenon which contributes to absenteeism, diseases, injuries on duty as well as other negative consequences (Van Zyl, 2002).

Studies that have been conducted in different countries reveal that workplace stressors contribute to the experiences of stress (Sanders, 2001; Van Zyl, 2002). The presence of stress at the workplace and effective management has therefore been a growing concern for both researchers

and practitioners alike. Taking into account the amount of time spent at work and that career success is contingent on work productivity, the workplace may therefore be seen as a major foundation of stress for individuals (Makhbul & Hasun, 2011). Sanders (2001) emphasises the far-reaching effects which stress has on workers' health, productivity as well organisational commitment. This has resulted in therapists rethinking about stress prevention strategies which will be best for all systems involved. Further mention is made of stress which originates from work-related situations which results not only in ill health and decreased morale but also in high socio-economic costs for the company, employee and community. Although high levels of stress result in increased healthcare, higher absenteeism and turnover, professionals cannot agree who should be responsible for minimizing stress in the workplace. According to Van Zyl (2002) the measurement of stress within and outside the organisation is also only the starting point for handling this problem.



South Africans at all levels in different work environments are also experiencing higher levels of stress that often tend to occur in classic emotional behaviour (Van Zyl & Bester, 2002). South Africa has undergone many changes over the past few years, especially following democratization in 1994. Political, social and economic changes have taken place to encourage heightening stress level of the population. Stricter employment legislation in the form of the Employment Equity Act and a competitive environment together with tougher economic conditions, violence and even the threat of unemployment have contributed to increased levels of stress and burnout amongst employees from various sectors. In South Africa the added pressure facing employees is the effects of affirmative action which is seen essentially as a moral view and a necessary instrument of change to influence social and economic equality. Employers are therefore compelled to hire employees and assist them to succeed on the job even though they might not have the right profile. This further adds additional strain and stress on employers to achieve that goal and could thus result in a drawback to capable workers seeing as they cannot be selected or even promoted (Van Zyl & Bester, 2002).

It is also evident from South African and international literature that stress is also prevalent in the place of work with severe penalties for employers and employees (Atkinson, 2004; Cilliers &

Kossuth, 2002; Dhaniram, 2003; Le Feure, Matteny & Kolt, 2003; Lowe, 2004; Osthuizen & Van Lill, 2008). Van Zyl and Bester (2002) further explain that the high stress levels inside South African organisations occur often due to a shortage of high-level human capital, managers as well as other professionals that are under immense strain and lack of skill which create extraordinary pressure on both technicians and skilled workers. These increased demands, including the added stress is thus carried over to the non-work situation. Van Zyl (2002), clarifies that it “is acknowledged that work stress creates an emotional climate that can be transmitted to the home and affect the dynamics of family life.”

According to Oosthuizen and Van der Bijl (2007), many South Africans struggle to maintain a balanced work and family life. Women have had to take up the role of the provider while men acquired more responsibilities at home; often their family responsibilities clash with their duties at work. Consequently, women experience work-home conflict where traditional family life patterns are interrupted or changed to a technological operating unit. These situations could have a negative impact on the quality of the individual's life and can cause stress (Nelson & Quick, 2006). Similarly in South Africa both situations can be relevant due to changes in family structures such as single parents and dual career couples. Females are known to struggle with coping as well as having difficulty in trying to balance work and responsibilities for their families culminating in less life satisfaction, anxiety and work stress. Unexpected difficulties which families may encounter in effecting certain transitions, such as retrenchment, which may result in psychological and interpersonal conflicts or confusion tend to threaten family security, stability, quality of life, status as well as the identity that work provided for the individual and family (Buys, Mostert & Wentzel, 2009). Research studies indicate that individuals who possess an internal locus of control will tend to have higher job satisfaction and performance (Nelson & Quick, 2006).

Another phenomenon described by Hemp (2004) is presenteeism. This is a problem of workers being on the job, but due to illness or other related medical conditions not being fully functional with a reduction in productivity leading to be a more costly problem than absenteeism.

Sanders (2001) argues that while a majority of larger companies provide some type of intervention at the secondary or even tertiary levels, examples being stress management and employee assistance programs (EAP) few companies, however, address the primary organisational stressors that represent the core problem. Cooper and Cartwright (2001) are of the opinion and suggest the reluctance in shifting the organisational structure may be due to the following perceptions namely: Organisational change is most of the time too disruptive (it is thus easier to change the worker than the organisation); stress management programs are highly visible to the employee and are represented as being helpful by the organisation. It is important to note such EAPs provide a greater cost return per employee than system changes (especially for personal problems impacting on one's job). This research investigated the level of stress and burnout amongst South African employees in the Fast Moving Consumer Goods (FMCG) Industry.

## 1.2 BACKGROUND OF THE STUDY



Occupational stress is acknowledged as a major challenge worldwide to the wellbeing of organisations and its employees (Van Zyl, 2002). Stressful situations are thus to be expected in the workplace and it is an indispensable part of life. Not only does it provide excitement, momentum and enthusiasm but distress and anxiety as well. It is against this background the intention is to establish the stress, patterns of men and women taking into consideration their age, educational qualifications, years of experience and the nature of their work. By gaining a better understanding of the causes of stress more effective assistance/support programmes can also be implemented in the work situation. South Africans are thus deemed to experience numerous causes of and high levels of stress. A method of addressing this problem would be to pay more attention to the measuring and management of stress in terms of an organisational context (Van Zyl, 2002).

Cooper et al. (2001) argue that stress manifests itself in increased absence through sickness, premature labour turnover, early retirement due to ill health and lost production quantity and value and employee litigation against individual companies. If individuals are exposed to prolonged periods of stress it is possible they have the potential to develop ill health and express symptoms

of depression, anxiety or even coronary heart disease. Furthermore, stress in the workplace can also represent a potential loss of talent for organisations if top performers disengage from their work due to occupational stress (Cartwright & Boyes, 2000; De Coon, Sluiter, Blonk, Broersen & Frings-Dresen, 2004). Higher staff turnover and a lack of return on investment in human capital could have a direct impact on the achievement and profitability of a company. The prolonged exposure to stress could also possibly result in the development of burnout.

According to the UN International Labour Organisation, occupational stress was viewed as a 'global epidemic' (Olivier, 2012). In research carried out by van Zyl (2002), South Africans experience abnormally high levels of stress in the workplace in comparison to the rest of the world. In retrospect "the reality is that employees work more today than they did 25 years ago – in some cases almost a 13th month every year. In addition, organisations get downsized but the work remains, so workloads are upsized. Around 80% of visits to healthcare providers are due to stress-related conditions in South Africa. A look at the headlines indicates: the IMF slashes the global growth outlook and a mining group fires 5000 employees. People who read those headlines experience anxiety, and in the workplace it causes overstressed bosses to push already overworked employees". van Zyl (2002) further mentions at a time when employers required staff to direct companies out of the financial crisis with improved productivity; employees were breaking down and became disempowered by stress. An opinion was expressed by Eriksson (The People Element, 2012) in South Africa approximately R3-billion a year is lost to workplace stress which involves all levels of employees.

The pace of work related to output within an organisational environment has increased rapidly during recent years (Brand, 2007). Such an increase can be attributed to factors such as technical advancement, the need to be globally competitive, a constantly changing economy as well as constant changes in organisational structures; demands placed on an individual employed in an organisation have also increased. The technical and economic factors, in addition, effecting an organisation have forced employees to face a number of other challenges in the form of greater work load, increasing job security and a lack of role clarity (Johnson, Cooper, Cartwright, Donald, Taylor & Millet, 2005). Occupational stressors are also aspects of the work environment that cause

strains, poor psychological health or well-being of the individual (Beehr, 1995; Kahn & Byosiere, 1992). Other demands in the workplace as well as the overall demands in the lives of individuals (dual career families, family pressures, advanced technologies, job insecurity); all contribute to the increased levels of stress as experienced by individuals.

Numerous researchers have attempted to study the relationship between stress and burnout (Barnett, Brennan & Garies, 1999; Pines & Keinan, 2005; Schaufeli, 2003). A general definition of stress as a construct was placed in context by Ivancevich et al. (2002, p. 281) as “an adaptive response, moderated by individual differences, that is a consequence of any action, situation or event that places special demands on a person.” A Stressor was seen as “an external event or situation that is potentially harmful to a person” (Ivancevich et al., 2002, p. 281). Burnout according to Maslach and Jackson (1986) is a condition of emotional exhaustion, depersonalisation and reduced personal accomplishment. The concept of burnout was first defined in the 1970s and referred to as response to interpersonal stressors to a job (Maslach, Scaufeli & Leiter, 2001; Schaufeli, Leiter & Maslach, 2008). These authors view this concept “as a syndrome of emotional exhaustion, depersonalisation and reduced personal accomplishment that can occur among individuals who work with people in some capacity”. Exhaustion occurs as a result of emotional demands while depersonalisation refers to a cynical, negative or a detached response to care recipients/patients.

Reduced personal accomplishment refers to the belief that an individual can no longer work effectively with clients/patients/care recipients. Burnout can also be defined as a psychological adjustment disorder according to the diagnostic and statistical handbook of mental disorders DSM-IV (Schaufeli & Enzman, 1998). Similarly in a more general way, burnout is “a state of exhaustion in which one is cynical about the value of one’s occupation and doubtful of one’s capacity to perform” (Maslach et al., 1996, p. 20). There is consensus where stressors lead to burnout in human services (such as working with patients and care recipients), however, it also manifests in various other occupations (Burish, 2006; Demerouti et al., 2001).

Maslach and Leiter (1997, p. 24) view burnout as “the index of the dislocation between what people are and what they have to do. It further represents erosion in value, dignity, spirit and will; an erosion of the human soul. It is a malady that spreads gradually and continuously over time, putting people into a downward spiral from which it is hard to recover.” Burnout is thus beliefs of exhaustion, a pessimistic attitude towards a vocation and the people concerned in the job as well as a reduction in personal achievement or work effectiveness. Maslach (et al., 2001) further state burnout may still be a greater problem in occupations where employees interact with other people (clients, customers) instead of dealing with equipment and information. Cooper, Dewe and O’Driscoll (2001) assert that it is generally accepted that prolonged or intense stress can have a negative impact on the individual’s mental and physical health. Physical and psychological symptoms of stressors are known to include coronary heart disease, ulcers, substance abuse and anxiety which all significantly impact on the lives of employees as well as their families.

Apart from developing burnout, physical and psychological effects results in added costs for organisations in terms of staff turnover, increased absenteeism and poor work performance. Furthermore, stressed individuals are also more likely to indulge in negative lifestyle behaviours such as the consumption of excessive alcohol, cigarette smoking and poor dieting (Faragher, Cooper & Cartwright, 2004). The ultimate result of excessive exposure to stressors could result in the development of burnout (Maslach & Goldberg, 1998). Personality characteristics and various coping mechanisms could have a moderating effect on the level of occupational stress experienced by the individual (Dewe & Trenberth, 2004; Edwards, Baglioni & Cooper, 1990). It could therefore be argued an individual’s ability to manage their emotions could have a potential impact on relationships with colleagues as well as clients and could be reflected in the quality of the work they deliver and thereby influencing the profitability of the organisation. Organisations should develop systems and policies enabling them to identify possible workplace stressors and effectively deal with these stressors. Identifying possible factors in addition that might moderate the effect of stress and consequently the development of burnout in employees in an organisation could assist in its management. The ability to manage and cope with occupational stress is a basic requirement of the present working world. The situation is exacerbated where job roles are less

refined, more demanding and individuals faced with numerous challenges with little direction or guidance from managers or superiors of what is expected.

### **1.3 MOTIVATION FOR THE RESEARCH PROJECT**

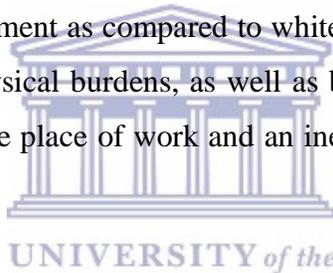
The presence of stress has created the background to assist in seeking to establish the effects on men and women taking into consideration their age, educational qualifications, the years of experience and the nature of their work (Bearschank, 2010). A better understanding of the causes of stress could serve as a guideline for more effective implementation of assistance/support programmes. Examining the relationship between occupational stress and burnout within the fast moving consumer goods (FMCG) environment could provide a roadmap to create effective strategies for more acceptable levels of output by employees. An insight into the relationship between occupational stress and burnout could furthermore allow employers in the FMCG industry to proactively identify possible sources of stress as well as the symptoms of burnout in the behaviour of the employees which could ultimately result in actions to relieve or shed light on these factors. The resulting research results could also be used to plan effective training initiatives to further develop the necessary skills as well as coping mechanisms to deal with stress and burnout. The results could also be used to plan and carry out more successful recruitment practices which could result in lower staff turnover, higher levels of productivity not to mention a happier and healthier workforce.

Occupational or work stress theorists are of the opinion that the destructive consequences such as emotional distress, bodily illnesses and reduced work productivity manifest by a combination of character traits and environmental individuality (Spangenberg & Orpen-Lyall, 2000). The precise cause of stress can therefore be identified and specific solutions or coping mechanisms should be learned. Friedman (2005) is of the view that for the most part a logical strategy should provide opportunities to develop coping mechanisms thereby ensuring time enhancing competitive advantage for the organisation. The author singles out an important contributor to this capacity is personal resilience. Only once these essential aspects are addressed of individual's functioning such as physical, psychological, emotional and religious, can it expected from employees for full

engagement in an organisation. Management can gain a better understanding how to improve working conditions for their employees by addressing problems such as high levels of absenteeism, turnover and poor performance levels to counteract financial losses for a company.

## **1.4 PROBLEM STATEMENT**

Burnout has frequently been mistaken for stress and although the symptoms may be similar, there are important distinctions to be made (Burisch, 2006). Stress can intensify burnout but it is not the main cause of burnout. Furthermore, although employees can experience stress because of long work schedules, shift work or general work workload, they too may experience burnout. Cooper and Williams (1991) indicate that blue collar workers come into contact with more health risks associated with their work environment as compared to white collar professionals. They are also open to the elements of noise, physical burdens, as well as being faced with unacceptable shift work, a lack of social contact at the place of work and an ineffective relationship with superiors (Makhbul & Hasan, 2011).



Sullivan (1989) further differentiated between job dimensions (skill variety, task significance, autonomy, feedback and role overload), organisational dimensions (role clarity, leadership and efficiency) as well as interpersonal dimensions and social support (co-workers and supervisors) as causes of burnout. Similarly, Hare, Pratt and Andrews (1988) also presented their argument that burnout can be the result of both organisational and personal factors.

The problem identified in this research will address the question: What is the relationship between occupational stress and burnout at a selected organisation within the fast moving consumer goods (FMCG) environment?

## **1.5 OBJECTIVES OF THE STUDY**

The objectives of the study are:

- To determine whether biographical factors have a relationship with the constructs of stress and burnout

- To ascertain the relationships between stress and burnout
- To provide guidelines for the organisation to effectively implement a suitable strategy to reduce stress and burnout.

## 1.6 OUTLINE OF CHAPTERS

The study is structured as follows:

**Chapter one** presented background information on the problem statement, research objectives, research questions and significance of the study were also discussed in chapter one.

**Chapter two** describes the relevant theories of burnout and occupational stress. The aim is to define the constructs and to present a well-reasoned argument to substantiate the need and importance of this study. The literature study also incorporates relevant research which is related to the constructs.

**Chapter three** presents the research methodology as well as the measurement instruments used to conduct the research. It will furthermore report on the research hypotheses as well as the sample and data collection methods.

**Chapter four** contains reporting and discussion of results within the framework of the methodology selected.

**Chapter five** concludes the study with a discussion incorporating all the objectives as well as providing recommendations.

## 1.8 SUMMARY

An introduction was provided of the main concepts of stress and burnout and consequences in the work environment. It also provided a brief overview of the study as well as the motivation and purpose. Furthermore, the environment in which the study was focused, namely the FMCG was

introduced. A link will serve where a detailed overview will be provided of the constructs already introduced in this chapter with specific reference being made to important literature as well as previous research around these constructs.



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

The interest in occupational or work stress, employee satisfaction as well as health has increased rapidly in the past two decades (Burke, 2002). It is no surprise then, that considering the total time that is used up at work and that career success is dependent on an employee's work performance, the workplace therefore could very well possibly become a main source of stress for employees (Makhbul & Hasun, 2011). It is evident from South African as well as international literature that stress prevails in the work environment with grave consequences for employers and employees (Osthuisen & Van Lill, 2008). Van Zyl and Bester (2002) further explain these prominent stress levels occurring within South African organisations often result due to a shortage of high-level human resource personnel, managers as well as other professionals who are under extreme pressure, as well as skill shortages further create incomparable pressures on both technicians and skilled employees.

According to Cooper and Payne (1988) a majority of this work has been found to have been undertaken in a stress-strain framework with the accumulated research findings resulting in an enhanced understanding of this multifaceted phenomenon (Cooper, 1996; Schabracq, Winnubst, & Cooper, 1996). Occupational/work stress and health findings are based predominantly on the reported experiences of the employees (Offermann & Armitage, 1993).

#### **2.2 DEFINING STRESS AND ITS EFFECTS**

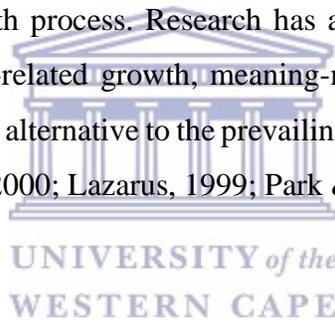
The word stress has its origin from the Latin origin of "strinere", which means to "draw tight". It was also made use of in the 17<sup>th</sup> century to depict hardship or suffering. In the later 18<sup>th</sup> century stress was denoted to be power, force, strain as well as physically powerful effort, while making

reference primarily to a person's organs or even psychological powers (Hinkel, 1973). According to Ilogho (2011) the New Encyclopaedia Britannica (2005) described stress in the fields of psychology and biology as being any "strain or interferences" which disturb the ongoing functioning of the being, and it is the human response to physical and psychological defences. If stress is too powerful or the individual's defences are too insufficient a mental (psychosomatic) disorder will occur (Brown, 2002).

Stress occurs when dangerous or demanding situations arise and individuals perceive an inequality between the strains being made in relation to their capability to handle them. The World Health Organisation (WHO) Akinboye (2002) described it as being a 'Worldwide epidemic' as 90% of visits to medical facilities, hospitals and doctors are found to be as a result of stress; 40% of employee turnover is also due to stress associated problems. Akinboye (2002, p. 56) further describes stress as being a force which affects human beings physically, mentally, emotionally, socially and spiritually. Stress is therefore, the reaction of individuals to unwanted mental, physical, emotional, social and spiritual experience (Ilogho, 2011). The word stress encourages a person to think of disturbances of adjustment, the production of physical illness and psychopathology disorders (Brown, 2002). Atwater (1990) mentions the most familiar psychological reactions to stress are defence mechanisms such as denial, rationalization, suppression, projection and displacement that can also be viewed as ways of coping.

Life itself is often measured as being stressful, especially as a result of an individual's inability to deal with and overcome distressing or hard situations and challenges in life (Van Zyl, 2002). Stress is seen as being an emotional, mental, physical or social response to any undesirable experience. Stressful experiences can therefore be shattering and could even be a cause of sudden death in extraordinary cases. Finally, Seyle (1976) by Robbins, Judge, Odendaal & Roodt, 2009) indicates a distinction can be made between eustress, a pleasant experience (e.g. is winning the lottery or taking pleasure in a job well done) and distress, which is unpleasant (e.g. losing a job or being under enormous pressure at work).

Stress manifests in varying degrees where the most affected category of people is type A personality individuals. According to Anonymous (2011), people with type A personalities are rushed, ambitious, time-conscious and driven which is a possible predictor of success. Edwards et al. (1990) see type A behaviours are elicited by environmental stressors or challenges. Studies suggest if these traits are not properly managed it can create stress-related illnesses. In contrast type B personality is more relaxed, less time conscious and a driven person able to view life more adaptively. They are better able to put their lives into perspective and think through how they are going to deal with situations. Consequently they tend to be less stress-prone (Ilogho, 2011). Oginska-Bulik (2005) has also argued individuals with a high level of emotional intelligence (EI) possess the ability to deal with stress and display lower levels of perceived occupational stress. Atwater (1990) stated stress can be used as a valuable tool for self-understanding and thus instrumental in the personal growth process. Research has also been geared towards exploring numerous concepts such as stress-related growth, meaning-making, meaning-based coping and benefit appraisals which all offer an alternative to the prevailing focus on the pathology and deficits of stress (Folkman & Maskowitz, 2000; Lazarus, 1999; Park & Folkman, 1997).



There have been attempts to define occupational stress; however, there does not seem to be a generally accepted version (Brand, 2007). Rees and Redfurn (2000) are of the opinion with the lack of clarity related to the construct definition of occupational stress, employers as well as their employees can be misguided by their perceptions of the nature and causes of stress related issues. Lazarus and Folkman (1984, p. 89) define stress as the disruption of an equilibrium between the cognitive-emotional-environmental systems caused by external factors". Stress is considered to be a multifaceted process consisting of three main units namely, sources of stress which occur at work, perceptions and evaluation of a certain stressor of an employee and not to mention the emotional reactions that are evoked when a stressor is appraised as being threatening Spielberger (2003). The appraisal of the specific stressor as being threatening causes an "emotional arousal of anxiety as well as the associated activation of the autonomic nervous system. Spielberger (2003) purports should levels remain intense and constant, the ensuing physical as well as psychological strain could result in undesirable behavioural consequences. Research is also supportive of the idea

that work stress originates from two sources mainly, job demands as well as a shortage of job resources (Brooks & Piquero, 1998; Pienaar & Rothmann, 2003).

In terms of occupational stress research, it is generally defined in one of three ways (Jex, 1998). Stress can be firstly seen as a stimulus which makes reference to the stimuli of the surroundings that requires an adaptive reaction of the employee; especially in the case where the employee experiences a high degree of stress in their job. Secondly, stress could also possibly be described as a response where the belief of the individual can be experienced should the job be perceived as being too demanding and exceed an employee's ability to cope; should the person feel intense stress due to aspects such as unrealistic deadlines. A third option is to define stress as being a stimulus-response, implying the term "stressor" be used to refer to a multitude of negative ways an employee could respond if faced with different stressors. Should the employee respond in a positive manner to a stressor, such a response would not seem as a strain (Jex, 1998).

Occupational stress manifests when an individual's ability to cope with a work-related stressor is insufficient (Beehr & Newman, 1978; Ross & Altmaier 1994; Schultz, 2002). Travers and Cooper (1996) defined occupational stress as negative environmental factors or stressors such as overload, role conflict/uncertainty and unpleasant working conditions associated with a particular job.

Cooper, Sloan and Williams (1998) have described stress as reaction to a condition in which an individual is not capable to meet the demands placed on them which results in a very negative outcome. They further mention the sources of stress as well as its effects as being numerous and not being just restricted to a certain situation. Stress should therefore not be viewed as a result of being pressurised in a work sense, but rather as manifesting as a sum of an individual's entire life circumstances. It includes aspects pertaining to the job; the relationships in the work environment; organisational climate and structure; role ambiguity and conflicts; opportunities for further career development and progression as well as the home-work interface (Cooper, 1996).

Quick, Quick, Nelson and Hurrell (1997) categorized organisational stress into “direct” as well as “indirect costs”. With direct expenses including involvement and participation in the form of absenteeism and turnover; performance in the position: for example accidents and productivity but of a poor- quality; health expenses: such as insurance charges; benefits due to compensation such as court awards for sexual pestering. A loss of liveliness, breakdown in communications, flawed decision making and quality of work relations which are included the indirect expenses.

## **2.3 MODELS AND THEORIES OF OCCUPATIONAL STRESS**

Kahn and Byosiere (1992) propose every model of stress consists of a basic pattern or process. The authors reason it includes a stimulus that activates a psychological response and which in turn further determines a series of complex consequences in the individual’s well-being. Models and theories provide guidelines for understanding and interpreting constructs in different contexts.

### **2.3.1 Person-Environment (P-E) fit theory**

This model was introduced as a result of the work of Lewin who believed the concept of interactional psychology which argues behaviour is a function of the interaction between a person and the situation, with one aspect of the interaction being the degree to which the individual fits the situation (Jex, 1988). Accordingly, strain will occur if an individual does not fit accurately within the environment resulting in an imbalance between demands and opportunities in the working environment and the skills and expectations of the employee (French et al., 1982). This model therefore hypothesizes that the objective descriptions of the individual (such as ability and goals) as well as the surroundings (job demands and supplies) all have an effect on the worker’s perceptions of those specific characteristics. Should these accumulated perceptions, however, point to a subjective misfit between the employee’s abilities and their goals to the subsequent job demands and supplies, it will most likely result in psychological, physiological and behavioural strains (Van Zyl, 2000).

If perceptions and strain are expressed in terms of the demands and abilities, it would imply as demands exceed the ability of an individual, stress would be likely to increase. Should the demands be reduced to below the individual's ability to deliver, stress may decrease. The P-E fit model predicts the degree of strain an individual may experience is proportional to the extent of the misfit between employees and their occupations (Pithers & Soden, 1999). The effect of experiencing strain is also dependant on whether or not the environmental demands are reduced to a level that could possibly cause boredom (Maslow, 1943). Behavioural strains further initiate coping behaviours as well as defence mechanisms, with the coping behaviours being mainly directed towards the subjective individual and their surroundings. This model is therefore helpful in describing the degree of the value of congruence between an individual and an organisation or work situation (Saks & Ashforth, 1997). Situations in which there is a mismatch amongst values produces significant stress reactions and results in burnout (Gregory, 2015).

Kahn and Byosiere (1992) also give individual factors which can affect the process in all its phases. According to the conservation of resources, people value and are motivated to obtain, maintain and protect resources (objects, conditions, personal characteristics and energies). Burnout will then tend to develop once these resources appear to be lost or should a person invest these resources but fail to regain them.

The P-E Fit Model comprises four basic concepts namely, organisational stress, strain, coping and social support. The model also places emphasis on the cognitive approach with regards to stress (Edwards, 1992). The physiological stress symptoms may include increased blood pressure and a reduced immunity while psychological factors usually consist of sleep disturbances, panic attacks, anxiety as well as restlessness. These symptoms, according to the theory could cause behavioural changes such as an increase in absenteeism and staff turnover. Research incorporating the P-E Fit model also includes the investigation of organisational demands, job duties and requirements, the skills and abilities of an employee as well as job satisfaction. Early research by Kahn and Byosiere (1992) found excessive or conflicting demands on employees in the work environment as well as a lack of fit contributes to aspects such as workload, role ambiguity as well as role conflict.

Chemers, Hays, Rhodewalt and Wysocki (1985) have criticized the P-E Fit model for the lack of specific focus and it gives insufficient consideration to specific stress in the workplace (Edwards & Cooper, 1990). This model is, however, not specific and does not take individual variables into consideration. The model has also been noted as lacking sufficient clarity and differentiation between the different forms and types (Edwards & Cooper, 1990; Ganster, Fusilier & Mayes, 1986).

### **2.3.2 Transactional Model of Stress**

This model proposed person variables namely, their beliefs, values, goals and commitments interact with environmental variables in the form of demands, constraints and resources by means of a cognitive process termed primary appraisal (Lazarus & Folkman, 1984). The model proposes, should an environment be appraised as demanding or exceeding people's resources and endangering their well-being, coping will become activated. Such coping includes an evaluation that can be done to remove or balance the demanding factors or source of stress (or secondary appraisal) and secondly to attempt to modify the distressed person-environment relationship such as problem-focused coping and/or to control emotional anguish in the form of emotion-focused coping. It is an ongoing process, the situation is re-appraised and the process continues. Should the source of the stress be successfully resolved, coping ceases and the positive effects will commence. However, should this not be the case, negative effects as well as physiological disturbances will persist which ultimately damages adaptation outcomes such as emotional well-being, somatic health, societal functioning). The authors further emphasize that assessment and coping should take place across numerous dimensions. The successful resolution of an incident on one dimension will depend on the extent of conflict shaped on the other dimensions.

Research by Dewe and Trenberth (2004) included the work stress and coping in terms of the transactional model of Lazarus (1984). The authors argued it is vital to think along the transactional way when trying to understand the nature of stress and the coping response. They further mention one of the most influential frameworks for understanding coping is by means of coping and appraising. By employing such a focus, some reasoning can be given to the causal

relationships that have been elusive regarding stress research. Whereas the more traditional methods or approaches to stress focus mainly on the components of it in an artificial isolation (stimuli, response, and interaction between the two) minimal or no attention is given to the relational aspect between the environment and the person as well as the constant interaction between them (Dewe & Trenberth, 2004). Recently the authors mention a study related to the transactional approach (including an appraisal focus) on future research of work stress and coping should rather not be undertaken without the role emotions play in the stress process. Lazarus and Cohen-Carash (2001, p. 45) argue stress generates emotions and if appraisals become “the conceptual key to our emotions, it both shapes and reflects the way we cope with our emotions and life conditions that bring emotions about”.

Gardner, Rose, Mason, Tyler and Cushway (2005) did a further application of this model in a study on cognitive therapy and behavioural coping in management of work-related stress. The transactional model of stress emphasises the role of cognitive appraisal of potential stressors in the determination of a suitable stress response, the primary and secondary appraisal could be modified by the use of techniques which are normally associated with cognitive therapy (Gardner, et al, 2005). Pre and post measures with a three month interval revealed that cognitive therapy was found to be an effective intervention as a stress management technique.

### **2.3.3 Job Demand-control-Support model (decision latitude model)**

The model emphasises the role of work content as major source of stress. During the development of the theory Karasek (1979) divided the job content into two components, employee perceptions regarding tasks that need to be completed in performing a job and employee perceptions regarding the extent of control or discretion they have in performing job tasks (job control). Accordingly the two components interact with each other resulting in an amount of strain that is mentally and physically experienced by employees. The model proposes psychological strain results from the collective effects of the demands of a work situation and the scope of decision making discretion which is expected to occur in situations where extreme high job demands occur and very low control (Karasek & Theorell, 1992) exists.

Although the model has been noted as being highly influential, it has also been criticised as being too simplistic, by the exclusion of factors which could possibly be related to strain (Baker, 1985; Schaubroeck & Merritt, 1997). One of the arguments is the factors which have been frequently shown as being related to strain, namely social support, has not been included in the model. Consequently, during the 1980's a support dimension was also added to the model, thus making it the Job Demand-control-Support model (JDCS) (Johnson & Hall, 1988; Johnson, Hall, Stewart, Fredlund & Theorell, 1989). The model specifically proposes the moderating effects of control on the demand-strain relationship will only be evident when social support is high. Job demands are thus primarily related to the exhaustion component of burnout, whereas a lack of job resources is primarily related to disengagement and lack of accomplishment is also not included. This was also confirmed in a study by Johnson and Hall (1988) who observed an interactive relationship between work control and job demands which were evident when social support from colleagues was present. Furthermore, Bliese and Castro (2000) found a high amount of role clarity improved the effects of copious amounts of work overload. This was, however, found only where supportive leadership was present in the groups. This finding implies two important aspects, role clarity and control may share theoretical and conceptual similarities and contextual variables play an important, but frequently ignored role in terms of occupational stress research.

#### **2.3.4 The stimulus-event model**

Holmes and Rahe (1967) defined stress as a stimulus event that presents difficult demands. Events such as a death or a divorce in the family, even financial stress are all examples. The stimulus-event model assumes that different individuals respond similarly to events. This means the indication of stress that an individual experiences can also be measured by assessing the events that have occurred in their lives. Monat and Lazarus (1945) indicated the stimulus-based definitions are incomplete due to any situation that may or may not be stressful, depending on the characteristics of the individual as well as the meaning of the situation.

### 2.3.5 Other theories of stress

The role stress theory of Kahn et al. (1964) was primarily the first influential theory on stress. This theory argued occupational stress centres mostly on role expectations, which can be translated into role pressures. These will then interact with certain aspects for example the individual's personality, job overload, role conflict and role ambiguity which causes pressure being experienced by the individual. This also results in activation of defence mechanisms and coping responses. McGrath's Stress Cycle (1976) argued individuals will tend to elevate situational demands against their abilities. Should such demands, however, threaten to exceed abilities the individual will choose to put into action a behavioural response that will aim to recover the situation. It is further argued effective coping mechanisms necessitate a connection between situational anxiety, perceived stress, selecting a response and behaviours.

Beehr and Newman's Facet model (1978) proposes the characteristics of an individual and their surroundings become filtered through psychological as well as physical processes. Such processes also affect employee health as well as organisational performance, which consequently create adaptive responses aimed toward the person and their surroundings. There were seven facets identified for the conceptualisation of the major dimensions (facets) of job stress:

- Environmental: Job demands and task characteristics, role demands or expectation, organisational characteristics and conditions, organisation's as well as the external demands and conditions;
- Personal: Psychological condition, physical condition, life-stage characteristics, demographics;
- Process: Psychological and physical processes which may link personal and environmental facets to each other; human consequences facet (psychological health consequences, physical health consequences);
- Organisational consequences: Profits, earnings, quality of work life;
- Adaptive response: Adaptive responses by the individual, by an organisation, or by third parties;

- Time: This facet runs through all the others and implies that all the facets require the passage of time; for example the elements of the personal facet such as the development of needs and personality characteristics require a passage of time, similarly too, the elements of the environmental facet also require time to exhibit their effects.

Beerh and Newman (1978) improved on their model and presented a version where personal as well as situational descriptions moderate every relationship between the factors of the model and organisational effectiveness and thereby sidelining the person and the environment. The model defines a “time facet” which emphasises that each facet or stage in the model incorporates the effect of the passage of time.

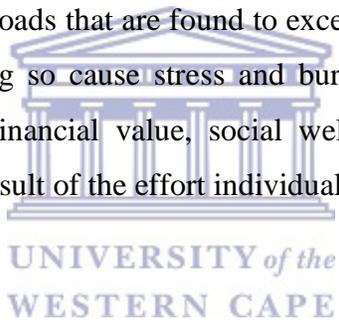
Edwards’ cybernetic theory (1992) is related to where stress is depicted as an inconsistency between employees’ perceived versus required state of well-being provided that the occurrence of this discrepancy be perceived as imperative to the employee. This theory hypothesised stress influences outcomes namely, employee well-being composed through psychological and physical health and coping, where it is has been determined to be “efforts to prevent or reduce negative effects of stress on well-being” (Edwards, 1992, p. 245).

The theory therefore identified stress, coping and well-being as being the essential components in a negative response loop (Edwards, 1992, p. 245). It is thus suggested stress influences an individual’s well-being negatively and this in turn initiates coping, which further affects well-being in a direct as well as indirect manner through the determinants of stress. The essence therefore of the cybernetic theory pertains to the functioning of a self-regulating system which has its heart as a negative feedback mechanism. This theory is an integrated approach representing stress, the ability to cope and well-being in companies. The theory emphasizes stress affects not only negatively on an individual’s health, but it encourages coping which also effects, in turn, the sources of stress.

Slaski and Cartwright (2003) argue the various contemporary theories of stress such as the Cybernetic Theory (Edwards, Caplan & Harrison, 1998), Ethological Theory (Schabracq,

Winnubst & Cooper, 1996) as well as the Equilibrium Theory (Hart, Griffin, Wearing & Cooper, 1996) tend to position emotions and self-regulation at the core of a dynamic stress process. The emotions highlighted issues which could pose a threat (physical, social or psychological) to the individual's well-being. Such emotions are then considered to be adaptive as they act as a mechanism to protect the individual from physical harm and to facilitate maintenance of self-identity.

New models such as a process one have been developed with some based on the MBI and empirical evidence obtained by it, also has similarities to the Job Demands-Resources Model (Bakker & Demerouti, 2007; Leiter, 1993). According to this model, exhaustion and depersonalisation form a sequential process and a lack of accomplishment developing separately as a result of poor a organisational environment. Workloads that are found to exceed the individual's resources result in depleted resources and in doing so cause stress and burnout. The rewards dimension is a reflection of the resources (i.e. financial value, social well-being and includes self-esteem) provided by or lacking from as a result of the effort individuals put into their occupations (Leiter, Gascon & Martinez-Jarreta, 2010).



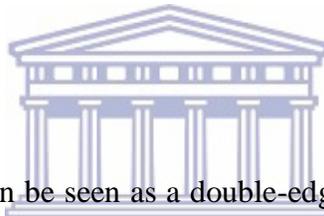
Some researchers (majority which did not make use of MBI or any modifications) are of the opinion burnout is not necessarily work-related but can be found among the un-employed (Hallsten, 2005).

The mainstream of burnout psychology considers it as being work-related, making it more difficult to differentiate it from other related constructs, such as depression. Thus in order to overcome this and clarify work-relatedness, the terms 'job burnout', 'professional burnout' and 'occupational burnout' are also used (Ahola, 2007; Schaufeli, Maslach & Marek, 1993). In the majority of burnout theories, there are basic assumptions about the nature of its development. Schaufeli and Enzman (1998, p. 36) produced common elements in burnout theories: Predominance of fatigue symptoms, various atypical symptoms occur, symptoms are work related, symptoms manifest in normal individuals without major psychopathology and a reduced effectiveness and impaired work performance occurring because of negative attitudes and behaviours.

Generally, burnout is linked to overburdening work experiences which are chronic in nature as well as a constant conflict between different roles or between important values and personal expectations. Finally, it is important to note should the stressful situation not be resolved, or if an adjustment is not possible and the situation remains unchanged, it will eventually lead to burnout symptoms. Burnout could also lead to depression and other illness (Aloha & Hakanen, 2007). Furthermore, burnout not only develops gradually but recovery from severe burnout has also been found to be slow (Bernier, 1998; Sonnenschein, 2007). The antecedents of burnout are usually divided into organisational, occupational and individual (Maslach et al., 2001).

There is research on organisational or white collar workers, however, limited research has been conducted on gender differences in stress among blue collar workers.

## 2.4 CAUSES OF STRESS



The response to causes of stress can be seen as a double-edged sword where, if it is effective, it will keep individuals focused, alert and energetic (Melamed, Shirom, Toker, Berliner & Shapira, 2006). Should the stress, however, increase to higher levels, there is a possibility to result in damaging health, relationships and reduced productivity. Stress usually occurs if persons are confronted with a threat where they cannot cope when there are no resources or coping skills available. Stress then becomes harmful when a threat is perceived as being extreme or even uncontrollable thus any incidence or situation creating demands on a person is perceived as a stressor. Two types of stress have been identified, in the first instance acute and being short-lived and mostly as a cause of unforeseen stressors (Melamed et. al., 2006). The second is chronic stress and ongoing physiological agitation as a result of an unresolved issue or situation. These tend to be more prolonged and have a significant negative effect on the majority of people with various illnesses and psychological factors.

Three main areas were identified as influencing the levels of constant (chronic) stress in the workplace namely, job strain in the form of intrinsic requirements of occupation, levels of insecurity, pressure due to time restraints as well as the rate, quantity and complexity of work,

personal differences and social demands (Melamed et. al., 2006). Individual differences in the first instance are where heredity is related to the health of individuals and their response to stress. Environmental differences, in the second instance are created differences and can, however change or develop over time as a consequence of experiences. These are of significance as they affect how decisions are made, conflicts are handled, response to stressors and attempts to deal with the stress. The third element social demands are individuals' perception of their social-network support needs. Adequate levels of social contact are needed as it reduces the negative effects of stressors by ensuring an extent of predictability, purpose as well as hope in distressing and frightening situations.

Carr, Kelley, Keaton and Albrecht (2011) indicate if individuals are to be confronted with a stressor they can assume numerous behaviours with a positive, pessimistic or neutral effect on physical as well as emotional health. Persons can react by developing neutral behaviours to avoid stressors such as early perception or avoidance, or perhaps constructive behaviours such as making use of social networks, physical exercise or spiritual activities to reduce pessimistic (negative) responses to stressors. Negative responses to stress include amongst others aggressive behaviours and smoking or excessive alcohol consumption. When an individual senses there is a peril to life the body's defence system springs into action. This action is termed the "flight or fight response" by physiologist Cannon.

Job stress has been acknowledged as an important occupational hazard which could impair physical health, emotional well-being, and occupation performance (Kahn & Byosiere, 1992; Sauter & Murphy, 1995). The following are more signs and symptoms of stress may be thinking or interpretation symptoms (recollection problems, poor concentration, poor judgement, a pessimistic attitude, nervous or racing thoughts, persistent worry), physical manifestations (aches or pains, diarrhoea or constipation, unsettled stomach or dizziness, pain in the chest, low libido, recurrent colds), emotional symptoms (grumpiness, irritability or short temper, anxiety, incapability to relax, feeling inundated, a sense of isolation, depression or general sadness), behavioural symptoms (consuming more or less food, isolating oneself from others,

procrastination or complete neglect of responsibilities, consuming alcohol, cigarettes or drugs to relax, nervous behaviour (nail biting or pacing etc.) (Carr et al., 2011).

There are seven main categories of stressors that could possibly impact on work stress according to Cooper and Marshall (1976). These are, working environment, repetitive tasks, job overload; role in organisation (role conflict, management support); relationships in the occupation; career growth; organisational structure and climate; external sources (family, life crisis and financial issues); as well as individual characteristics (personality, levels of motivation, family support). Further causes of occupational stress could indicate an overlap with the categories identified by Cooper and Marshall (1976) and include organisational stressors (insufficient administrative support, long hours, poor salary, procedures and policies, uncertainty and safety, organisation type); work-related stressors (role conflict, role ambiguity, role confusion, overload, unrealistic job demands, limited input in decision making, supervisors, colleagues, lack of variety, poor communication, poor leadership, technology, interpersonal conflict); and task-related stressors (role conflict, role ambiguity, role confusion, overload, unrealistic job demands, limited input in decision making, supervisors, colleagues, lack of variety, poor communication, poor leadership, technology, interpersonal conflict); and task related stressors (responsibilities, clients and subordinates, unclear tasks) (Strydom, 2000).

Van der Colff and Rothmann (2009) reason occupational stress has numerous negative effects on the individual namely, impaired performance and effectiveness, reduction in productivity, reduced levels of customer service, health problems, absenteeism, turnover, industrial accidents, alcohol and drug usage, purposefully destructive behaviour (spreading rumours and stealing) and even suicide. The effective management of stress with regards to its reduction is vital but when untreated it has severe negative repercussions in the work place such as job dissatisfaction and absence from the workplace (Kim, Murrmann & Lee, 2009). Males and females tend to respond differently to the effects of stress and in turn affecting their job satisfaction. There is also a substantial amount of proof that demonstrates females as being more psychologically as well as physiologically affected by stress than males (Makhbul & Hasun, 2011).

Females reported to have higher levels of cortisol to social rejection, whereas males showed a higher tendency to react to achievement stressors. Flynn, Schipper, Roach and Segerstrom (2009) propose women succumb to more physical and emotional symptoms. Kim et al. (2009) further reason female employees respond well and are satisfied with their jobs if they can work alongside others who appreciate their roles, whereas males are often satisfied if their performance is respected by others. The consequences, however, are women will have a tendency to feel more dissatisfied in their jobs than male employees if their role expectations are not undoubtedly specified.

Pietila and Rytkonen (2008) report men experienced greater stress in their lives and was caused by the traditional role of being the main income earner in the family unit. It is these greater responsibilities and their inherent susceptibility to stress which were found to have an effect on their wellbeing. There is also a tendency among women to report discrimination and this could also possibly add to the perception they experience more stress (Flynn et al., 2009).

Many gender differences in the workplace stem from differences in the experiences, responsibilities and types of stressors that pose differential challenges to the two genders. Females, more often than their male peers are simultaneously exposed to family and job related stressors as a result of their dual roles as mothers and professionals (Afza, Mutjaba & Habib, 2011) as well as burnout (Hill, Jacob, Brennan, Blanchard & Martinengo, 2008). They also tend to face gender-specific resistance in their efforts to reach the highest echelons in organisational hierarchies (Gyllensten & Palmer 2005). Uwgu (2009) points out multiple role occupancy leads to stress as in the case of dual-career couples performing multiple roles arising from work/family domains. Bezuidenhout and Cilliers (2010) argue female academics in higher-education institutions face numerous challenges in the continuously changing landscape of South African higher education. Mergers, increasing job demands, ever-increasing class sizes and role conflict inherent in the female role contribute extensively to the manifestation of stress and burnout in this population group. Workplace stress is a major problem for both organisations and employees and it has been estimated approximately 13.4 million working days in Britain is lost per year due to stress, depression or anxiety (Gyllensten & Palmer, 2005). Anxiety is also commonly known to be caused

as a result of a shortage or inadequate stress tolerance. This could result in a negative effect on general performance, could contribute to poor concentration, difficulty in making decisions as well as somatic problems such as sleep disturbances (Stein & Book, 2001).

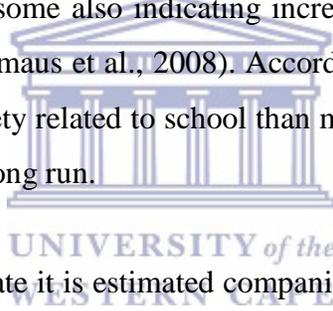
Akinboye (2002) outlines common causes of stress in the workplace which include low pay; promotion delays; threats of redundancy; job insecurity; changes in working hours; feelings of lack of control; lack of job satisfaction; office politics; employee lack of control; career development and achievement factors; conflict at work; heavy work load; new management techniques; long hours of work; work shifts; sensory factors such as noise; sexual harassment; ageism; meeting deadlines; burn out; poor social skills; bullying at work; autocratic leadership; and concept change at work. Gaunt and Benjamin (2010) conducted a study directed whether gender ideology of employees moderates the effect of gender on job insecurity and stress. The results showed traditional men experience greater job insecurity than traditional women. However, as hypothesized egalitarian men and women exhibited similar degrees of job insecurity. Furthermore, job insecurity due to structural unemployment; underemployment and forced early retirement as a result of macroeconomic instability have also aggravated the effect of stress on employees (Godin & Kittel, 2004).

Research based on stress has revealed repeatedly women were found to have significantly higher levels of psychological and physical stress as opposed to men. A study by Pietila and Ryttonen (2008) found the opposite where men were suffering more from stress as compared to women. In their attempt to explain their findings, it is assumed females make better use of emotion-focused coping strategies whereas men are more capable with problem orientated coping strategies (Peacock & Wong, 1996).

O'Neill and Davis (2010) investigated common stressors at work in the hospitality industry and found the two most common stressors were interpersonal tensions at work and overloads (technology not working properly). Interpersonal tensions were also linked to lower job satisfaction and greater turnover interventions.

Significant differences involving males and females with regards to how their stress and emotions are managed and expressed were also reported by Bennie and Huang (2010). Men showed greater emotional and stress management skills, while women expressed more emotion in their responses. Amongst the additional variables which were included such as home language and age, however, marital status was the only factor found to influence stress and emotional management. The other factors did not directly influence either gender's expression or management of their emotions or stress.

Some researchers have further identified females as being more susceptible to the development of despair or anxiety in relation to men (Eaton & Bradley, 2008; McLean & Anderson, 2009; Schmaus, et al., 2008). There are also, mixed findings how males and females respond psychologically to stressors, with some also indicating increased anxiety or stress in women in relation to men (Matud, 2004; Schmaus et al., 2008). According to Martin (1997), females were noted as experiencing greater anxiety related to school than males during demanding events such as examinations, as well as in the long run.



Gladies and Kennedy (2011) indicate it is estimated companies can lose between US\$100 billion to US\$300 billion annually. Resulting factors associated with these costs include absenteeism, accidents, health care expenses and a decline in productivity. Job stress is regularly caused by a multitude of factors such as changes in management, long working hours, barriers to career advancement, heightened competition, high pressure deadlines, work overload, excessive rules and regulations, lack of participation in decision making, new technology, inadequate support, conflicting demands from organisational stakeholders and personal conflicts (Crampton et al., 1995; Hall & Savery, 1986; Roberts, Lapidus, & Chonko, 1997).

Lim and Teo (1999) reported factors that generated stress namely, lack of advancement, work overload resulting in spill over of workload at home and guilt and dissatisfaction for being less attentive to family. Further factors include risk taking and decision making as a result of the fear of making mistakes as well as employee morale and organisational culture and difficulty in team work considering the fluid and non-involved nature of work.

### **2.4.1 Occupational status, health and social class**

The majority of the research on occupational stress and health has centred on managerial and professional females. However, there is a heightened interest in investigating social class and health, which include measures of occupational status and stress covering a broader spectrum of occupations. With social class referring to the causal structure of industrialized societies whereby many social as well as economic characteristics, such as conditions of employment, pay scale, quality of housing and status tend to differ. Socio-economic status pertains to social position and blurs the difference between the two concepts of economic conditions (earnings and means) and reputation (status). Work stress tends to be greater in individuals of lower social economic status and it is also associated with lower social support, conventional cardiovascular risk factors, less education and certain psychological traits (Strike & Steptoe, 2004).

Virtanen, Vahtera, Pentti, Honkonen, Elovainio, and Kivimäki, (2007) found psychological distress is associated with long-term medically certified sickness absence in a large contemporary working population. High job strain was also found to have an adverse effect on prognosis among employees with psychologic distress. Cases with psychological distress had 1.3 to 1.4 times a higher incidence of long-term sickness absence than non-cases. Among these high job strain predicted sickness absence (hazard ratio 1.17 in women, 1.41 in men). The significant effect of job strain on sickness absence was found among workers in high socioeconomic positions (hazard ratio 1.54 for women, 1.58 for men) but not among employees in low socioeconomic positions (hazard ratio 1.06 for women, 1. for women, 1.31 for men). As mental health problems account for a proportion of the disease burden and are a major cause of permanent work disability, the identification of employees with high job strain and the improvement of their working conditions should be considered as an important target in the prevention of adverse consequences of psychological distress.

Gladies and Kennedy (2011) studied the relationship between work stress and organisational climate among women employees in the information technology industry. The study results indicated in the organisational climate, the mean value of perceived pay disparity was high;

however, it revealed there was less gender inequality in employee development. It was also found in job stress the mean value of work to family spill over was very high. Furthermore, their study found there was a significantly positive association between organisational climate and job stress. Job stress can be due to organisational factors, personal factors, career factors or relationship factors (Gladies & Kennedy, 2011). Among the organisational factors, the organisational climate is a major stressor for employees (Baum et al., 1983). Several factors also appear to increase the impact of stress on women being the role they still play in the provision of family care. Through their research, Lundberg and Frankenhaeuser (1999), reported it is well-established the total workload of women who are employed full-time is higher than that of full-time male workers, especially where they have family responsibilities.

One main obstacle in women's path is “organisational bullying” which women are exposed to which disturbs their emotional and physical tranquillity and causes stress (Gholipor, Sanjari, Bod, & Kozekanan, 2011). Studies have revealed that sufferers of bullying as well as the witnesses involved will cause wasting of resources, quitting or losing their job, become negligent with regards to tasks, lack motivation and job satisfaction, all of which result from the consequences of stress experienced because of bullying. Insulting as a result of harassment reduces self-worth in social life and cause a reduction in the capability of an individual to face personal, as well as occupational problems proficiently and thus reduce personal motivation.

Workplace bullying was also found by Bentley, Catley, Cooper-Thomas, Gardner, O’Driscoll, Dale, and Trenberth (2011) to be a major cause of stress and psychological harm for employees and a costly problem for organisations. Their finding that more than one-in-ten respondents experienced bullying in the workplace indicated a significant problem for the travel industry. When compared to those who had not experienced any bullying, targets of bullying reported lower levels of constructive leadership, colleague support and supervisor support and lower self-rated performance. These targets also reported higher levels of stress, lower levels of emotional wellbeing, higher absenteeism and a higher intention to leave the organisation. Organisational

responses to bullying which were reported as being most effective were those that focused on improvements in communication and relationships.

#### **2.4.2 Work stressors women face**

According to Moore, et al. (2007) the degree to which women work in a heavily male-dominated environment has been forwarded as one potential workplace stressor for female employees. Later, as they move into higher ranking positions and working with a proportionately greater number of men (although they are not faced uniquely by women managers) is something they are more likely to encounter (Eagly & Karau, 2002; Heilman, 2001). Therefore, they propose this might be a more salient source of stress for managerial women.

Burke, (2002) established that managerial women were found to feel isolated at work, exhibiting Type A behaviour and were also found to experience larger strain than male co-workers. Additional pressures on female managers included a lack of self-confidence and slight forms of prejudice. Hochschild (1997) predicts that based on the majority of time-use studies undertaken, females in dual career families are found to work an additional month of 24 hour days annually in comparison to men. With this additional time being spent on what is termed 'second shift' work, exertion beyond remunerated employment such as domestic work, the management of the home, and childrearing.

Collectively, such studies propose that managerial women are found to experience more stress than males and that the causes of stress are gender-related (Burke, 2002). There are some stressors, however, that may be particularly important for working women. These include organisational politics, tokenism, barriers to achievement, overload, social-sexual behaviour, work/home conflict and organisational restructuring and downsizing.

Both men and women can be affected by stress as a consequence of pressures of responsibility, work overload, restrictions due to time, as well as other problems associated with subordinates,

co-workers or superiors (Chusmir & Franks, 1988). These stressors could also most likely result in physiological and psychological side effects.

Physiological diseases associated with both male and female employees are listed as: increased blood pressure, skin disorders and failure of the heart, numerous diseases associated with the blood vessels, increased cholesterol, fatigue, increased/high blood sugar, increased injuries and lastly even death (Carr et al., 2001). The authors furthermore mention researchers have associated stress with numerous emotional conditions. Female employees have been noted to become inactive as well as losing their self-esteem and therefore they also tend to feel guilty and helpless. It is also argued males and females who experience similar amounts of stress would most likely also exhibit related symptoms. While men and women both tend to react by becoming anxious or even bored and tend to lose concentration, some become disappointed with their jobs and lives while losing contact with regards to reality. Emotional fatigue, feelings of alienation as well as withdrawal result in their efforts feeling futile.

Even though occupational stress affects male and females in a similar way, there are, however, stressors which are unique to women and are added to a great extent (Carr et al., 2001). These stressors tend to attach to a shared job-associated stress and thereby attaching a larger handicap on women as most males are not affected. Stress has a result on the job outcome thereby the additional stress experienced by some women will most probably have an effect on their occupation in extensive ways than male employees.

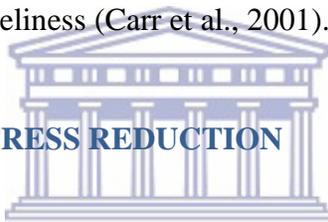
### **2.4.3 Demands on women conflicting with career and family**

In some women's lives there is a big difference with regards to doing anything as well as ability to do everything (Car et al., 2001). These women who try to do everything are called "superwoman". They often feel defective and depressed should they not be able to live up to their standards. As a result of many female employees exhibiting this superwoman role, the stress that is produced can be evident in numerous emotional as well as health problems.

Many common problems are due to matrimonial difficulties, depression, a feeling of constant exhaustion as well as a stigma of family neglect. Women, especially those with children, are often faced with having to find appropriate day care, nurturing the children when sick, ensuring transportation as well as taking leave from work for exceptional programs. Although males are supportive of the career of their wives and assist with the children, the bulk of the responsibility lies with women (Carr et al., 2001).

Many females also could find themselves with feelings of being alone in an environment which is designed as well as defined according to men. Many of the occurrences of stress amongst female managers could be as a result of their limited or lack of control in the male-dominated work environments. Furthermore, the lack of dynamic role models is also considered to be a contributor to female managers' feelings of loneliness (Carr et al., 2001).

## **2.5 POSSIBLE SOLUTIONS /STRESS REDUCTION**



According to Petrides and Furnham (2001), having a sense of control over a job is beneficial because it provides a buffer against stressors and enough autonomy to fulfil job requirements in ways that enhance satisfaction. High trait emotional intelligence was also related to lower levels of stress and higher levels of perceived control, satisfaction, and commitment. Oosthuizen and van Lill (2009) investigated a basic process model with a “salutogenic approach” of coping as a result of stress in the organisation. The two components of salutogenic functioning are namely “a sense of coherence” and locus of control (consisting of three dimensions: internal, external locus as well as autonomy). As was predicted, the individuals with a higher sense of coherence and internal locus of control were observed to experience reduced levels of stress and noticeably vice versa. However, in the resulting regression analysis only the “sense of coherence” as well as “external locus of control” variables were found to have contributed significantly to variance in the criterion variable stress.

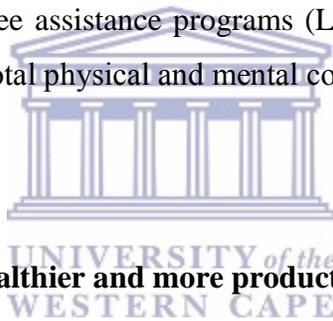
Gladies and Kennedy (2013) purport job redesign and organisational change could possibly be the more preferred approaches to stress management as this will focus on reducing or eliminating

sources of problems in the work environment. Since women employees have dual responsibilities at home and in the work place a major cause of concern has been the spill over effect from work to home. They also offer valuable suggestions to the design of HR policies that do not reflect work disparity among employees. These HR policies should include policies such as flexi time as well a cafeteria approach of welfare benefits to enable women employees to strike a better balance between work and personal life thereby improving the quality of work life.

Ugwu (2009) investigated the multiple roles which female employees are faced with at home as well as the workplace and their coping mechanism. The study revealed women who received care giving from their husbands or even from house-helps experienced less stress than those without the additional support. In a longitudinal study by Hintsanen, Hintsala, Widell and Kiivimaki (2011) the results showed higher negative emotionality and lower sociability systematically predicted higher job strain. The results also suggest temperament may be a predisposing factor to the experience of work stressors. There have even been suggestions from employers, organisations and institutions where they should formulate policies to alleviate work-related stress among employees (Alla, Olubayo-Fatiregun & Adeniran, 2007). Cooper and Cartwright (1997) also offer intervention programmes to help reduce stress in the workplace. Jex (1998) states there are three key elements that will contribute to coping with occupational stress. Firstly, the capability to plan a course of positive action to limit and contain stress; the ability to maintain an optimistic attitude in the face of a sudden change or a negative experience; as well as the capacity to feel one has control or even a partial influence over stress-inducing events.

Gholipour, Sanjari, Bod and Kozekanan (2011) purport that previous studies undertaken have introduced social endorsements as a method to overcome stress. Carlson and Perrewe (1999) indicate social support is another mechanism which reduces the chances of stress and induces recognition in the organisation with very little periodical requirements in both homes and as well as organisational settings. Managers can lighten job stress by initiating social support networks in organisations, especially amongst colleagues, superintendents and even in subgroups. The use of authorised educational programs can increase the kindred on the social supports facet and therefore aid in the reduction of stressful organisational effects.

There are worker-orientated interventions aimed to improve the fit of the individual and the workplace to reduce stress (Robbins, et al. 2001). Primary or preliminary level interventions refer to the redesigning of a job where employees will have more meaningful work, autonomy or control over their work helping reduce stress. For others 'effort at work' can ideally be reciprocated by rewards which include money, esteem and status control or job security (Smith, Roman, Dollard, Winefield, & Siegreest, 2005). Secondary level interventions focus on the individual and are classified into three types: somatic, cognitive and multimodal techniques all aimed at helping to minimize the damaging effects of stress. Lastly, the tertiary level of stress management is concerned with the rehabilitation of individuals who have suffered ill health due to strain at the workplace. The interventions at this level are based on treatment rather prevention through organisational wellness or employee assistance programs (Leonard, 2003). These programs are noted to focus on the employee's total physical and mental condition.



### **2.5.1 Strategies for promoting healthier and more productive environments**

A stress-filled environment is detrimental to the entire organisation (Carr, Kelley, Keaton & Chad, 2011). Not only does it affect people's health as well as the amount they are able to work, but their performance too. It is of great importance to enhance the well-being of those working in organisations to reduce the resulting negative effects on productivity. Brannon and Feist, (1997) recommend individuals' perception of being capable of managing or altering a stressful situation and regulating their own emotional distress are the two prominent ways of coping with stress.

Barden (2002) purports harmful stress is becoming a main illness in the organisational environment and which as a result debilitates employees thus becoming also costly to managers. Schorr (2001) is of the opinion if managers knew how to put a stop to and cope with stress, productivity could be improved. By implementing stress-management programs it could lead to a reduction in non-attendance, illness and accidental costs and rather increased job performance (Dishinger, Howard, Kiagler, Seabrooke & Tucker, 2000). The authors further state a stress

inventory can aid managers as well as employers in the assessment of employee stress. After the identification and assessment of the sources/causes of stress, such a program can offer employees the much needed skills for coping due to problems as well as adapt to using alternative ways of reacting to stress.

Dishinger et al. (2000) are of the opinion employees need to identify the negative effects of stress and thereby enabling them to manage the stress. Furthermore, by sharing their information workers can also act as a medium to assist management to design and implement these stress reduction programs. They conclude, employers should offer various stress reduction programs; employers should carry out a study of the programs they currently present to ascertain the programmes which are the most effective for controlling the employee stress; employees in return should also contribute with their ideas for the management of stress along with their employers as well as to assist them in the implementation of appropriate stress reducing programmes; educators are to include it into the business curriculum consultation of stress in the place of work with methods on how it should be managed; and further research should be conducted on related aspects affected by stress to establish if there are other aspects in an worker's life which are affected. Finally, other factors should be investigated to determine what other personal and work-related causes and symptoms of stress are on the individual.

There is abundant research on organisational or white collar workers; however, limited research has been conducted on gender differences in stress among blue collar workers and stress. The results of the study by Makhbul and Hasun (2011) present some answers to the stress outcomes experienced by supporting staff in the public as well as the private sector. Their finding indicated indifferent stress outcomes were experienced by the workers irrespective of their gender. The study made use of only manual or blue collar workers as the sample as these workers are directly exposed or at greater risk to the emotional and physiological strains at the workplaces (Eller, Netterstrøm, Gyntelberg, Kristensen, Nielsen, Steptoe, & Theorell, 2009; Makhbul & Hasun, 2011). Cooper and Williams (1991) argue blue collar workers come into contact with more health risks associated to their work environment in comparison to white collar or qualified workers. They further stress the major issues faced by blue collar (manual) workers are in contact with chemical

substances, earth, psychosomatic work stress as well as ergonomics predicament (Makhbul & Hasun, 2011). They are open to the elements of noise, physical burdens, as well being faced with unacceptable shift work, long working hours, a lack of social contact at the place of work and an unconstructive relationship with supervisors (Makhbul & Hasan, 2011). The T-test analysis conducted in their study, confirmed there was no significant differences in the stress outcomes experienced by workers as a result of the gender of the employees.

Differences between working conditions and health of different socio-economic groups have been noted throughout literature (Tippinan- Tanner, 2011). Usually, blue-collar worker occupations involve a more hazardous working environment and have more sickness days and health problems than white collar employees. The results confirmed the findings of the previous studies where blue-collar including manual employees had more severe burnout than white collar or non-manual workers (Aloha et al., 2009; Soares & Sudin 2007).

Winnubst (1993) is of the opinion work-related antecedents may be different between occupations although the syndrome itself might be the same. Generally, different types of stressors can be categorized into job demands or job resources, which could affect the burnout dimensions in a similar way irrespective of occupations (Demerouti et al., 2001a).

Limited evidence could be found of studies focussing on gender responses to stress and burnout outcomes among employees in a Fast Moving Consumer Goods (FMCG) production environment.

## **2.6 THE BURNOUT CONSTRUCT**

The most significant definition of burnout is provided by Maslach (1982) who described it as being a syndrome consisting of emotional exhaustion, depersonalisation as well as reduced personal accomplishment that could occur amongst people who do some type of ‘people work’ (Dollard et al., 2003). Burnout is believed “to represent a unique and intense client-patient interaction” (Lee & Ashforth, 1996, p. 123 cited in Dollard et al., 2003). It can therefore be defined as “persistent negative work related state of mind which develops gradually as a consequence of a prolonged

stress situation at work” (Ahola et al., p.11 cited in Milner, Fisher & Latif, 2007). It is regarded as an occupational hazard, especially in “helping professions” and in human service organisations (Milner, Fisher & Latif, 2007).

This original definition thus restricts the syndrome mostly to human services or similarly to professionals who are working in posts where their primary function consists of ‘processing people’ as opposed to working with numbers or information. Recently, however, research has indicated the core dimensions of burnout – exhaustion, cynicism or disengagement can be applied to other occupations, (Cordes & Dougherty, 1993). Demerouti et al. (2001) however, propose working with people could be seen as intrinsic to burnout because most of the previous authors looked at occupations which require working with people; others have challenged this general view (Mashlach & Schaufeli, 1993).

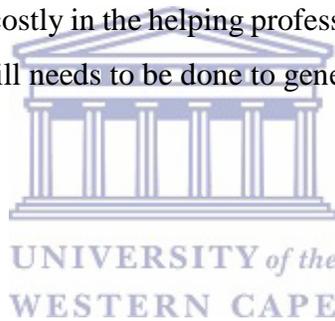
Burnout has frequently been described as an unpleasant and dysfunctional condition individuals and organisations would both like to prevent (Maslach & Goldberg, 1998). The majority of interest in burnout has not only been to merely understand what it is, but to determine what can be done to manage it. Numerous studies have tried to establish what are the primary causes or correlates of burnout, with the aim of creating generic intervention strategies to modify these factors. Although there have been several demographic variables which have been studied in relation to burnout, these studies are relatively few and the findings are not consistent (Schaufeli & Enzmann, 1998). The confounding variables (age and work experience, sex and type of occupation) make the interpretation of any demographic results more difficult.

Schaufeli and Buunk (2002) (as cited in Pienaar, and Sieberhagen 2005), describe burnout as being a precise type of job stress and influences work-related affective well-being. Being mainly of a psychological nature, the prevalence of physical symptoms is therefore not unusual. Burnout can affect individuals on a cognitive, emotional, physical and behavioural level as a consequence of an overall breakdown in defences against long-standing occupational-stress (Brill, 1984). The author further mentions this breakdown as occurring gradually and often remaining unobserved for some time. This is perpetuated by the employee’s lack of effective coping mechanisms and

aggravated intentions induced by the subjective experience of work-reality which result in the continuing decrease of emotional resources, a feeling of reduced efficiency, decreased passion as well as the increase of dysfunctional behaviours and attitudes in the vocation.

Burnout is a response to chronic occupational stress and characterised by emotional exhaustion (or the draining of emotional resources), cynicism (bearing a negative and callous perception towards one's job) as well as a lack of professional efficacy (having a tendency to evaluate one's work negatively) (Roma, Schaufeli, Bakker & Lloret, 2005).

The negative work-related psychological state of burnout, is also primarily characterised by mental exhaustion which has been extensively studied (Pienaar & Sieberhagen, 2005). Even though burnout has been found to be very costly in the helping professions (nursing, education, police and social work settings, much work still needs to be done to generalize it to other settings (Cordes & Dougherty, 1993).



### **2.6.1 Components of Burnout**

Burnout is therefore a particular stress reaction as a result of the relationship between an individual and their work (Gregory, 2015). Theoretically burnout consists of three separate but interrelated constructs, namely emotional exhaustion, depersonalisation, as well as reduced personal accomplishment (Visser & Rothmann, 2009). These components are widely measured by the Maslach Burnout Inventory (MBI) (Maslach & Jackson, 1981; Maslach, Schaufeli & Leiter, 2001). Each of these will be further discussed below.

*Emotional exhaustion:* The individual stress dimension of burnout makes reference to emotions associated with depleted physical and emotional resources (Leiter & Maslach, 2004; Maslach & Jackson, 1981; Maslach, Schaufeli & Leiter, 2001). This also inspires actions in the individual to detach himself or herself emotionally as well as cognitively from his/her work, as a means of

coping with work burdens (Pienaar & Sieberhagen, 2005). It refers to emotions of strain, exhaustion, powerlessness and despair (Schaufeli et al., 1993 cited in Milner, Fisher & Latif, 2007).

Emotional exhaustion is believed to be the most significant element in burnout and is also commonly the first reaction to form. (Evans & Fischer, 1993; Schutte, Toppinen, Kalimo, & Schaufeli, 2000). It denotes moods of emotional depletion and extreme tiredness, where an individual lacks the means to handle with the emotional demands of the occupation (Schutte, Toppinen, Kalimo & Schaufeli, 2000 cited in Visser & Rothmann, 2009). Schaufeli and Enzmann (1998 cited in Visser & Rothmann, 2009) further acknowledged exhaustion as a principal indicator of burnout. The state of chronic exhaustion can cause individuals to detach themselves emotionally as well as cognitively from their job, and in doing so they become less involved with or receptive to the requirements of other persons or the difficulties of the task at hand (Maslach, 1998 cited in Visser & Rothmann, 2009).

Emotional exhaustion is referred to as a deficiency of energy along with a feeling that emotional resources are depleted (Naude & Rothmann, 2004). It is thus indicative of feelings of being overextended psychologically (Maslach, 1993) as well as exhausted due to the demands experienced as a result of individuals' work or run down of their emotional resources.

*Depersonalisation:* This being the interpersonal context dimension is characterized by Depersonalisation, and involves undesirable, unfeeling and pessimistic attitudes or unreasonably detached reactions to the recipients of service and care and thus reducing the receiver to an impersonal object. These dimensions are generally considered to be the core symptoms of burnout (Demerouti, Bakker, Nachreiner & Schaufeli 2001 cited in Pienaar & Sieberhagen, 2005). It refers to dealing with recipients with regards to services in a pessimistic, cynical, disconnected and emotionally insensitive manner (Naude & Rothmann, 2003). It involves an indifferent overly detached attitude to others occasionally the recipients of one's services or care (Maslach, 1993, p. 20).

Depersonalisation, has recently been called cynicism (Ahola et al., 2006 cited in Milner et al., 2007) and comprises an unfeeling and disengaged and unenthusiastic attitude to work as well as a detachment from becoming involved with a result in indifference and disregard for others' emotional state (Milner et al., 2007).

*Reduced personal accomplishment* refers to negative self-evaluation, the belief that objectives are not reached, poor professional self-esteem and beliefs of insufficiency on the part of the service provider (Naude & Rothmann, 2003). There is a decline of feeling competent and successful achievement towards work (Maslach, 1993, p. 20).

This third dimension, namely the lack of personal accomplishment (Pienaar & Sieberhagen, 2005), signifies the self-evaluation aspect of burnout and represents an emotional state of insufficiency (Schaufeli & Buunk 1996 cited in Pienaar & Sieberhagen, 2005), incompetence, a lack of success, as well as feelings of unproductiveness (Maslach et al., 2001 cited in Pienaar & Sieberhagen, 2005). Reduced personal accomplishment therefore depicts as an individual experiencing a diminished sense of competence and accomplishment in one's occupation with an overall feeling of inadequacy especially with regards to the work venue (Pienaar & Sieberhagen, 2005). These dimensions have furthermore been observed to occur in a sequence, to build in duration as well as severity (Maslach et al., 2001), and can also be explained theoretically by the Conservation of Resources (COR) theory (Hobfoll, 1989; Hobfoll & Freddy, 1993) in Gregory (2015).

Maslach et al. (1996) have therefore defined burnout as being not just a state overcome as a result of workload, seeing that there are numerous individuals who are also overwhelmed with excessive work and yet who succeed to avoid it. Burnout, instead manifests in an internal dynamic of an individual sense of a reduced efficacy, cynicism, as well as emotional exhaustion.

Maslach and Jackson (1981) noted in Rutherford, Hamwi, Friend and Hartmann (2011) personal accomplishment to be independent of emotional exhaustion and depersonalisation. Both of the last two constructs (emotional exhaustion and depersonalisation) were seen as negative in contrast to personal accomplishment which is not.

### 2.6.3 Causes and consequences of Burnout

Numerous causes of burnout, have been identified, but most seem to be attributed to the individual, the workplace and the interaction between the two. The majority of the research, however suggests that environmental factors, especially characteristics of the work situation, are found to be more strongly related to burnout than individual factors such as demographic and personality variables (Leiter & Maslach, 1998). Sullivan (1989) and Muldary (1983) are of the opinion and propose burnout could be a possible response to excessive workplace stressors. In contrast to this, it is important to consider some employees when faced with stress react differently. Burnout is also conceptualised as a continuous variable which ranges from low, to moderate, progressing to high degrees of experienced feelings (Brusaferrro, Agnoletto, Gubian, & Balestrieri, 2000). It is therefore not to be viewed as a dichotomous variable that is either present or absent. Further mention is made where a high level of burnout is correlated with high points on emotional exhaustion as well as depersonalisation while inversely correlated with personal accomplishment. Toppinen-Tanner (2011) purports the importance of burnout phenomenon as well as studying burnout has its basis on at least three issues: Burnout is quite prevalent and has an economic, human and social burden to societies and individuals; burnout is stable, making the prevention of it before it occurs even more important and; it can possibly prevent burnout through development and health promotion. The author further revealed as much as 3-7% of the population suffered from serious burnout and thus implying that tens of thousands of people have difficulties in maintaining their work ability and wellbeing in their everyday activities. Burnout and its consequences have been well documented with serious impact especially on personal health (Liljegren & Ekberg, 2009). With some of the primary published descriptions of burnout being described as people distancing themselves from their family and being noted as a significantly early sign of the syndrome (Freudenberger, 1974).

Past research studying burnout has repeatedly linked it to an outcome of (a lack of) recovery (Taris & Feij, 2006) seeing it is related to numerous health complaints which include amongst others, sleeping disturbances, psychosomatic complaints, depression, cardiovascular diseases, anxiety and acute infections (Shirom, Melamed, Toker, Berliner, & Shapira, 2005). Burnout is defined as “a state of exhaustion in which one is cynical about the value of one’s occupation and doubtful of

one's capacity to perform" (Maslach, Jackson, & Leiter, 1996, p. 20). Previous research has shown exhaustion (referred to as the depletion of mental resources) and cynicism (an indifferent and detached attitude toward one's work) are found to be the core of the burnout syndrome (Schaufeli & Taris, 2005; Schaufeli & Salanova, 2007).

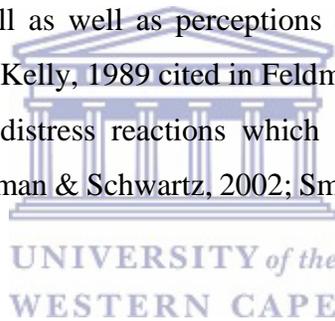
According to Naude and Rothmann (2003) research from the previous three decades has revealed the consequences of burnout as not just as being restricted to the person's subjective experience, but also to a variety of organisational outcomes. Levert, Lucas & Ortlepp, 2000; Rosse, Boss, Johnson & Crown, (1991) purport the construct burnout was found to be connected with reduced organisational effectiveness and occupational problems such as employee turnover, low self-confidence, deprived class of care, lowered efficiency, non-attendance and interpersonal struggle. Burnout has also been linked with insomnia, feelings of physical exhaustion as well as an increase in substance abuse (Jackson & Maslach, 1982; Maslach, 1982).

In addition, despite all the various definitions of burnout, there is a consensus it involves an internal process of a psychological nature involving aspects such as attitudes, feelings, motives and expectations which is experienced negatively due to the consequential feelings of distress, discomfort and dysfunction (Brand, 2007). Barad (1979) and Cherniss (1980) are both of the opinion the development of burnout during the first year of employment, may perhaps be due to a lack of development of coping mechanisms to deal with emotional stressors of the job.

Studies have suggested that burnout could be linked to factors such employees who have a high work overload as well as high job demands (in combination to a lack of resources), reduced autonomy, lack of control, an effort-reward imbalance, role ambiguity or conflict, one's environment being uncertain as well as conflicts between staff (Janssen et al., 1999 cited in Glasberg, Norberg & Soderberg, 2007). These is thus a well-established relationship between heavy work demand (in the form of work overload) leading to the development of burnout (Maslach et al., 2001 cited in Visser & Rothman, 2009). Cordes and Dougherty (1993 cited in Visser & Rothman, 2009) inform us that work overload is directly associated in the development of emotional exhaustion.

With initial research regarding burnout exclusively as an organisational problem, later work revealed it however to be a result of numerous factors related to society, the organisation as well as the individual. Even though work stressors have been proven to be the main cause of burnout, a variety of work and non-work pressures seem to be a required precursor for burnout (Feldman & Schwartz, 2002).

Few studies with regards to the relationship of support towards job satisfaction or productivity have been observed or controlled with respect to the effects of personality characteristics, in spite of their potential effect on perceptions of support as well as reports of grief or fulfilment (Lepore, 1998 as cited in Feldman & Schwartz, 2002; Lepore, Allen & Evans, 1993 cited in Feldman & Schwartz, 2002). Anger-related behaviours or negative affectivity could affect the respondent's views toward relationships over-all as well as perceptions of support from managers or even respective co-workers (Houston & Kelly, 1989 cited in Feldman & Schwartz, 2002) and could be related with the exacerbation of distress reactions which include the experience of burnout (Brondolo et al., 1998 cited in Feldman & Schwartz, 2002; Smith & Tziner, 1998 cited in Feldman & Schwartz, 2002).



In all probability, the most influential advancement with regards to the scientific investigation of the burnout construct was the invention of the Maslach Burnout Inventory (MBI) (Maslach & Jackson, 1986). This major development stimulated scientific awareness in burnout by the introduction of the easily administrable self-report questionnaires and thus making them the most accepted (Maslach et al., 1996). It is predicted the MBI has been administered in over 90% of the empirical periodicals on burnout since the mid-eighties (Schaufeli & Enzmann, 1998).

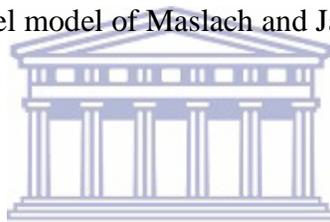
Three variations of the MBI were developed, firstly the MBI-GS (General Survey), MBI-ED (Educators) as well as the MBI-HSS (Human Services Survey) (Naude & Rothmann, 2003). Unlike the MBI-GS which measures exhaustion, cynicism as well as professional efficacy; the latter two instruments measure emotional exhaustion, depersonalisation and personal accomplishment. The General Survey is noted to measure burnout but in a wide range of

professions, in relation to the HSS and ED-versions of the MBI which measures burnout more in the human services as well as teaching contexts respectively. The MBI-HSS was noted as being the most popular instrument for measuring professional burnout (Tarris, Schreur & Schaufeli (1999).

## **2.6.2 Models of Burnout**

Recently an increasing number of research articles has focused on the burnout construct, however, the development of a comprehensive theoretical framework is still to be developed (Brand, 2007). Schaufeli and Buunk (2002) purport the intricacy of the phenomenon makes it highly unlikely that a single theory of burnout would be developed and agreed upon. Four development models will ultimately build up to the three-level model of Maslach and Jackson (Cooper et. al., 2001).

### *2.6.2.1 Process Model of Burnout*



Cherniss (1980) proposed a process model of burnout which suggests aspects of the work environment and the characteristics of the individual are both viewed as sources of strain. Individuals, however, choose to respond to these aspects in different ways, which can include negative attitudes towards the situation for example reduced work load, taking less responsibility for work outcomes, or even being detached from the job (Cooper et al., 2001). It is these negative attitudes which form the basis of Chernis's definition of burnout. The author further states the 'over inclusiveness' of this theory, notably that burnout is linked to negative attitudes is cited as a possible limitation. Cooper et al. (2001) therefore argued this model of burnout is possibly too broad and does not allow for the differentiation between burnout and job strain.

### *2.6.2.2 Multi-dimensional model of job burnout*

The development of this model has its foundation in extensive interviews with individuals employed in the human service occupations. During the development of the model, the aim was to

go beyond the experience of stress (exhaustion), to include a person's response to the job (cynicism/depersonalisation) and the response in the person self (feelings of inefficacy/personal accomplishment) (Maslach, 2003). The dimension of exhaustion represents the basic stress response, as referred to in other stress-related research, which shows positive correlations with aspects such as role overload and stress related health problems. The depersonalisation dimension makes reference to the detached, negative feelings towards certain aspects of a job as well as other employees, as a response to the stress experienced. Although this dimension is not commonly found in other stress models, according to Maslach (2003) it represents the key feature of the burnout phenomenon. The third dimension, feelings of inefficacy or a 'lack of personal accomplishment' relates to the other two dimensions of the model and is also dependant on the situation and can either be viewed as a consequence of exhaustion or cynicism or in some cases these feelings seem to have developed sequentially. Maslach (2003) further mentions the way in which the three dimensions of the burnout construct relate to the various workplace variables within an organisational setting (a lack of resources and information, working relationship, insufficient time, heavy work demands) differ. It is furthermore suggested exhaustion and cynicism manifest mostly as a result of work overload and interpersonal conflict, whereas a sense of inefficacy mostly manifests as a result from a lack of resources or support.

Schaufeli and Enzmann, (1998) maintain the majority of research on burnout focuses mostly on situational variables as possible causes, work load together with demands, role overload and a lack of support from colleagues. Many other studies have also confirmed the impact of various other job characteristics on burnout. A study by Maslach (2003) tried to provide a theoretical framework for burnout and stress research by analysing the construct in terms of six key areas namely: work overload, lack of control, insufficient reward, breakdown of community, absence of fairness and conflicting values (Angerer, 2003). The framework is rather presented as a person-job fit framework with emphasis placed on the compatibility between six domains of the job environment as well as the employee.

### *2.6.2.3 Phase Model*

Golembiewski and Muzenrider (1984; 1988) developed a model which is similar to Maslach's burnout model, however, the author proposed the second component, depersonalisation should rather be in the first phase on the model. Their argument being notably that since depersonalisation constitutes the manifestation of burnout, it consequently impairs performance and as a result the individual's sense of personal accomplishment is then reduced which therefore constitutes the second phase in the model. Golembiewski and Muzenrider further argued emotional exhaustion will develop as depersonalisation and lack of personal accomplishment will exceed the individual's coping ability and result in emotional exhaustion. The most powerful stage in the development of burnout will then be represented by emotional exhaustion (Cooper et al., 2001). Golembiewski and Muzenrider's model is made up of eight phases in total. The rating of individuals is from low to high for each of the dimensions of burnout and then followed by the assignment to one of the eight phases. This model suggests burnout will tend to become more evident as the individual moves passed the depersonalisation to reduced sense of personal accomplishment and onto emotional exhaustion. The development of emotional exhaustion is therefore strongly related to the progression of burnout.

### *2.6.2.4 Conservation of Resources Theory*

The theory of Hobfoll (1989) and Hobfoll and Freedy (1993) covers a general perspective of stress with relation to burnout in organisations as host (Cooper et. al., 2001). The theory states that employees seek to obtain and maintain resources. The conservation of resources theory (COR theory) suggests there are four main categories of resources available to individuals: objects (houses, cars, and furniture), conditions (relationships, steady jobs), personal characteristics (self-esteem) and forms of energy (money and favours). The theory argues the potential loss of these resources will threaten individuals and consequently result in stress. It is further proposed by the theory burnout can develop, when resources become lost or when they are inadequate to meet the burden the individual faces. The construct burnout, will therefore result where a repetitive loss of resources is evident and not as a result of a single occasion (Cooper et. al., 2001). The authors

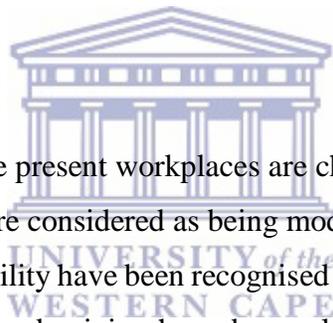
further maintain this theory is well-matched to the transactional model of stress as developed by Lazarus and Folkman (1984).

#### *2.6.3.5 Measuring Burnout*

There are two questionnaires which are notably the most frequently used in research for the measurement of burnout. These are the Maslach Burnout Inventory (MBI) (Maslach & Jackson, 1981; 1986; Maslach, Jackson & Leiter, 1996) and the Burnout Measure (BM) (Pines, Aronson & Kafry, 1981).

## **2.7 CONCLUSION**

The major changes witnessed in the present workplaces are challenging on the mental well-being of employees. Stress and burnout are considered as being modern epidemics and their importance for both physical as well as work ability have been recognised internationally. Definitions of these two constructs and some models and origins have been placed in context and thus serves as background to support the methodology chosen for the research.

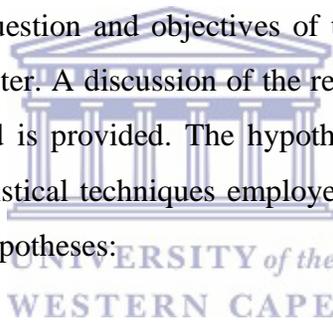


## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3.1 INTRODUCTION

The purpose of this research study is to explore the relationship between occupational stress and burnout. Burnout has been frequently used interchangeably with the term stress as the symptoms could very well be related, there are, however, significant distinctions exist between the two concepts (Burisch, 2006). Although stress can intensify burnout, it is not the main cause of burnout. In order to answer the research question and objectives of the study, the methodology used is outlined and discussed in this chapter. A discussion of the research design, procedure as well as the measurement instruments used is provided. The hypotheses, population, sample selection, ethical considerations and the statistical techniques employed are also presented. To recap, the study seeks to test the following hypotheses:



#### 3.2 RESEARCH HYPOTHESES

- Hypothesis 1: There is no statistically significant difference in stress and burnout amongst employees based on gender.
- Hypothesis 2: There is no statistically significant difference in stress amongst employees based on based on age, population group and years of employment.
- Hypothesis 3: There is a significant positive relationship between occupational stress and Burnout

### 3.3 POPULATION AND SAMPLE

The population consisted of all the employees (men and women) in a fast moving consumer goods industry (FMCG) in the Western Cape and covers all the departments within the organisation, from the senior managers to the low-ranking staff.

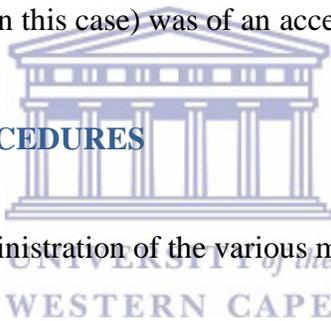
A total of 110 employees agreed to take part in the study and were chosen as the sample representing the respondents. The population was made up of 1000 employees. Ideally, the “rule of thumb” is a sampling ratio of approximately 30% for a relatively small population of 1000 should be drawn Sekaran (2000, p. 295). The participants received a biographical questionnaire which included present designation, educational level, age, race, gender and marital status. The cover letter explained the reason for the research, how the data would be used as well as who would have access to the data and procedures for completion and returning of the forms. Two more questionnaires, one focusing on the determining scores and effects of stress as well as another for the determination of burnout were also distributed to the respondents. Ideally, it is vital to make use of a random sample from the population and the sample framework will be compiled in order to be representative of the total population (from which the sample has been chosen) thereby in order to draw conclusions regarding the population (Cooper & Schindler, 2003).

Probability sampling was used to randomly select workers employed in this organisation. Stratified random sampling was suitable for the present research study as it enhances the sample’s statistical significance, providing sufficient data to investigate the sub-populations as well as enabling the opportunity of using different research methods in different strata should it be required. The intention was to separate the population into various strata: Senior management, Middle management, Supervisors, Junior Staff and Factory workers. A simple random sample may well be taken from every stratum, afterwards the sampling results would be weighted and pooled into the suitable population estimates.

### 3.4 RESEARCH DESIGN

Babbie and Mouton (2007, p. 646) define quantitative research “as the numerical presentation and manipulation of observations for the purpose of describing and explaining the phenomena that those observations reflect”. The authors Polit and Hungler (1995 in Makie, 2006, p. 45) defined quantitative research as being a “systematic collection of numerical information and analysis of that information using statistical procedures.” A quantitative method of investigation was chosen for this study as the aim of the research was to find solutions to the problems stated. This was accomplished by analysing and interpreting the data with the aid of statistical measures. The advantage of this type of research method is the potential to be generalized for large populations, should the sampling be done effectively. It can also be considered as being valid if the instrument of data collection (a questionnaire in this case) was of an acceptable quality (Reiman, 2008).

### 3.5 DATA COLLECTION PROCEDURES



The data collected through the administration of the various measuring instruments was subjected to various statistical procedures.

The questionnaire were administered by personally delivering them to the FMCG area after permission was granted by the organisation and the University’s Ethical Clearance Committee. The questionnaire comprised of a covering letter, a biographical section, and stress and burnout measuring instruments. The cover letter explained the reason for the research study being conducted, the informed consent and instructions on completing the questionnaire. The questionnaires were left with the participants and personally collected after 2 days. The advantage of using a self-administered questionnaire was that participants could complete it in their own free time and the questionnaire could be distributed to a large number of participants at the same time.

## 3.6 DATA ANALYSIS TECHNIQUES

### 3.6.1 Descriptive statistics

Descriptive statistics is a type of statistical analysis focused on describing, summarizing or explaining a set of data (Babbie & Mouton 2007). The value of descriptive statistics is:

- To have standard graphs and measures to summarise and communicate the understanding of data.
- Assist the interpretation of data characteristics that is exposed at a visual glance
- To describe the data that is submitted for further analysis.

### 3.6.2 Inferential statistics

The goal of inferential statistics is to go beyond the immediate set of data and to infer characteristics of populations based on the sample of data (Sekaran, 2001). The value of inferential statistics is:

- Analysing data for specific characteristics
- To test validity of statements, hypotheses or predictions
- Verifying certain relationships between different variables
- Calculating probable outcomes
- To do predictions.

On the basis of the aforementioned, the following inferential statistical techniques were utilised:

#### 3.6.2.1 Pearson correlation

The Pearson correlation procedure determines the strength of association between variables (Josias, 2005; Pallant, 2010) and it is suitable for measuring interval and ratio scaled variables (Paulse, 2005).

It allows the researcher to simultaneously determine the degree as well as the direction of the relationship between the dependent and the independent variables (Brand, 2007). Calculating

correlations aims to establish the indirect relationship in data and it furthermore allows the researcher to objectively establish which variables are indeed closely related and influence one another. Advantages of calculating correlations in research can be used to explore questions which cannot be explored with experimental procedures. It also allows the researcher to determine the degree of the relationship between the variables being studied. A main disadvantage of presenting relationships research is it cannot be used to demonstrate cause-and-effect relationships between variables (Tabachnik & Fidell, 2007).

### *3.6.2.2 T-Tests*

T-tests are primarily used to investigate whether the chosen sample was indeed experiencing considerable levels of stress from intense to zero. T-tests allow for the comparison of the means of two groups to analyze their unique differences based on the postulation that the two groups are found to belong to the same population or two populations who possess the same population mean. The significant differences in the levels of stress of employees in a fast moving consumer goods company based on their gender, was determined by making use of the T-test method (Pallant, 2010).

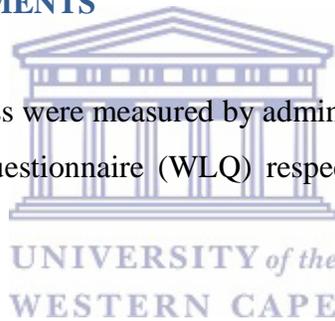
### *3.6.2.3 Analysis of Variance (ANOVA)*

The ANOVA, acronym for Analysis of Variance pertains to the differences between the sample means and does not have any restriction on the number of means (Oosthuizen, 2005). Coolican (cited in Paulse, 2005, p.73) goes on to further explain “analysis of variance procedures are so powerful parametric methods for testing the significance of differences between sample means where more than two conditions are used, or even several independent variables are involved”. Fields (2002) also informs that ANOVA results in an F-statistic, comparing the magnitude of systematic variance of the data to the amount of unsystematic variance.

The ANOVA creates the possibility to appraise separate or even the combined influence of a number of a few independent variables on the criterion investigated. The ANOVA was used to ascertain whether a statistical significant difference exists between the levels of stress based on the biographical details and the variables namely age, population group and educational level. A similar investigation was also undertaken for the burnout variable. Tredoux and Durrheim (2007, p. 252) summarise “the basic difference between the ANOVA and the t-test is that it allows us to test the difference between more than two groups of subjects and the influence of more than two groups of subjects and the influence of more than one independent variable”.

### 3.7 MEASUREMENT INSTRUMENTS

The constructs of burnout and stress were measured by administering the MBI and Experience of Work and Life Circumstances Questionnaire (WLQ) respectively. These two instruments are classified as self-report measures.



#### 3.7.1. Burnout

The construct burnout was measured with the Maslach Burnout Inventory Human Service Survey (MBI-HSS, MBI, 1996). The MBI- HSS is a 22-item questionnaire designed to measure the three elements of burnout, namely:

- ❖ Emotional Exhaustion (the extent to which emotional resources are depleted)
- ❖ Depersonalisation (negative, cynical attitudes and feelings towards clients)
- ❖ Personal Accomplishment (tendency to evaluate one’s work with clients negatively).

This version of the inventory was more specifically developed to identify levels of burnout in health care staff (Maslach & Jackson, 1986). The items within the questionnaire were written based on statements regarding personal opinions or attitudes (for example, I feel emotionally drained from my job, I worry that this job is hardening me emotionally). The frequency with which a respondent experiences a certain feeling is assessed by linking items to a six-point scale ranging

usually from never to every day. The MBI is a self-administered questionnaire which takes from 10-15 minutes for completion. The questionnaire itself consists of 9 items that assess emotional exhaustion, with five items measuring depersonalisation and a further eight items that measure reduced personal accomplishment. Higher mean scores on the emotional exhaustion and depersonalisation scales correspond to elevated degrees of experienced burnout. A number of the component items of both emotional exhaustion and depersonalisation will have little loadings on each other which indicate a moderate correlation exists between these two subscales.

This is in agreement with the hypothetical expectations suggesting the two subscales are split but related aspects of burnout (Maslach & Jackson, 1986). However, in contrast, the lower mean scores on the personal accomplishment scale corresponds to elevated degrees of experienced burnout. The subscale of personal accomplishment does not load onto any of the other two subscales and can therefore not be assumed as the opposite of emotional exhaustion or depersonalisation. The subscales are each scored separately and are not pooled into a single score. The scores can be related to cut-off points which will indicate a low, medium or high level on each scale with useful feedback purposes. This type of instrument can also be used to assess the degree of burnout in numerous job settings for clinical, counselling or even research purposes (Maslach et al., 1997).

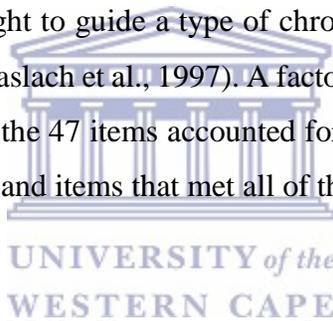
### **3.7.2 Reliability of the MBI-HSS**

The MBI was used to measure burnout in human service occupations. Recently, alternative versions have also been developed to measure burnout in other industries such as teaching as well as general occupations. The following alternative forms are referred to as Maslach Burnout Inventory – Human Service Survey (MBI-HSS), Maslach Burnout Inventory – Educators Survey (MBI – ES), Maslach Burnout Inventory – General Survey (MBI – GS). Although the MBI is mostly used in the original English version, individual researchers have, however, translated it into Spanish, Swedish and Polish. The translations were mostly for research purposes and no single certified translated version of the MBI is available to date commercially (Zalaquett & Wood, 1997, p. 212). The reliability coefficients for the subscales were found to be as follows (Maslach &

Jackson, 1986) (1) Emotional Exhaustion: = 0.90, (2) Depersonalisation: = 0.79, and (3) Personal Accomplishment: = 0.71. The standard error of measurement for each respective subscale was: 3.80 for Emotional Exhaustion, 3.16 for Depersonalisation

### **3.7.3 Validity of the MBI-HSS**

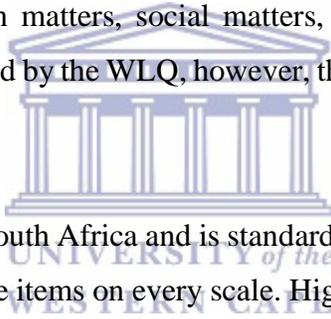
During the development of the MBI an initial questionnaire was constructed which consisted of 47 items. This was then given to a sample of 605 individuals consisting of 56 % male and 44 % female participants from numerous health and service occupations. Participants were selected from individuals employed in occupations where they were required to deal with people with problems, possibly leading to the presence of strong emotional feelings in their work environment. Such strong emotional feelings are thought to guide a type of chronic mental stress that is believed to aggravate symptoms of burnout (Maslach et al., 1997). A factor analysis of the data was conducted and the results indicated that 10 of the 47 items accounted for three quarters of the variance. The set of selection criteria was chosen and items that met all of the criteria were kept.



### **3.8.3 The Experience of Work and Life Circumstances Questionnaire**

Occupational stress was measured by means of the Experience of Work and Life Circumstances Questionnaire (WLQ). The WLQ is a self-rating measuring instrument for stress inside as well as outside the work place. This has also been standardised for the South African setting to determine the level and causes of stress for persons with a reading and writing ability of Grade 10. The WLQ is a scale consisting of 40 five-point items; with scores ranging from a minimum of 40 to a possible maximum of 200. Construct validity refers to how well the results obtained from the use of the measure for the theories around which the test is designed (Sekaran, 2001, p. 207). In the manual coefficients of internal consistency and test-retest reliability ranging from 0.83–0.92 and from 0.62–0.80 are respectively noted. The construct validity is also acceptable (Van Zyl & Van der Walt, 1991; 1994).

Oosthuizen, (2006) and Oosthuizen and van Lill, (2008) have used this questionnaire successfully to measure stress levels in the workplace even though low levels of stress were reported in the 2008 study; a score of 80 or higher is a reflection of high stress levels (Oosthuizen, 2006). In the 2008 study the questionnaire was successfully used for a study of coping with stress in the workplace and 240 participants indicated most of them reported relatively low levels of stress. Sardiwalla (2004) also used this questionnaire to study the significance of occupational stressors and coping strategies as factors causing burnout as experienced by hospice employees. Occupational and non-occupational stressors were both measured using the Experience of Work and Life Circumstances Questionnaire (WLQ) which was developed by Van Zyl and Van der Walt (1991). This instrument has 7 stressor scales; stressors pertaining to outside the work place and stressors within the work place, including organisational functioning, job characteristics, physical working circumstances, occupation matters, social matters, remunerations and fringe benefits. Levels of stress can also be measured by the WLQ, however, this scale was not used in the research study.



The instrument was developed in South Africa and is standardised for local conditions. An overall score was obtained by adding up the items on every scale. High scores on the stressors outside the work place scales reflect high to very high levels of stress. Lower scores, however on the work place subscales of the survey entail challenging areas in those subdivisions and are indicative of high stress levels. The WLQ has been employed in a number of studies (approximately more than 80 studies) that have been conducted at the University of Port Elizabeth (Van Rooyen, 2000). Nell (2005) also successfully used the questionnaire to measure stress in married mothers in the teaching profession.

The WLQ was not designed specifically for measuring stress for a specific sector of employees (the production environment as in this study) but rather it can be viewed as a general measure of stress. The information obtained from this measure can be utilised for diagnostic purposes: In the first instance to determine whether a respondent experiences normal, high or very high levels of stress; in the second instance to identify the problem factors that cause the level of stress being experienced. An individual with a high score on the items in the questionnaire is most likely to

experience an elevated level of stress. A higher level of stress could indicate the respondent experiences numerous struggles arising from the surroundings. The WLQ consists of two parts:

- Experience of Work
- Circumstances and Expectations.

The part of the questionnaire that deals with the experience of work (Scale A) is used to determine a person's level of stress. An indication is thus obtained whether the person experiences a normal, high, or very high level of stress. It consists of 40 questions that are answered on a 5-point scale reflecting how often certain feelings of stress (e.g., depression, anxiety and frustration) occur. A high score points to a high level of stress, whereas a low score points to a low level of stress. Examples of questions on this scale include: How often in your work do you feel worried? How often in your work do you feel afraid, not knowing of what exactly?

The next part of the questionnaire looks at circumstances and expectations (Scale B and Scale C) and analyses the causes of the person's level of stress (Van Zyl & Van der Walt, 1991). A total of 76 questions are asked about an individual's circumstances and about unfulfilled expectations. Scores are obtained by evaluating respondents' answers according to a 5-point scale. Scale B looks at the circumstances that cause stress within and/or outside of the work situation. The participants' responses to the questions posed in the questionnaire are indicated on a 5-point scale by writing down a figure from 1 to 5 according to the following: 1: Virtually never; 2: Sometimes; 3: Reasonably often; 4: Very often; 5: Virtually always.

The circumstances in the work situation that are analysed involve the following: (a) the functioning of the organisation; (b) the characteristics of the task(s) to be performed; (c) physical working conditions and work equipment; (d) social matters; (e) career matters; (f) remuneration, fringe benefits and personnel policy (Van Zyl & Van der Walt, 1991). A high score on these items indicates the respondent experiences these factors as problematic issues. Examples of questions on this scale include the following: How often do you feel in your organisation that the organisation as a whole does not function satisfactorily (for example owing to poor organisation, little confidence in employees and/or incorrect leadership styles)?

The circumstances outside of the work situation that are dealt with include: (a) Family problems; (b) financial circumstances; (c) phase of life; (d) general economic situation in the country; (e) changing technology; (f) facilities at home; (g) social situations; (h) status; (i) health; (j) background; (k) effect of work on home life; (l) transport facilities; (m) religious life; (n) political views; (o) the availability of accommodation; and (p) recreational facilities. According to Nell (2005) a high total score on these items indicates a person experiences issues outside the work situation as problematic. In this part of the questionnaire (i.e., causes outside the work situation) only a total score is calculated. Examples of questions on this scale include: How often in your everyday life do you feel that the social situations with friends and/or relatives are difficult to handle?

The part of the questionnaire that deals with expectations (Scale C) is divided into six subscales.

### **C1: Organisational functioning**

This subscale deals with the extent to which the following matters cause stress in the respondent: A share in decision making; trust in the supervisor(s) and open communication channels with the supervisor (Van Zyl & Van Der Walt, 1991).

### **C2: Characteristics of the task(s) to be performed**

This subscale reflects the extent to which the content of the person's work causes him or her to experience stress. The following factors are included: Getting the work done in time, taking full responsibility for a piece of work and receiving ambiguous instructions

### **C3: Physical working conditions and job equipment**

This subscale shows to which extent the availability of sufficient job equipment and physical working conditions (e.g., temperature and adequate lighting) influence an individual's level of stress.

#### **C4: Social matters**

This subscale measures the extent to which work stress is caused by the following factors: Enjoying a high status in one's job, and the person's relations with his manager or supervisor and colleagues.

#### **C5: Career opportunities**

This subscale indicates to which extent the availability of career opportunities and promotion possibilities cause stress in the respondent.

#### **C6: Remuneration, fringe benefits and personnel policy**

This subscale measures the extent to which the following expectations cause work stress: For the employee to receive adequate remuneration (i.e., salary) and fringe benefits, and for the employee to function under the present personnel policy.

With regards to the interpretation of the results obtained on this measure, Van Zyl and Van Der Walt (1991) indicated the scores for the total level of stress, including the causes of stress, are divided into three categories, namely normal, high and very high. Should an individual have a low score on the total level of stress, with high scores on the causes arising inside as well as causes originating outside the work situation, this person is probably capable of handling stress arising from the environment. While if a person has a high total stress score and low scores on the causes of stress, it can indicate this person's capability to handle stress is very poor

##### *3.8.3.1 Reliability*

Reliability of the instrument was good as it revealed an alpha coefficient of 0.83. The test-retest reliability coefficient revealed the following: stressors pertaining to outside the work circumstances - 0,80; organisational functioning - 0,72; task characteristics - 0,65; physical working conditions and job equipment - 0,62; career matters - 0,72; social matters - 0,69 and remuneration and fringe benefits - 0,65; indicates the reliability of this measuring instrument is very acceptable. The content and construct validity is also very satisfactory.

### 3.9 ETHICAL CONSIDERATIONS

Ethical issues in research relate to concerns, dilemmas and conflicts that arise over the appropriate way to conduct research. Even more important is to adhere to ethical conduct in a cross-cultural and diverse country such as in South Africa (Foxcraft, 2004). Unethical research practice includes acts such as coercing individuals to participate in a study, not fulfilling the research requirements of informed consent, and failure to maintain privacy and confidentiality (Russell & Roberts, 2001). Cozby (1993), Foxcraft (2002) and Sekaran (2001) have all outlined guidelines to ensure researchers always act in the best interest of their participants.

There are some ethical considerations to be kept in mind when undertaking a research study (Nell, 2005). Ethical issues tend to be complicated and there are no hard and fast rules that have to be adhered to in the research world. It is the responsibility of the researcher to conduct the research in such a manner as to respect and maintain subjects' rights and to protect subjects from possible physical and/or psychological harm. However, ethical issues are not only applicable to the protection of the sample population. Ethics and the validity of the research conducted should not be viewed as separate issues (Korchin & Cowen, 1982).

### 3.10 CONCLUSION

There are an increasing number of studies which have given an indication of a link between occupational stress and burnout; however few have confirmed a definite correlation. Furthermore, the stress and the burnout experienced by individuals employed in the FMCG industry have not been widely investigated. This chapter was a review of the methodology utilised in this study and mentioned the research questions and hypotheses. It furthermore provided an explanation of the research design or research method employed in the study. Details regarding the sample selection, data collection and analysis of the data were also discussed. The measuring instruments and target population were discussed, an explanation of the reliability, validity and justification of the instruments used were also provided. A random sample of 110 employees from a fast moving

consumer goods company in the Western Cape was chosen. The statistical analysis provided descriptive and inferential information. It included the Pearson Product and T-test as well as a justification for each of their use in the study. The results of the research will be presented in the following chapter.

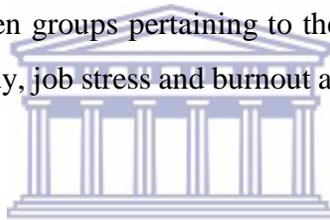


## CHAPTER FOUR

### RESULTS

#### 4.1 INTRODUCTION

The aim of this study was to explore the relationship between occupational stress, burnout and gender. The various hypotheses were presented per construct with the relevant data analysis techniques employed and the results presented. A number of analyses were also employed to examine the various demographic variables such as gender, level of education, age, number of years employed (years of experience) and population group (ethnicity) to establish if any significant differences exist between groups pertaining to the various variables. The analyses of the constructs applicable to the study, job stress and burnout are also presented with the support of inferential statistical procedures.



#### 4.2 DESCRIPTIVE STATISTICS

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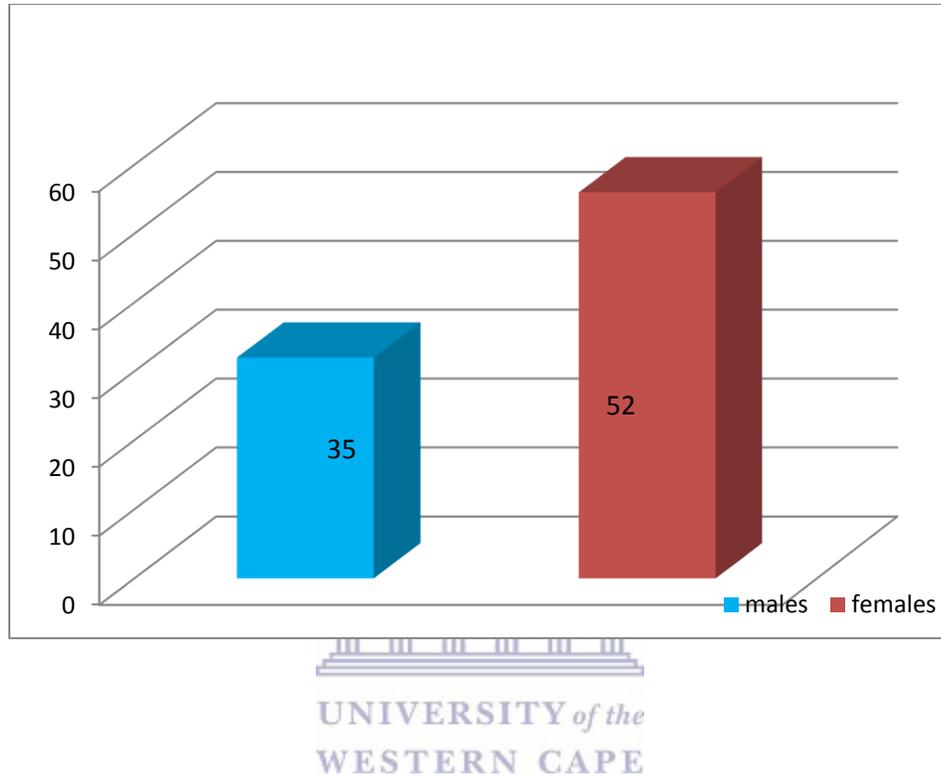
Babbie and Mouton (2007) indicate descriptive statistics is mainly a way of indicating quantitative descriptions in a manageable form. Furthermore, it also describes single variables or associations that connect variables to each other. These descriptive statistics consist of tabular or graphical representations as evidence of the findings. It also involves the examination of the data by using frequency distributions, dispersions dependent and independent variables as well as the measures of central tendency.

##### 4.2.1 Gender

Figure 4.1 depicts the gender distribution of the respondents. It is evident 40.2% (n=35) of the group consisted of male respondents, while 59.8% (n=52) female respondents answered the questionnaire. The total thus being n=87 respondents who had participated.

**Figure 4.1**

**Gender**

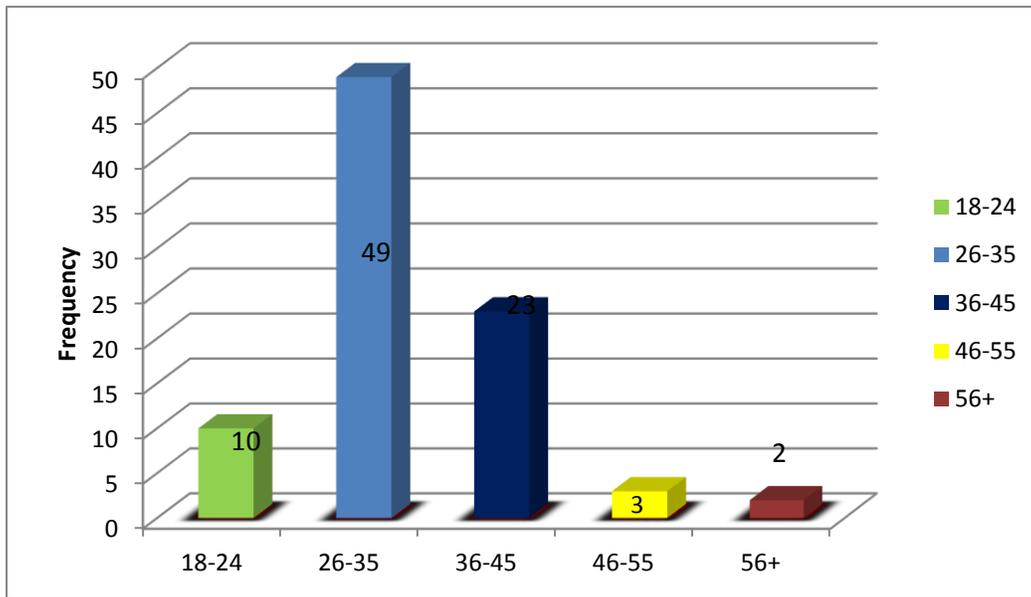


**4.2.2 Age**

In terms of figure 4.2 responses were represented by 11.5%; n=10 were in the age group of 25 or younger. The frequency distribution for age revealed that the majority of the participants were between the ages of 26-35 years old (56.3% (n=49). This was then followed by the second largest group, namely the 36-45 years (26.4% (n=23). Only 3.4%; n=3 of the sample was in the age group 46-55 and lastly 2.3% (n=2) >56 years.

**Figure 4.2**

**Age in years**

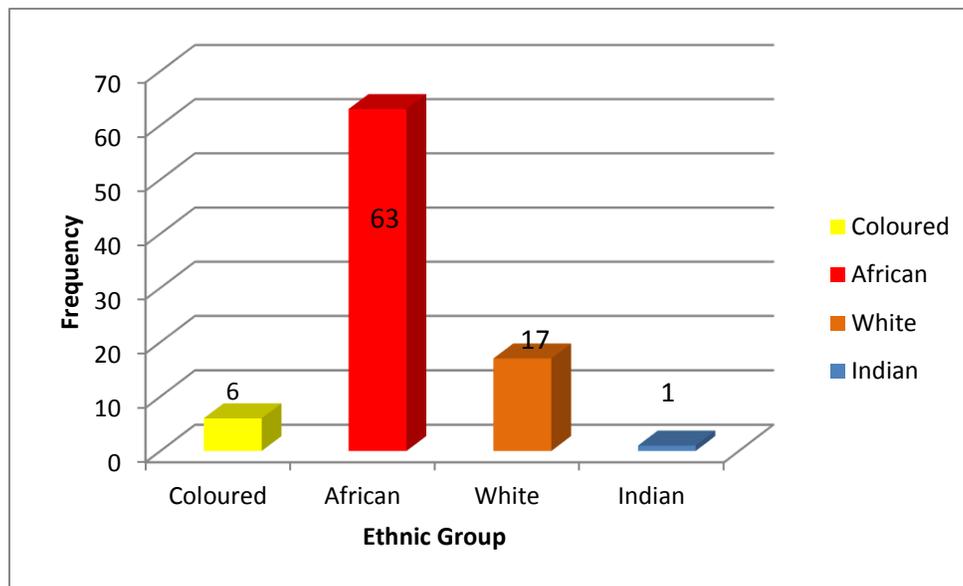


**4.2.3 Ethnic groups**

In terms of figure 4.3 the majority of the respondents were represented by the African (Black) respondents with the group representing of 72.4% (n=63) of the respondents. This was followed by White respondents comprising 19.5% (n=17) and with a lower number of Coloured respondents represented by 6.9% (n=6) in the sample. Indian respondents comprised the minority in that they constituted only 1.1% (n=1) of the respondents.

**Figure 4.3**

**Ethnic group**

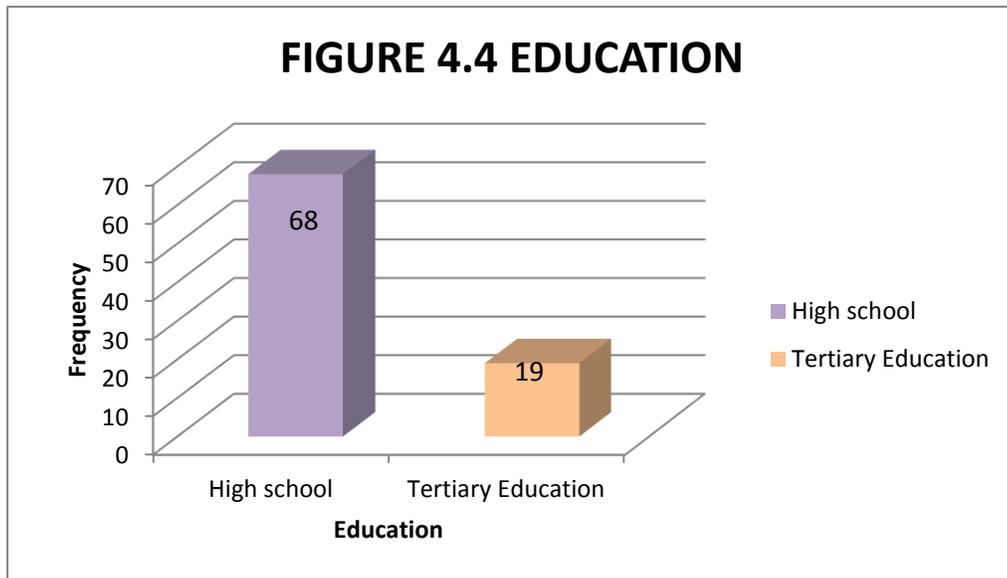


**4.2.4 Education**

Figure 4.4 provides an overview of the number of years of education have within the respondents' profession. The majority of the respondents (78.2% (n=68) of the sample had high school qualifications while (21.8% (n=19) were in possession of a tertiary qualification.

**Figure 4.4**

**Education**

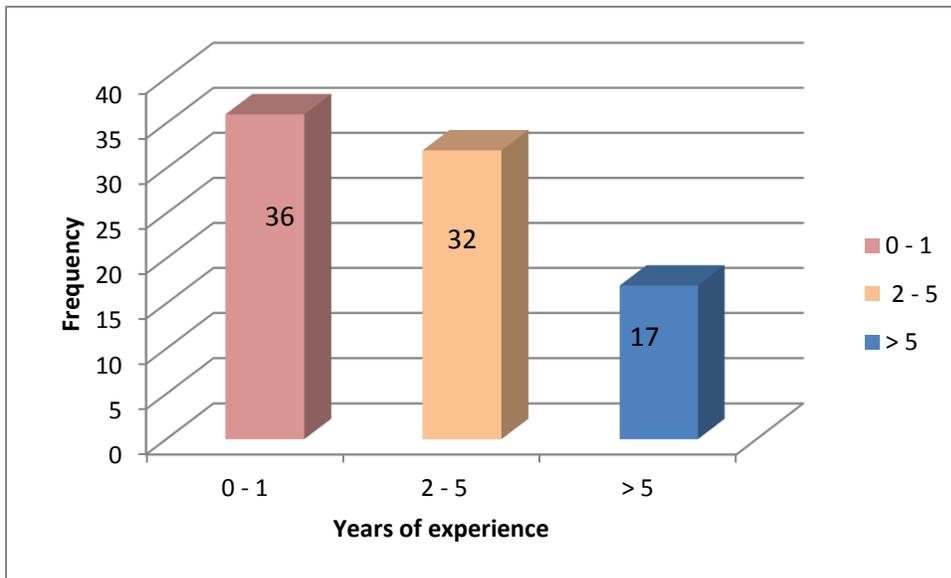


**4.2.5 Work experience**

Figure 4.5 provides an overview of the number of years of experience which respondents have within their profession. The majority of them 41.38% (n=36) have one to less than one year experience, while (36.78% (n=32) have been with the company for 0 to 2 years. While the smallest number of respondents reported being having the longest tenure namely (19.54% (n=17).

**Figure 4.5**

**Years of working experience**



**Table 4.1**

**Descriptive statistics for male and female employees comparing job stress and burnout**

<b>Total stress</b>	<b>Gender</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Std. Error Mean</b>
	male	35	447.89	158.862	26.853
	female	52	540.33	146.937	20.377
<b>Burnout</b>	male	35	57.4	19.304	3.263
	female	52	65.5	16.734	2.321

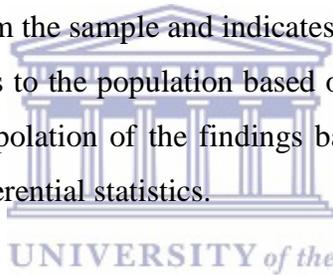
Table 4.1 depicts the results in the current study which indicates that males experience lower job stress (Mean = 447.89, SD = 158.862) than females do (Mean = 540.33, SD = 146.937). A similar

finding was observed for burnout. Females (Mean 65.5, SD = 16.734) indicated that they experienced higher burnout than males (Mean 57.4, SD = 19.304).

For the purpose of obtaining statistical inferences about a population under study, it is necessary to use inferential statistics (Oosthuizen, 2006).

### 4.3 INFERENCE STATISTICS

Sekaran (2000) indicates inferential statistics are methods of using the data to enable making statements with regards to the population from which the sample were drawn. The author further explains they can be separated as being parametric and non-parametric. It furthermore allows the researcher to draw conclusions from the sample and indicates how justified the researcher will be concluding something with regards to the population based on the data provided by the sample. This process that allows the extrapolation of the findings based on the data obtained from the sample which is then known as inferential statistics.



In the current study statistics are used to test the null hypothesis. The statistical techniques the Pearson Product Moment, ANOVA and T-tests were used in this study for purposes of testing the stated hypotheses. These statistical techniques aided in drawing conclusions with regards to the population from which the sample was taken and decisions were made in terms of the research hypothesis. Numerous brief explanations of these inferential methods are also provided in order to emphasize their use in the present study.

#### 4.3.1 Gender differences in job stress and burnout

- Hypothesis 1: There is no statistically significant difference in stress and burnout amongst employees based gender.

**Table 4.2**

**Independent Samples T-test to determine gender differences in job stress and burnout**

	Levene's Test for Equality of Variances		t-Test for Equality of Means						
	F	Sig.	t	Df	Sig (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
TotalStress Equal variances assumed	1.551	.216	-2.785	85	.007	-92.441	33.193	-158.439	-26.444
Equal variances not assumed			-2.742	69.145	.008	-92.441	33.709	-159.685	-25.197
TotalBurnout Equal variances assumed	.204	.653	-2.081	85	.040	-8.100	3.893	-15.841	-.359
Equal variances not assumed			-2.023	65.858	.047	-8.100	4.004	-16.095	-.105

Table 4.2 depicts whether there are significant gender differences in job stress amongst employees in the FMCG Western Cape. The results indicate there are statistically significant differences in stress based on gender in stress ( $t = -2.742$ ,  $p < 0.05$ ). The p-value (Sig 2 tail) is less than alpha (0.05). The null hypothesis is therefore not rejected. A similar finding for the burnout component was also found ( $t = -2.023$ ,  $p < 0.05$ ). The null hypothesis is therefore not rejected.

### 4.3.2 Differences in job stress based on biographical variables

- **Hypothesis 2:** There is no statistically significant difference in stress and burnout amongst employees based on based on biographical characteristics.

**Table 4.3**

**ANOVA illustrating differences in stress based on the biographical variables**

		Sum of Squares	Df	Mean Square	F	Sig.
Age	Between Groups	114690.919	4	28672.730	1.162	.334
	Within Groups	2023253.426	82	24673.822		
	Total	2137944.345	86			
Population /Ethnic group	Between Groups	102641.467	3	34213.822	1.395	.250
	Within Groups	2035302.878	83	24521.721		
	Total	2137944.345	86			
Education	Between Groups	46906.716	1	46906.716	1.907	.171
	Within Groups	2091037.628	85	24600.443		
	Total	2137944.345	86			
Years of experience	Between Groups	102750.799	4	25687.700	1.035	.394
	Within Groups	2035193.546	82	24819.433		
	Total	2137944.345	86			
p<0.01**						
p<0.05*						

Table 4.3 reflects the results for ANOVA depicting the differences in job stress based on the biographical variables such as population (ethnic group), education, age, and years of experience. The results indicate there are no statistically significant differences in stress based on the variables age ( $F = 1.162$ ,  $p > 0.01$ ), ethnic group ( $F = 1.395$ ,  $p > 0.01$ ), education ( $F = 1.907$ ,  $p > 0.01$ ), and

years of experience ( $F = 1.035, p > 0.01$ ). The null hypothesis is therefore accepted as proposed in Hypothesis 2.

### 4.3.3 Differences in burnout based on biographical variables

- **Hypothesis 3:** There is no statistically significant difference in burnout amongst employees based on age, population group and years of employment.

**Table 4.4**

**ANOVA illustrating differences in burnout based on the biographical variables**

		Sum of Squares	df	Mean Square	F	Sig.
Age	Between Groups	1041.379	4	260.345	.782	.540
	Within Groups	27282.552	82	332.714		
	Total	8323.931	86			
Population	Between Groups	1038.015	3	346.005	1.052	.374
	Within Groups	27285.916	83	328.746		
	Total	28323.931	86			
Education	Between Groups	20.419	1	20.419	0.61	.805
	Within Groups	28303.512	85	332.982		
	Total	28323.931	86			
Years of experience	Between Groups	2196.389	3	549.097	1.723	.153
	Within Groups	26127.542	83	318.629		
	Total	28323.931	86			

$p < 0.01^{**}$

$p < 0.05^*$

Table 4.4 indicates that the results for ANOVA depicting the differences in job burnout based on the biographical variables such as population/ethnic group ( $F = 1.052, p > 0.01$ ), education ( $F = 0.61, p > 0.01$ ), age ( $F = 0.782, p > 0.01$ ), and years of experience ( $F = 1.723, p > 0.01$ ). The results indicate there are no statistically significant differences in burnout based on the biographical variables as ( $p > 0.05$ ) for all the variables (see Table 4.4). The null hypothesis is therefore accepted.

**Table 4.5**

**Cronbach's Coefficient Alpha - Stress**

	<b>Cronbach's Alpha</b>	<b>No of items</b>
<b>Experiences</b>	.939	<b>40</b>
<b>Circumstances</b>	.849	<b>23</b>
<b>Expectations</b>	.916	<b>53</b>
<b>Total</b>	<b>.917</b>	<b>116</b>

WESTERN CAPE

Table 4.5 indicates that the stress subscales have acceptable Cronbach alpha values since they are above 0.70.

**Table 4.6**

**Cronbach's Coefficient Alpha - burnout**

	<b>Cronbach's Alpha</b>	<b>No of items</b>
<b>Depersonalisation</b>	.813	<b>9</b>
<b>Cir</b>	.810	<b>5</b>
<b>Expectations</b>	.809	<b>8</b>
<b>Total</b>	<b>.770</b>	<b>22</b>

The Cronbach's Coefficient Alpha in table 4.5 was calculated to determine the reliability of the various instruments used to determine job stress and burnout. The results indicated the *Experience of Work and Life Circumstances Questionnaire (WLQ)* is a reliable instrument as the coefficient alpha is above 0.70 (Pallant, 2010). The Questionnaire measures a coefficient of 0.917. The reliability of a measure indicated the extent to which the measure is without bias (error free) and therefore gives consistent measurement across time and across the various items in the instrument (Sekaran, 2001). The results indicate this is therefore a very good questionnaire in measuring the stress among employees as the coefficient alpha is above 0.90. The burnout questionnaire has a coefficient alpha of 0.770 (Table 4.6). The Cronbach's alphas are above 0.70 and thus indicating that the questionnaire is reliable.

#### 4.4. CORRELATION RESULTS



The first correlation objective was to determine whether a relationship exists between the two constructs: occupational stress (as measured by the *WLQ*) and the dimensions of burnout as measured by MBI). The relationship with regards to the different variables was undertaken through the calculation of the Pearson product-moment coefficient. The correlation between the Stress and total burnout was also calculated.

##### 4.4.1 The relationship between occupational stress and burnout

- There is a significant positive relationship between Occupational Stress and Burnout (Depersonalisation; Emotional Exhaustion and Reduced Personal Accomplishment).

**Table 4.7**

**Inter-Correlation Matrix (Total Stress and Total Burnout Dimensions)**

		Total Burn	DepTotal	EETotal	DimTotal
Total Stress	Pearson Correlation	0.202	0.012	.232	.136
	Sig. (2-tailed)	.103	.922	.61	.277
	N	87	87	87	87

\*\*. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

**Total Burn = burnout; DimTotal = Diminished Feeling of Personal Accomplishment; DepTotal = Depersonalisation and EETotal = Emotional exhaustion)**

The results in Table 4.8 confirm there is a low correlation, definite but small relationship between stress and burnout ( $r = .202$ ,  $n = 87$ ,  $p > 0.01$ ). There is, however, also a slight relationship for the relationship between the stress and the Depersonalisation variable ( $r = .136$ ,  $n = 87$ ,  $p > 0.01$ ), as well as the emotional exhaustion variable ( $r = .012$ ,  $n = 87$ ,  $p < 0.01$ ).

Hypothesis five can therefore be accepted, there is thus a statistically significant relationship between depersonalisation and stress total. While hypothesis three and four can be rejected as the relationship between the variables is non-significant.

#### **4.4 CONCLUSION**

This chapter provided an overview of the most important findings which emerged from this empirical analysis. The statistical results were tabulated to illustrate the results of the current study.

In the next section, the discussion of the findings obtained and compared is presented as well as compared to other research previously conducted in this field. The limitations of this study will also be highlighted and future recommendations will be proposed with regards to improving the study.

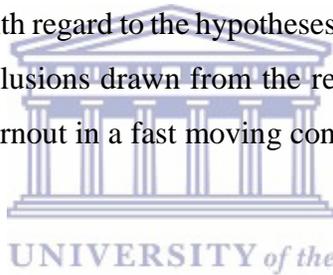


## CHAPTER FIVE

### DISCUSSION OF RESULTS, CONCLUSION AND RECOMMENDATIONS

#### 5.1 INTRODUCTION

The problems associated with occupational stress and burnout have been highlighted and placed in the context of the objectives of the study. The aim of this study was to explore the relationship between occupational stress and burnout and to determine whether significant differences in means exist in terms of gender, age and Ethnic Group, years of experience and education. This chapter presents the findings of the study with regard to the hypotheses postulated in chapter two and tested in chapter four. The resulting conclusions drawn from the research as well as recommendations for future research on stress and burnout in a fast moving consumer goods company (FMCG) are also provided.



**5.2 Hypothesis 1: There is no statistically significant difference in stress and burnout amongst employees based on gender.**

##### 5.2.1 Impact of gender

The results in this study indicate males (Mean = 447.89, SD = 158.862) experience lower job stress than females (Mean = 540.33, SD = 146.937); a similar finding was observed for burnout. Females (Mean 65.5, SD = 16.734) indicated that they experienced higher burnout than males (Mean 57.4, SD = 19.304). The results indicate there are statistically significant differences in stress based on gender and the null hypothesis was therefore not rejected. A similar finding for the burnout component was also found ( $t = -2.023, p > 0.01$ ). This is consistent with the findings of Schmaus, Laubmeier, Boquiren, Herzer and Zakowski (2008); Liu, Spector and Lin Shi (2008) as cited by Makhbul and Hasun (2011). These researchers found there is evidence indicating women are both more psychologically and physiologically reactive to stressors than men. Furthermore studies also suggest that females experience more physical and emotional symptoms than their male

counterparts (Flynn, Schipper, Roach, & Segerstrom, 2009). Similar findings were reported in the study of stress in the teaching field conducted by Bearschank (2010), the results indicate that males experience lower mean job stress (Mean = 3.50, SD = 1.260) than females (Mean = 3.70, SD = .889). The results indicated statistically significant differences in stress based on the number of years of experience ( $F = 3.769$ ,  $p < 0.01$ ) as well as on gender ( $F = 1.988$ ,  $p < 0.01$ ) and the age of respondents ( $F = 3.175$ ,  $p < 0.05$ ). Many researchers are also of the opinion that women have more stress than men. This could be attributed to females having a more committed attitude towards their jobs as well as having more barriers to conquer to obtain their positions (Van Zyl, 2002).

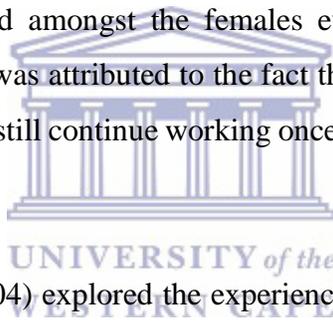
Females also had higher depression and anxiety than their male counterparts (Yali, Yaman & Yaman, 2003). This finding is supported by Bezuidenhout and Cilliers (2010) who argued that female academics in higher-education institutions face numerous challenges in the continuously changing landscape of the South African higher education. In a study by Klassen and Chiu (2010) a sample of 1430 teachers were used to examine, *inter alia*, the relationship among teachers' years of experience and stress. Female teachers were found to have greater workload and greater classroom stress from student behaviour together with lower classroom management self-efficacy. Teachers with greater workload stress had increased classroom management self-efficacy, whereas teachers with greater classroom stress had lower self-efficacy and lower job satisfaction. Black women also often find themselves in executive positions without having the essential skills, knowledge or support and thus resulting in high stress levels. Aamodt (2004) maintains role inconsistency and uncertainty in female employees are some of the factors contributing to higher levels of stress amongst females. The author noted when females have challenging roles, it could result in tremendous stress. Cooper and Davidson (1983 as cited in Aamodt, 2004) also found males and females respond in a different way to a variety of stressors. Some researchers could not find any significant gender differences in stress Martocchio and O'Leary (1989, as cited in Aamodt, 2004). Research by Borg and Riding (1991) indicates females tend to report greater stress due to time pressure compared to males.

Cladellas and Castelló (2011) revealed professors whose classes were held in the early morning or late evening hours reported a less healthy perception of themselves as well as a higher number of stress symptoms. Results showed no differences related to gender, but significant differences were found in the gender-teaching shift interaction. Early/late class hours showed a stronger effect on females. The authors further state that as a university professor's has the autonomy to arrange his or her work time and in doing so balance work and personal life, this may have an impact on preventing illnesses and stress symptoms. It is not so much a question of general time management as the avoidance of time conflicts with highly valued personal activities. This effect was most notable in the women in the sample, who showed a preference for a female social role that gives priority to family (Borg & Riding, 1991).

However, not all studies show similar findings. Pietila and Rytkonen (2008) argued that men's stressful lifestyle was accredited to their larger labour market tasks and as being the traditional breadwinner role in families in comparison to women's lesser demands in the home front. Men's larger responsibilities were observed to affect their health because of their 'innate' susceptibility to stress. In a study by Vagg, Spielberg and Wasala (2002) males reported stress more strongly related to concerns about their roles than females reported. Female employees are also more keen on reporting discrimination and role conflict in comparison to men, which could mainly contribute to women's alleged stress (Flynn et al., 2009). Groot and Van den Brink (1999) found for males but not for females if work with stress pays more relative to work without stress, workers are more likely to accept a job with stress. Groot and van den Brink (1999) further state that there are large and statistically significant differences in stress levels between industries. Among males, workers in the food and clothing industry the chemical and metal industry and in construction, report stress in their work significantly less frequently than workers in the public services sector. Among female workers in the food and clothing industry, the trade and catering industry and the transport and communication industry have less work-related stress than public sector workers. In this current study, the food industry was used as the industry background and therefore a similar result was observed as there were no significant differences between males and females reported stress.

Brand (2007) reported work/home interface as a predictor of burnout which could possibly be indicative of the dual roles which nurses fulfil in terms of their roles in the house as well as work. Having taken into consideration that the majority of the respondents were female, there was thus the possibility that development of burnout was due to the stress caused by an inability to balancing these two roles.

Wright (2007) confirmed the penalty of experiencing job strain was apparently more rigorous for females than for males. The author reported that females who were found to experience job strain also had higher systolic blood pressure in comparison to females with a lower job strain. The females in the study experiencing a high job strain were also found to have an elevated systolic blood pressure in comparison to males in either high-strain or low-strain jobs. Higher elevated levels of strain were also reported amongst the females even after they had left their work environment. Much of this strain was attributed to the fact that most females who are employed tend to be mothers and wives; they still continue working once they return home perform domestic responsibilities.



Iwasaki, MacKay and Ristock (2004) explored the experiences of stress among both female and male managers by making use of a series of single-sex and mixed focus groups. Watson, WahGoh and Sawang (2011) also reasoned that their research has identified that men and women differ in their stress and coping processes. It is also anticipated that these distinct gender differences could possibly lead to the development of more precise and effective individual stress management programs which can account for both the rapidly changing gender mix of today's workplace as well as the unique response styles of each gender to occupational stress; a notion supported by Gardner, Rose, Mason, Tyler, and Cushway (2005). These authors acknowledge a need (from an identified theoretical viewpoint) for the development of stress management programs, rather than the historically unsuccessful 'one-size fits-all approach' which is adopted by most organisations.

### **5.3 Hypothesis 2: There is no statistically significant difference in stress amongst employees based on age, population group and years of employment.**

#### **5.3.1 Impact of age**

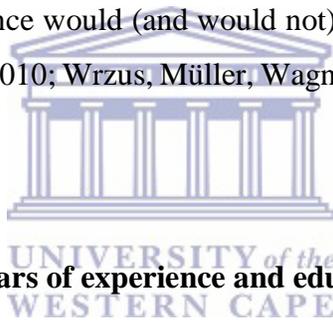
In this current study the ANOVA depicted no difference in job stress based on age. This is, however, contradictory to a recent study by Afza, Mutjaba and Habib (2011). Younger workers were found to have more stress. This could be due to older employees having more experience in their work. Bearschank (2010) indicates there is a statistically significant relationship between the age and the stress of teachers at high risk schools in the Western Cape respondents ( $F = 3.175$ ,  $p < 0.05$ ).

Maslach (1982 in Williams & Van Tonder, 2009) found age, marital status and gender to be related to stress and burnout. This is in contrast to Calvert, Flynn, Fraser and Long (1991) which reported a non-significant relationship between age in their study on stress and burnout. Karasek and Theorell (1990) investigated the relationship between selected demographic variables and stress and did not find a significant relationship between age and stress amongst a sample of teachers. In a study by Naylor (2001) it was reported young teachers experiencing high stress levels and anxiety to such an extent that they even contemplated suicide.

A study by Warren, Schafer, Crowley and Olivardia (2013) indicated burnout amongst healthcare professionals with the analyses of variance and backward regression analyses revealing higher levels of burnout for females being of a younger age and overweight, working longer hours and having less experience. Overall the data suggested emotional exhaustion was the most common aspect of burnout as experienced by eating disorder treatment providers while it also highlighted some of the key correlates of burnout for this population, which can be used to provide information for prevention and intervention efforts.

Some studies on the effect of stress and age have shown reduced levels (Brose, Schmiedek, Lövdén, & Lindenberger, 2011; Rook, 2003; Stawski, Almeida, Lachman, Tun, & Rosnick, 2010; Uchino, Berg, Smith, Pearce, & Skinner, 2006) while others have confirmed to be amplified (Mroczek & Almeida, 2004); others have found no age differences in the negative emotional

response to stress (Röcke, Li, & Smith, 2009). Research on age differences in emotional responses to daily stress has therefore produced inconsistent findings (Scott, Sliwinski & Blanchard-Fields, 2013). The results of their study, however, indicated older adults' negative affect (NA) were less affected by exposure to recent stressors than compared to younger adults. There was, however, no age differences on the effects of stressor exposure 3–6 hours afterward. The authors reported there were no age differences in the effect of previous exposures to stress or severity on PA, or any interactions between momentary or previous stress and global perceived stress (GPS) on PA. The results therefore supported the notion that chronic stress plays a central role in the emotional experiences in daily life. The Socio-emotional theories of aging (Carstensen, Fung, & Charles, 2003) explain how adults maintain their emotional well-being in relation to age. They, however, do not provide detail about the boundary conditions under which such age-related preservation and enhancement in emotional experience would (and would not) be observed. More recent theories (Charles & Piazza, 2009; Charles, 2010; Wrzus, Müller, Wagner, Lindenberger, & Riediger, 2013) reported the same findings.



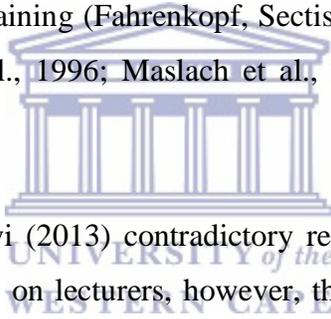
### **5.3.2 Impact of Ethnic Group, years of experience and education**

The present study indicates there is no statistically significant relationship between ethnic group and the stress of employees. Findings of Bearshanck (2010) depicted the same findings with no statistically significant relationship between ethnic group and teacher stress at high risk secondary schools in the Western Cape. A study by Bester and Van Zyl (2001) indicated Black semi-skilled and illiterate employees' levels of stress were significantly higher than the skilled and literate group. Dressler (1989) links high levels of stress in senior Black employees to the broad social context within which these individuals function. Typical examples include, personal home life affected by devoting extra time to work, physical threats in townships, inadequate housing facilities, family problems, poor health, social problems and insufficient recreation facilities. A study by Ngidi and Siyaba (2000) revealed Black teachers' working conditions are frustrating and demoralising and cause high levels of stress due to physical conditions such as overcrowding, inadequate equipment and lack of facilities. This is a consequence of the disparities in financial provisions of the apartheid era in South Africa. Empirical research revealed that township or

previously disadvantaged Black school teachers experience moderate to high levels of stress (Ngidi & Siyaba, 2002). Prins (1995) believes Black employees experience a variety of difficulties in the workplace, such as work overload, time pressures, inadequate training opportunities, poor communication, little participation in decision-making and stereotypical prejudice.

Brand (2007) conducted a study on stress, burnout and race group and found White nurses' emotional exhaustion (dimension of burnout) scores were significantly higher than Coloured or Black nurses. Similarly, the scores on personal accomplishment also revealed a higher mean score for White nurses than any other group, however, they were not found to be significant. Pelzer, Mashego and Mabebe (2003) reported a higher stress level amongst White doctors in comparison to other ethnic respondents. The author indicates this could be due to the historical situation in South Africa, with White doctors having been practicing in the profession for a longer duration and were thus reporting an accumulated effect of stress as well as burnout. This too could have been applicable to the current organisation; should the findings have revealed White males as reporting higher stress scores. It was also reasoned White nurses could be experiencing greater difficulty in adapting to the current changes within the healthcare system especially with regards to lack of Government financial support as well as staff shortages. In considering the sources of stress variables which predicted the greatest amount of variance in dimensions of burnout (workload & work/home interface) it was seen fit as arguing with regards to race differences, Coloured and African nurses could very well have a stronger support network in terms of their professional as well as personal relationships. The author further reasons it could be explained as a result of cultural differences (e.g. collectivism) which refer to a society where a person is integrated into a strong, cohesive in-group from birth onwards and throughout their life-time to protect them in exchange for unquestioning loyalty. In South Africa traditionally the Coloured and African families consist of extended families (often including grandparents, children and grandchildren in one household) (Bearschank, 2010). It is therefore possible that the support in terms of the number of individuals which are available to maintain the household, could also have an impact on the lower levels of burnout reported of colour in comparison to the white respondents. The results of the study conducted by Brand (2007) indicated the level of income did not have any impact on the levels of depersonalisation and emotional exhaustion (both dimensions of

burnout) between the different ethnic groups. In the analysis with personal accomplishment as the dependant variable significant differences were reported. The study reported no significant differences in stress in terms of years of experience or education. However, overall it was found that the differences reported by emotional exhaustion (dimension of burnout) from the different race groups, were possibly explained by a variety of factors which included the number of years of profession, the level of education as well as the ranking (or level of seniority) of the employee. According to Warren et al. (2013) with regards to the demographic variables (although the results appear to be more somewhat more mixed) research generally suggests having a lesser amount of work experience (Ballenger-Browning, Schmitz, Rothacker, Hammer, Webb-Murphy & Johnson; 2011; Prosser, Johnson, Kuipers, Dunn, Szmukler, Reid & Thornicroft; 1999), being younger (Ackerley, Burnell, Holder & Kurdek, 1988; Brown & Pranger, 1992; Garner, Knight & Simpson, 2007) and having less education/training (Fahrenkopf, Sectish, Barger, Sharek, Lewin, Edwards & Landrigan, 2008; Maslach et al., 1996; Maslach et al., 2001) are factors which positively correlated with burnout.



In a more recent study by Adebisi (2013) contradictory results revealed gender and years of experience did not influence stress on lecturers, however, the different faculties differed in the stress they experienced. Working harder and longer hours (specifically for those employees in some demanding professions) with lecturing included resulted in an increased workload, for employees with a mountain of uncompleted work, especially where there is too little time.

### **5.4 Hypothesis 3: There is a significant positive relationship between Occupational Stress and Burnout**

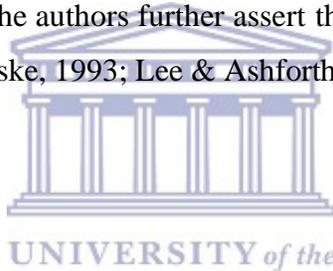
#### **5.4.1. Relationship between dimensions of burnout and occupational stress**

The results revealed that emotional exhaustion and total stress depicted a weak correlation. This is not similar to Schaufeli (2003) who argues that emotional (plus cognitive) exhaustion together with depersonalisation can be seen as being the core components of burnout as well as being viewed similar to Meijman and Schaufeli's (1996) description regarding the construct of occupational fatigue. Schaufeli (2003) further explains the concept of emotional exhaustion refers

to employees ceasing to perform what is required, when all forms of physical and mental energy is drained. Depersonalisation or psychological withdrawal from the task is to be viewed as a coping mechanism in relation to the excessive demand of work and feelings of exhaustion.

In this study a positive relationship was found between the depersonalisation component and stress. This finding is also similar to Brand (2007) whose study showed a significant positive relationship between occupational stress and two of the dimensions of burnout; emotional exhaustion as well as depersonalisation. With regards to the relationship between occupational stress and emotional exhaustion as well as depersonalisation; the results replicated previous findings in stress-burnout research domain. The Total Stress correlated with the emotional exhaustion component of the MBI – which Maslach and Jackson (1981) indicate as being the most widely used measure of burnout. The authors further assert that emotional exhaustion depicts the essence of burnout (Koeske & Koeske, 1993; Lee & Ashforth, 1993).

### **5.5. Limitations of the study**



A number of limitations to this study are identified. Firstly, the number of employees used in this study can be seen as having been too small and the data obtained from the research is therefore not very generalisable. The sampling size (n=110) was thus too small and a suggestion for future studies would be to rectify this. It is therefore recommended a larger sample size be used. In this current research undertaken, all the employees worked in the same organisation, the introduction of bias could therefore not be ignored. A larger sample with more representation from the different areas of production and work areas would have allowed a more comprehensive analysis in terms of differences in the sources of stress experienced in the various departments. There are various divisions within a production facility. Another limitation and future recommendation would thus be to include the various departments. In some areas there could be more stress due to a higher performance expectation, for example the fast-paced filling division versus another section where less stress can manifest e.g. weighing section where accuracy is of utmost importance

Many studies focus on one employer and because of specific samples which may over select individuals with regards to one or more of these perplexing characteristics. Kleiner and Pavaiko (2010) suggest it is imperative to investigate these relationships with samples that are nationally representative. The study could therefore come more generalizable.

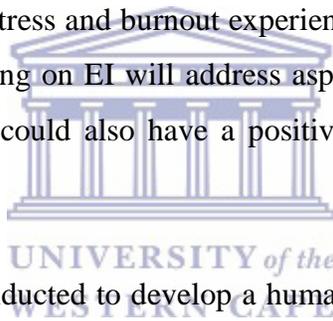
Perhaps the inclusion of more biographical factors such as: the inclusion of marital status, level of income as well as number of children will further reveal more as to the effects of stress. The study was also confined to one factory only and combined administrative as well as factory staff. The use of the staff could have thus been treated separately, per factory which ensure homogeneity. There was also only a single indicator of stress used instead of a battery of items (making use of more than one questionnaire).

Furthermore, the instruments used MBI (Maslach, Jackson & Leiter, 1996) and Experience of Work and Life Circumstances Questionnaire WLQ) are self-report measures. Criticism related to using such self-report measures have been highlighted and refer to respondents attempting to create a more favourable impression of themselves when completing such instruments. In addition and with specific reference to occupational stress and burnout, researchers do not always have control over the environment in which respondents are employed or the additional home stress to which they could be exposed. The possible influence of situational and time specific variables to which the respondent is exposed at the time of the assessment should be considered, e.g. possible unstable home environment as well as relationships; possible re-employment in another section. It is therefore suggested cultural and work/home interface be explored, to provide more detail on the specific aspects within the relationship components that contribute to higher and lower reported stress and burnout.

It was also not asked or recorded from the participants to find out the number of hours they worked as well as the time of day when they do their work. It would therefore be advisable should any further research be conducted to include these factors. Although night shift seems to be declining, the work day has, however, ever more expanded since the 1970s to include the early and evening hours (Hamermesh, 1999). Recent studies have linked the stress and exhaustion of overtime work

to a higher rate of job-related injury (Dembe, Erickson, Delbos & Banks, 2005) and those subjected to greater time pressure with depression (Roxburgh, 2004). An even larger limitation of this study, is the conceptualization of work time in terms of an employees' hours. In addition to physical exhaustion and increased work-related hazards, extending working hours reduces time on hand to spend in other social settings such as one's family (Voydanoff, 1994) which in turn increases stress as it reduces time for essential activities such as cooking and physical exercise.

Brand (2007) investigated the role of Emotional Intelligence (EI) as a moderator in the stress and burnout relationship. The dimension of EI which was found to be the greatest predictor of burnout. The author concluded in general, a focus on the development of effective interpersonal relationships and skills, combined training on the various aspects of EI, would also have a significant impact on the level of stress and burnout experienced by the individuals employed in the nursing profession. Such training on EI will address aspects such as management of anger, stress and anxiety, which in turn could also have a positive impact on both professional and personal relationships.



Future research should also be conducted to develop a human resources costing and accounting model for the South African environment and in doing so to effectively determine what the financial implications of absenteeism, presenteeism and turnover intentions due to occupational stress are (Mostert, Mostert, Nell, & Rothmann, 2008).

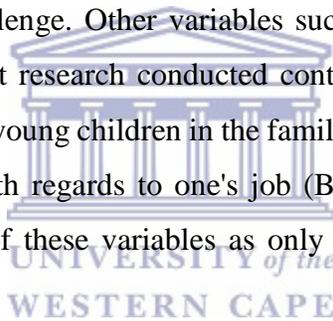
Finally, in order to obtain more valuable information regarding possible interventions, it will be necessary to investigate which of the burnout dimensions would predict the greatest variance in occupational stress.

## **5.5 Future recommendations**

Brand (2007) who conducted a study on stress (in the medical industry) and burnout reported results of a sample of 220 individuals who were divided into two groups; overtime (employees permanently employed, but work additional overtime) and contract staff (contracted by an agency).

A future study could therefore include the addition of this valuable information and interesting data could therefore be obtained from the comparison of such results.

In a follow up study, perhaps even a longitudinal one can be done to assess the levels of stress of the employees some time down the line (perhaps 5-7 years). Barnett (2006) states longitudinal data on job and health assists in separating the influence of physical conditions on how much or when employees work from the consequences of work time on wellbeing. Perhaps the use of an interview in order to obtain extra information would also be of benefit. By the addition of this qualitative data this also makes the research more replicable. Any future research focus should be on developing longitudinal designs where conclusions in terms of the cause and effect of stress can be drawn. Considering the extensive research on stress, suggesting areas for future research in South Africa could pose a challenge. Other variables such as occupation as well as within the family unit, makes it essential that research conducted control for essential covariates such as sexual category, the occurrence of young children in the family, earnings, race, level of education, job characteristics and attitude with regards to one's job (Barnett, 2006). Further research can therefore look into including all of these variables as only some were included in the current research.



According to Perrewe, Rosen, Halbesleben, Christopher and Cunningham (2014), Religion as well as spirituality are factors which influence occupational stress and well-being. Although this was not included in this study, any future studies would benefit by the inclusion of this aspect, namely that the relationship with an Ultimate being is undeniably important.

Employment type (contract or permanent) was not investigated in this study. It was also not asked or recorded of the participants to indicate the number of hours they worked as well as the time of day when they do their work. It would therefore be advisable that should any further research be conducted these variables should be included as well. Although night work may be on the decline, the work day has increasingly expanded since the 1970s to cover early morning and evening hours (Hamermesh, 1999). Recent research has linked the stress and fatigue of overtime work with a higher rate of work-related injury (Dembe, Erickson, Delbos & Banks, 2005), and greater

subjective time pressure with depression (Roxburgh 2004). An even greater limitation of this study is the conceptualisation of work time in terms of individuals' hours. In addition to physical depletion and increased occupational hazards, extending work time decreases time available to spend in other social arenas such as one's family (Voydanoff, 1994), which may increase stress and reduce time for healthy behaviours such as food preparation and exercise.

There is limited research on stress and burnout amongst the fast moving consumer goods industry in a South African context, therefore reference had to be made to other professions/organisations as well.

## 5.6 Practical implications of the current study

- Healthy productive employees are needed with a reduced susceptibility to stress and development of burnout. Through the implementation of practical interventions, as well the development of selective and effective coping strategies, the reduction of stress is possible. Such interventions should include: Stress management programmes and coping strategies as well as employee programmes. Such employee programmes need to focus on employees' total physical and mental condition and in doing so the organisations are in a position to monitor the employee's condition consistently.
- Employees working in a FMCG environment are often limited to repetitive jobs with limited space for development or promotions. They are also often exposed to dangerous machinery and have to often work shifts therefore job redesign, the modification of shift work systems as well as offering occupational health training is essential. It is therefore crucial for the employees in the FMCG environment to be considered for job redesign and job enrichment (Visser & Rothman, 2008), to create more meaningful tasks and add variety into job to prevent work overload, job rotation in order to gain as much experience as well as limit the onset of boredom and thereby facilitate a more challenging and interesting work as well as provide much needed variation to their work by doing other types of tasks too.
- According to Gilham (2014), burnout, from the organisational perspective is a process whereby an employee, who otherwise having been previously committed, becomes disengaged from their job as a result of the stress and strain due to the job. The proper

organisational approach would be to address “the lack of fit between the employee and their job setting” from the organisation’s perspective. It is thus imperative that competent and best fitting employees be hired and placed into the posts to prevent poor staff members and not fitting into their jobs.

- Although this study found no significant stress between age and stress, there is plethora of literature opposing this finding and it is thus recommended to organisations to provide coaching and mentoring to younger inexperienced employees.
- Proper and adequate training on the use of the machines and what to do in case of emergency is vital to prevent tragedies from occurring. Organisations therefore need to train their team managers on how to handle and deal with stressful situations in order to assist the employees better.
- Management should make use of effective communications to shape the perceptions of employees with regards to their understanding of organisational demands, pressures or opportunities (Robbins & Judge, 2016). Meyer (2012) further informs us of the benefits in addressing organisational support, especially the relationship that employees experience with their supervisors. Clarity regarding their job descriptions, they should also be provided with feedback in terms of improving their job performance as well as the extent to which they are allowed to partake in any decision-making processes (Coetzee & Rothmann, 2007).

## 5.7 Conclusion

The current research was conducted to measure the effect of stress and burnout on employees in the fast moving consumer goods / production environment. Both white and blue collar workers were included. The results indicate there are statistically significant differences in stress based on gender; no differences in job stress based on age. The results also revealed that emotional exhaustion and total stress have a small correlation.

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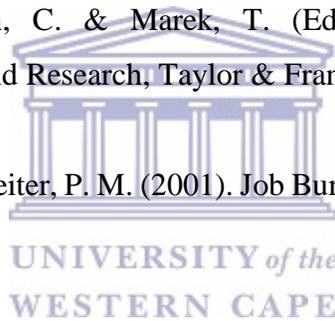
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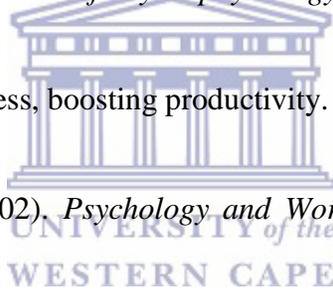
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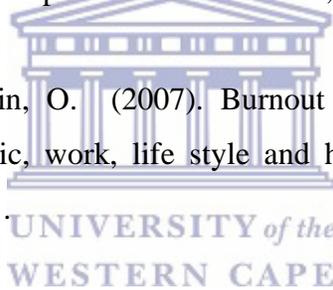
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