ANALYSIS OF INDICATORS OF STRESS AMONG EMPLOYEES IN MAFIKENG

OPAWOLE AKINTAYO AYODEJI

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BY

OPAWOLE AKINTAYO AYODEJI

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THIS MINIDESSERTATION WAS SUPERVISED

BY

PROF. MICHAEL TEMANE

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DECLARATION

I DECLARE HEREWITH THAT THE MINI-DISSERTATION ENTITLED, **ANALYSIS OF INDICATORS OF STRESS AMONG EMPLOYEES IN MAFIKENG** WHICH I HEREWITH SUBMIT TO THE NORTH-WEST UNIVERSITY AS COMPLETION/PARTIAL COMPLETION OF THE REQUIREMENTS SET FOR THE MASTER IN BUSINESS ADMINISTRATION DEGREE, IS MY OWN WORK AND HAS NOT ALREADY BEEN SUBMITTED TO ANY OTHER UNIVERSITY.

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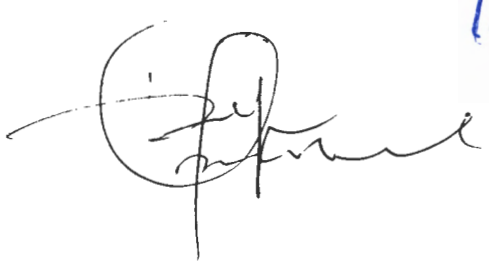

DEDICATION

This mini dissertation is dedicated to my family for loving me so much.

Thank you for the love, Dotun, Olaomoju, Oluwatobi, Agboola, Adunola, Moni, Remi, Seun, Kola, Rotimi, Seun Odewole, Femi and Kunle.

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ABSTRACT

Stress elicits certain reactions in the employee. Stress creates a demand on the body and the mind. The reaction of the employee depends on whether the interaction has a positive effect or a negative effect on the employee. A positive effect in the form of a happy feeling will most likely have a positive effect at the work place. However, a negative effect will also have a negative impact on his/her work

In the study, the researcher looked at the negative reactions found in a group of employees and the extent to which these signs and symptoms were present in the study sample. The study was also to find out if there were correlations between variables such as job satisfaction, satisfaction with life and distress.

The data obtained was categorized into different aspects related to the research questions, sub-problems in order to meet the aims and objectives of the research. Descriptive statistics, namely frequencies and percentages for categorical data, was used to interpret the information obtained.

The responses of each participant were then categorized into low, moderate and high perception of stress. This was done for both the Perceived Stress Scale and the Zung Scale.

Correlations between all variables were then calculated. The influence of stress on job satisfaction was done by linear regression analysis, using each perception of stress scale and the job satisfaction scale.

Most of the perceived stress common symptoms found in the present study were related to loss of self esteem and decreased optimism. Majority of the participants in the study had a high degree of stress. The study showed that perception of stress also correlated with level of job satisfaction. A high perception of stress correlated with low job satisfaction and a low perception of stress correlated with high job satisfaction.

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CHAPTER ONE: INTRODUCTION

THE EMPLOYEE AND THE PHENOMENON OF STRESS

An employee interacts on a daily basis with his or her environment. The world can be seen as an external environment. The employee is not isolated in his or her existence. The interaction between the employee and the environment is one that requires adequate balance for proper functioning. Functioning in this context refers to all elements of psychosocial life not just at work. Work-life is the most important interaction to the employer. However, the quality of work performance by an employee is intertwined and highly dependent on all other aspects of life. Work cannot be viewed in isolation. The employee is affected by all sorts of situations and problems in his or her environment. The external environment can be viewed in terms of interactions between the employees, family and friends, the work and work place relationships with colleagues and employers. The interaction at the workplace also involves the employee, the economic environment, socio-political and technological conditions in his or her environment. Analysing all these interactions will lead us further into all aspects of the employee's life. All these interactions with various aspects of human life have a bearing on his or her life.

The interactions elicit certain reactions in the employee. They create a demand on the body and the mind. Hence they are referred to as stressors. The reaction depends on whether the interaction has a positive effect or a negative effect on the employee. A positive effect in the form of a happy feeling will most likely have a positive effect at the work place. However, a negative effect will also have a negative impact on his/her work.

Stress can be defined as arousal of the mind and body in response to demands made upon them. Stress can be positive or negative. Negative stress will lead to distress. Distress is either too much arousal or too little arousal, resulting in harm to the body or mind (Schafer, 1987). Distress reveals itself in the human being in various symptoms as

warning signals. Stress is more likely to manifest in some situations than others and in some individuals than others. Stress can undermine the achievement of goals, both for individuals and for organizations. (Michie, 2002)

INCIDENCE OF DISTRESS AMONG EMPLOYEES IN MAFIKENG

The interest in this problem of distress has been generated from personal interactions with other people and perceptions in the community. Personal discussions with other medical practitioners in Mafikeng gave an impression that there is a high prevalence of stressed employees in Mafikeng. The researcher is a medical practitioner in Mafikeng.

One of the major concerns among a lot of medical practitioners in the Mafikeng community is the level of requests for sick leaves and reasons for the sick leave. The work place is also concerned about the amount of work days lost to such leaves. A lot of departments are also concerned about the work performance of their staff.

The interest of this study is to find out how, employees in this community, exhibit signs of stress and if it is related to their job or other variables such as satisfaction with life.

The main aim of this study was to find out the level of stress among employees in the Mafikeng community how they exhibited outward signs of stress.

Sub – problems are as follows:

1. What is the employees' perception of stress?
2. Is there any relationship between job satisfaction and stress?
3. Determine relationships between the various variables (perceived stress, clinical manifestation of stress, satisfaction with life and job satisfaction)

AIMS AND OBJECTIVES

In this study, the researcher looked at the negative reactions found in a group of employees and the extent to which these signs and symptoms were present in the working

populace. The study will find out if there are correlations between variables such as job satisfaction, satisfaction with life and distress.

The reaction to distress is a state of mind that is negative and has an immense impact on the performance of duties by those that exhibit these symptoms. The impact goes beyond only their work places and it extends fully into all aspects of their social life. Among those that exhibited these symptoms, the researcher found out which symptoms and signs were present and their relationship to job satisfaction and other variables.

The effects of stress of a negative nature are immense. They have to do with the level of absenteeism in the working place, occupational safety, the amount of time in performing tasks and relationships at work to mention a few (Schafer, 1987). The study aims to find out the prevalence of these symptoms.

HYPOTHESES

1) There are a significantly high number of employees in Mafikeng with symptoms of distress.
2) The relationship between these symptoms of distress and job satisfaction is significantly high.
3) That the early warning symptoms and signs are more common than the outwardly clear symptoms of severe distress, hence most workers in distress are not identified on time.
4) That high level of job satisfaction is related positively to low level of stress.

JUSTIFICATION FOR THE STUDY

There is an **unsubstantiated** general perception that there is a high degree of distress among employees in Mafikeng. In the community, general opinion that things do not get done or will not get done properly is common. There are no reasons available that serve as concrete evidence as to why the perception is like this. The study aims to identify the prevalence of distress and the most likely symptoms and signs of distress amongst employees. The research will give an insight into which symptoms may be present and

the most common ones among employees, and steps that can be taken to correct such situations. A relationship between satisfaction with life, job satisfaction and perceived stress will be established.

The results of the study would help workplace managers to change their perception towards those that exhibit the symptoms. The distressed can be helped and this can be instituted early, and employees can be channelled towards a more productive attitude.

The beneficiaries of the study are 1) managers, 2) medical practitioners in Mafikeng 3) employees in general and 4) the community. Human resource departments in various units stand to gain immensely from this study. Those identified above would be able to conceptualize the extent of the problem of distressed employees. They would be able to handle employees with these symptoms better than before because they may have another perspective to the problem.

Medical practitioners can also have a better understanding of the extent of stress with particular emphasis on the pattern, most common presentation in our community and other related aspects of stress within the Mafikeng community.

The community, as a whole, would understand the problem and, therefore, make possible changes where necessary. Family life and work life can be improved if identification of symptoms is done among those with high possibility of distress. Treatment can be instituted early and better outcomes can be achieved.

The study can increase awareness among employees and other readers about the presence of the symptoms of distress.

ASSUMPTIONS OF THE STUDY

1) Distress is detrimental to effective human functioning;
2) Distress is costly to the individual, organization and the community; and
3) Stressed individuals have poor job satisfaction.

DELIMITING THE RESEARCH

The research was limited to Mafikeng. The subjects were drawn from the working class. Any working adult, who resided and visited a physician's surgery, was eligible to participate in the study. Any type of legal work was acceptable for the study. The sample size was between seventy and one hundred workers.

OVERVIEW OF THE STUDY

The study report has five chapters.

Chapter 1 dealt with employees and the phenomenon of stress and focused on reasons generating interest on the subject of stress among the Mafikeng employees. The chapter dealt with the aims and objectives of the study and sub problems. Hypotheses and assumptions related to the study were included in this section. Delimitation of the study was done in this chapter.

Chapter 2 focused on related literature review. The chapter showed related studies done previously and showed previous trends related to stress that had been investigated and the conclusions by various authors. The validity of the different scales used in the measurement of various variables was dealt with in this chapter.

Chapter 3 dealt with the research methodology.

Chapter 4 depicted the results of the study.

Chapter 5 was a discussion of the results and the conclusions that were made by the researcher. Recommendations based on the results were also included in this chapter.

SUMMARY

The study aims to identify the common presentation of stress among employees in Mafikeng. The main research questions and sub questions were identified and the rationale for the study provided.

CHAPTER 2: LITERATURE REVIEW

INTRODUCTION:

Stress occurs as a result of interaction between an individual and a situation. It is the physiological and physical state that results when the resources of the individual are not sufficient to cope with the demands and pressures of the situation (Michie, 2002). Everybody experiences anxiety, stress or tension at some or other stage in our lives. Failure to cope with stress immediately or deliberately might overwhelm individuals and disable them to perform tasks at hand. Therefore, it is necessary to know about the effects of anxiety, stress and tension and how we can cope with them. Although many previous studies have looked at how stress influences various outcomes such as poor health (Schafer, 1987), few have looked at types of symptoms that are reported by employees in Mafikeng. Previous studies reviewed in this study were mainly Euro-American. The term 'stress' has been used to describe different the following constructs:

(a) External stressors;

(b) Demand from the environment as perceived by the individual; and

(c) A physiological response to threatening situations.

The negative effect of the two first constructs on mental health has been documented by several authors (Bovier, Chamot & Perneger, 2004).

The reaction to distress is a state of mind that is negative and has an immense impact on the performance of duties and job satisfaction by those that exhibit these symptoms. Among those that exhibit these symptoms, this study hopes to find out what these symptoms and signs are and if they are related to work and job satisfaction.

Stress can be seen as arousal of mind and body in response to demands made upon them. Stress can be positive or negative. Positive stress is arousal that contributes to health, satisfaction and productivity. Negative stress is distress. Distress is too much or too little arousal resulting in harm to body or mind. Experts estimate that anxiety disorders are the most prevalent psychiatric disorders in primary health care, accounting for 25% of all

presenting problems (Carey, 2004). A general practitioner seeing an average of 40 patients a day, will encounter 10 patients who will require specific intervention for anxiety and depressive disorders (Carey, 2004).

In a work environment, these disturbances may manifest themselves in the form of low productivity, worker dissatisfaction, conflict with co-workers, absenteeism, higher health insurance costs (Schafer, 1987). The adverse effects of these stress complications on personal health and organizations' growth and productivity, can be enormous, hence it is very important that appropriate preventive stress management programmes be formulated both at the individual and organization levels (Shankar & Famuyiwa, 1991). Stress can also increase cost substantially for the company and the society. Employment relationships generate stress related health care costs that are borne partly by the workplace and, partly, by the society at large. The distribution of such costs between the workplace and society depends on the governance practices of specific employers with regard to stress risk abatement and on the policies and programmes they have in place, to contain stress-related harm. However, there will continue to be residual stress related casualties in the workplace even when serious efforts to abate stress at its source by increasing control and reward have been implemented. This fact points to an ongoing need to maintain harm and cost containment measures, such as, health promotion and employee assistance policies and programmes. The role of these interventions in the context of well implemented stress risk abatement policies and practices is primarily to help employees help themselves (i.e. to support the capacities of individual employees to cope with stress and to look after themselves) (Martin, 1999).

STRESS AND WORKER'S HEALTH

Distress contributes to illness in many ways. These include, imposing long term wear and tear on the body and mind, and reducing resistance to disease. Distress directly precipitates an illness such as tension headaches. It aggravates an existing illness, such as, flare up of Psoariasis or worsening of Hypertension (Schafer, 1987)

In a study by Dishman, Nakamura, Garcia, Thompson, Dunn and Blair (2000), heart rate variability (HRV) provided a non-invasive, unobtrusive information about modulation of heart rate by the autonomic nervous system in a variety of dynamic circumstances. They observed that there was a small inverse relationship between perceived emotional stress during the past week and the normalized High frequency (HF) component of HRV. That relationship was independent of age, gender, trait, anxiety, and cardio-respiratory fitness. They concluded that the cardiac-vagal spectral component of HRV might be sensitive to the recent experience of persistent emotional stress, regardless of people's dispositions toward experiencing anxiety and their levels of physical fitness (Dishman et al., 2000).

The mental health of an employee is also affected by stress. In a study by Anders and Jehad (2006) that described how it was impossible for nurses to leave the stressful events related to their work behind them, participants reported having experienced stress related symptoms in some form. Examples of the symptoms included, somatic symptoms, panic, nightmares and hyper vigilance and intrusive memories that occur spontaneously. These all point to post traumatic disorders. Their study used measuring instruments that helped to elucidate the relationship between work contexts of employees and the symptoms that they experienced. Bovier et al., (2004) suggested that mental health was a central determinant of quality of life. In western countries, particularly in younger population groups, mental health disorders accounted for a large part of the overall burden of disease, as well as for a considerable share of health care utilization. Stress remained the strongest correlate of mental health in all linear regression models, which suggested a strong direct effect of perceived stress on mental health. Stress was consistently the strongest correlate of mental health, regardless of adjustment. The negative effect of stress on mental health was gradual, without evidence of a threshold (Bovier et al., 2004).

STRESS AND THE WORK PLACE:

The workplace is an important source of both demands and pressures, causing stress, and structural and social resources to counteract stress. The workplace factors that have been found to be associated with stress and health risks can be categorised as those that have to do with the content of work and also with the social and organisational context of work (Le Fevre, Matheny & Kolt (2003); Michie, 2002). Those that are intrinsic to the job include long hours, work overload, time pressure, difficult or complex tasks, lack of breaks, lack of variety, and poor physical work conditions (for example, space, temperature, light). Increasingly, the demands on the individual in the workplace reach out into the homes and social lives of employees. Long, uncertain or unsocial hours, working away from home, taking work home, high levels of responsibility, job insecurity, and job relocation, all may adversely affect family responsibilities and leisure activities. This is likely to undermine a good and relaxing quality of life outside work, which is an important buffer against the stress caused by work. In addition, domestic pressures, such as, childcare responsibilities, financial worries, bereavement, and housing problems may affect a person's robustness at work. Thus, a vicious cycle is set up in which the stress caused in either area of one's life, work or home, spills over and makes coping with the other more difficult (Michie, 2002). The conflict between home and work and the work impact on personal relationships is stressful. Also, physical conditions, such as, high noise levels, overcrowding in the workplace or lack of privacy, have been associated with stress (Fairbrother & Warn, 2003).

STRESS AND THE FAMILY:

With regard to family life, Zukauskas, Dapsys, Jasmontaite and Susinskas (2001) showed that family problems played a large role in police officers' lives and had a considerable impact on their sense of well being. Family problems were cited as a major source of stress because of low salaries, which were frequently insufficient to meet many family demands. Even though this study was specific to police officers, the study showed that society, stress inherent in work, family and other relationships could be a source of stress to an individual. Fairbrother and Warn (2003) citing Fletcher (1998) agreed that the experience of stress reactions in the workplace was not an isolated phenomenon.

In a large sample study of 7,099 employees from 13 different occupations, Sparks and Cooper (1999) reported significant statistical associations between a number of workplace factors and indicators of mental ill health, such as, free-floating anxiety, somatic anxiety and depression.

Women are especially likely to experience these sources of stress, since they still carry more of the burden of childcare and domestic responsibilities than men. In addition, women concentrated in lower paid, lower status jobs, may often work shifts, in order to accommodate domestic responsibilities, and may suffer discrimination and harassment. (Michie, 2002)

STRESS AND JOB SATISFACTION:

High levels of work stress are associated with low levels of job satisfaction, and job stressors are predictive of job dissatisfaction and a greater propensity to leave the organization. In the study by Fairbrother and Warn (2003), where they worked with naval sea trainees, their study showed that a positive working atmosphere was particularly important for the job satisfaction of trainees. They reported a positive learning environment aboard ship and rare or no incidence of harassment, or being fearful of others on board.

COSTS ASSOCIATED WITH STRESS:

Much attention has been given by researchers to the costs of these stress-related outcomes to the workplace itself in terms of absenteeism, higher insurance claims, lost efficiency and lost productivity These costs are real and not in dispute, although arguably many of them are passed on to consumers of goods and services in the form of high prices. Employment relationships generate stress related health care costs that are borne partly, by the workplace and partly by the society at large. The distribution of such costs between the workplace and society depends on the governance practices of specific employers with regard to stress risk abatement and on the policies and programmes they have in place, to contain stress-related harm (Martin, 1999).

A comprehensive approach to health promotion, stress reduction and limitation of health cost transference, from the workplace to the society at large, calls for a two-pronged strategy that is characterized by harm abatement, on the one hand, and harm containment, on the other. At a minimum, it would seem fair for society to insist that workplaces do no harm in a broader sense than is implied by the current occupational health and safety legislation in most jurisdictions (Le Fevre et al., 2003). Consequently, society should give priority to policies that encourage and require workplaces to do no harm (harm abatement) while supporting and possibly offering incentives for preventive and remedial programmes, such as, health promotion and Employee Assistance (harm containment) (Martin, 1999). The costs of occupational stress have been variously estimated. The International Labour Organisation (ILO) reported that inefficiencies arising from occupational stress, may cost up to 10 per cent of a country's GNP (Midgley, 1997). Cartwright and Boyes (2000) estimated that, in the UK, over 60 per cent of all workplace absences were due to stress, and although it was difficult to measure the total cost of occupational stress, estimates in the United States ranged from 200 to 300 billion dollars per year (Atkinson, 2000)

THE PERCEIVED STRESS SCALE (PSS)

The English version of the perceived stress scale was used in this study. It consisted of ten questions and this is the shot version of the PSS scale. Cole (1999) also concluded that the Perceived Stress Scale (PSS) was a widely used psychological instrument for measuring the perception of stress. In the study, it was shown that several items within the scale, exhibited statistically significant (p value < 0.05) differential item functioning by sex, race and/or education, none exhibited practically meaningful differential item functioning for the PSS-10 (PSS with ten items) in 2264 United States adults. The finding of relative item invariance to sex, race, and education suggested continued widespread use of the PSS-10. (Cole, 1999)

The PSS is a measure of the degree to which situations in one's life are appraised as stressful. Items were designed to tap how unpredictable, uncontrollable, and overloaded respondents found their lives. The scale also included a number of direct queries about

current levels of experienced stress. The PSS was designed for use in community samples with at least a junior high school education. The items were easy to understand, and the response alternatives were simple to grasp. Moreover, the questions were of a general nature and hence, were relatively free of content specific to any subpopulation group. The questions in the PSS asked about feelings and thoughts during the last month. In each case, respondents were asked how often they felt in a certain way.

The Perceived Stress Scale (PSS), developed by Cohen, Kamarck, and Mermelstein (1983), is being used with an increasing degree of regularity in a variety of samples. The PSS was designed to measure "the degree to which individuals appraise situations in their lives as stressful". Items evaluated the degree to which people found that life was unpredictable, uncontrollable, or overloaded. Remor (2006) in his study had objectives to ascertain the psychometric properties of the PSS in a larger, more diverse Spanish sample of both healthy and ill adults.

Remor (2006) used a translated Spanish version of the PSS and attempted to verify its reliability (related to internal consistency and test-retest), and secondly, to verify its validity with reference to an external criterion (concurrent validity), as well as validity related to sensitivity. A third objective was to test the utility of the PSS short version (10 items) in assessing perceived stress. A total of 440 participants were assessed during this validation study: 195 males and 240 females (and 5 participants of unspecified sex).

The mean age of the sample was 31.7 years (SD = 9.9; range 18-69 years). The level of perceived stress was evaluated by means of the PSS. This scale is a self- report instrument that evaluates the level of perceived stress during the last month, to address concurrent validity, indicated by the correlation between PSS (and PSS-10) scores and other instruments that measure similar constructs, the HADS-T (distress) and HADS-A (anxiety) scores were employed. A higher correlation was found with distress level in comparison with anxiety level.

The data from the study suggested that the 10-item version provided a reliable and valid measure of perceived stress for use in follow-up interviews and other situations where a

short scale was required. The results showed that the European Spanish version of the PSS (including the PSS 10) had adequate reliability (for both internal consistency and test-retest), as well as, adequate validity (concurrent) and sensitivity (variations in stress levels for subgroups of population). The study also confirmed that the European Spanish version of the questionnaire was easy to understand and quick to administer, supporting its practicality for use in everyday clinical and research practice. The conclusion from the study was that shorter versions made studies with multiple measures feasible, hence the recommendation of the use of the PSS-10 for future research (Remor, 2006).

ZUNG SCALE

Among the many self-report measures of depression developed thus far, the Zung Self-rating Depression Scale (Zung, 1965), has been one of the most popular and widely used since its publication in 1965. The Self-rating Depression Scale (SDS) consists of 20 items. Most investigators, however, use the total score of a measure as an index of depression severity. This seems to be only an approximate estimation of depressive symptomatology because many studies indicate that depression is a multifaceted phenomenon (Kitamura, Hirano, Chen, & Hirata, 2004).

Fountoulakis, Lacovides, Samolis, Kleanthous, Kaprinis, St Kaprinis and Bech (2001) in their study aimed to assess the reliability, validity and psychometric properties of the Greek translation of the Zung Depression Rating Scale. They used a Greek translation of the SDS scale and concluded that the scale was both reliable and valid and was suitable for clinical and research use with satisfactory properties. They also found from their results that although sensitivity and specificity were proved to be high, the interpretation of its results should be made with caution (Fountoulakis et al., 2001).

Dugan, Mcdonald, Passik, Rosenfeld, Theobald and Edgerton (1998) worked with cancer patients and also concluded that cancer patients experienced significant psychological distress throughout the course of their disease. Patients might go through periods of anxiety, anger, fear, and sadness. Medical professionals working with cancer patients,

needed to do a better job at recognizing and treating distress. They found that the Zung self rating depression Scale, was preliminarily found to be a reliable and valid indicator of depressive symptomatology in ambulatory cancer patients, although the readers should note that the ZSDS might have limitations in detecting other aspects of psychological distress such as anxiety (Dugan et al., 1998).

SATISFACTION WITH LIFE SCALE

In order to measure an individual's subjective well being (SWB) from the cognitive aspect, Diener, Emmons, Larsen, and Griffin (1985) developed the Satisfaction with Life Scale (SWLS). Considering that different people may have very different ideas about what constitutes a good life, the SWLS was developed to assess satisfaction with one's life as a whole (Diener et al., 1985). The five global evaluation items are as follows:

(a) In most ways my life is close to my ideal;

(b) The conditions of my life are excellent;

(c) I am satisfied with my life;

(d) So far I have gotten the important things I want in life; and

(e) If I could live my life over, I would change almost nothing.

(Wu and Yao, 2006)

Pavot and Diener (1993) showed that The Satisfaction with Life Scale had been used extensively since 1985 and had good psychometric properties. Its internal consistency reliability coefficients ranged from 0.79 to 0.89 (Pavot & Diener, 1993). Shevlin, Brunsden and Miles (1998) in their study on reliability of the SWLS, also showed from their results that the SWLS had sound psychometric properties. They concluded that

1) Each item and the scale as a whole functioned equivalently for males and female. It was necessary to demonstrate that as a prerequisite for combining responses for males and females in any substantive study using the SWLS.
2) The factor loadings and the reliability of the SWLS was high.

The SWLS was, therefore, chosen as a measuring instrument for subjective wellbeing in the present study.

CONCLUSION:

Stress is the response to stressors in the environment, and stress, by definition, is either eustress or distress or a combination of the two. In addition to the amount of stress they cause, stressors can be identified by a series of characteristics: namely, the timing of the stressor, the source of the stressor, the perceived control over the stressor, and the perceived desirability of the stressor. Whether stressors result in eustress or distress, depends on the individual's interpretation.

All the scales used in the study had been proved to have high reliability in each aspect of life that the researcher hoped to investigate.

The general literature above emphasizes the importance of stress as it impacts on the life of the employee, even though they do not directly indicate particular stressors. They show different aspects of stress which are important to the organization where these employees earn a living, and are also important to society at large. The present study hopes to shed more light on the presence of identifiable symptoms of stress and the perception about certain aspects of stress among the Mafikeng working community. It is of utmost importance that medical practitioners and employers are able to get a clearer picture of the presence of stress among employees, in order to make work environment more conducive. It will also help to ascertain the amount of resources that the community must commit to the mental health of the employee, so that the best results will be obtained from the employee.

CHAPTER 3: METHODOLOGY

It is important that the research design is able to get desired information from the study. The study was descriptive. The researcher hoped to determine the prevalence of stress within a group of workers in Mafikeng. The most common characteristics were identified and described. A description of relationship between stress and job satisfaction was also carried out.

PARTICIPANTS IN THE STUDY

The participants in the study were drawn from a pool of employees residing in Mafikeng. These workers were drawn randomly from patients attending a clinic in the Mmabatho area of Mafikeng.

The only characteristic the sample of workers should possess was that they should be legally gainfully employed and should be above 18 years old. The age limit was put in place in order to exclude working minors who would not be representative of the larger working population in Mafikeng. The assumption on age was based on the researcher's personal experience as a resident in Mafikeng.

RESEARCH METHODS

Sample

The sample included all workers that agreed to voluntarily participate in the study. The purpose of the study was adequately explained to the participants so that the participant could truthfully answer the study questions. The sample cut across any type of job. It was envisaged that this might be helpful in bringing out particular patterns of stress symptoms with particular job descriptions. It was, however, expected that the kind of jobs of the prospective participants would be skewed towards those that had had some form of formal training (academic or in-service training).

Sample size

The study involved 88 participants. The study size was determined solely on convenience and availability of time and resources. It was hoped that the sample size would give a fair representation of the general population of Mafikeng employees.

Sampling method

The sampling method used a non probability sampling approach which could be described as a **convenience sampling**. The method of sampling was chosen because of the reasons listed below

1) the participants were conveniently available;
2) The absence of definitive and reliable data on all workers in Mafikeng
3) The use of a defined random sampling method was not possible within the economic limits of the researcher. The random sampling technique would require a proper sample frame which might only in that case be obtained from the government, municipal authorities and such records were not easily available. The other alternative would be for the researcher to collate his own frame which will be financially impossible; and
4) The convenience sampling method allowed for easy access to participants and reduced problems related to administering the questionnaires.

DATA COLLECTION

Questionnaires

The survey data was obtained from the participants through their responses to specific questions in a questionnaire. These questions were in a predetermined format on the questionnaire. The questionnaire was formatted in such a manner that it ensured that the identity of the participant was not traceable. That had become necessary in order to allay fears of reprisal from the employers within the Mafikeng community who might use the end product of the study.

The self filling questionnaire was also chosen as a way of gathering information so as to reduce interference from the interviewer or any other outside influence. Dealing with the

topic of stress involved asking questions about the state of mind of these participants and undue influence might actually not allow them to answer the questions truthfully.

The use of a questionnaire also increased the probability of reliability of the results from the study because the questions were standardized. Every participant answered the same questions.

The language of communication was mainly English. The participants who could not read were assisted by an interpreter.

Description of the research questionnaire

The following were five sections of the research questionnaire.

1) Demographic Characteristics:- Demographic Characteristics dealt with information such as gender, age, marital status, educational level, race and duration of employment of the participant
2) Perceived Stress Scale: - The PSS measured response to questions related to subjective assessment of stress. Both positive and negative perceptions of stress were tested. There were ten questions in that section.
3) Zung Scale (ZS):- The ZS measured response related to the objective assessment of stress. The first part of the scale measured presence of cognitive symptoms while the second section measured physical signs of stress. There were twenty questions in that section.
4) Satisfaction with life scale (SWLS):- The SWLS measured response to questions about the extent that a participant is happy with life. There were five questions in that section.
5) Job Satisfaction Scale (JSS):- The JSS was modified from an initial battery of about forty questions. The modification was done to remove repetitions and reduce the lengthy questionnaire. The modification was done with the help of the professor from the department of psychology. There were twenty questions in the section that measured responses to questions related to job happiness.

The questions were simple and unambiguous. The questionnaire was very simple to interpret into the local language as some of the participants were unable to read English. Tswana is the dominant language in this part of South Africa. The questions were formulated in a way that the answer should be direct to the point. That was done in order to reduce ambiguity on the part of the participants which could eventually cause problems with interpretation of the results.

RELIABILTY OF SCALES

For this study, the chronbach's alpha score for each scale was determined, to ascertain the reliability of each scale. The Perceived Stress Scale had a chronbach's alpha score of 0.650, the Zung Scale had a score of 0.687, the Satisfaction with Life Scale had a chronbach's alpha score of 0.770 and the Job Satisfaction Scale had a chronbach's alpha score of 0.562. The nearer the Chronbach's alpha score to 0.70, the more reliable the scale becomes. The PSS, ZS and SWLS had the best reliability in assessing the desired characteristics peculiar to each scale. Below is the table depicting the reliability of all the scales.

Table 3.0: Reliability of each scale

Scale	Chronbach's alpha	Chronbach's alpha based on standardized items	No of items
Perceived stress scale	0.650	0.623	10
Zung scale	0.687	0.692	20
Satisfaction with life scale	0.770	0.778	5
Job satisfaction scale	0.562	0.565	20

DATA ANALYSIS

The data obtained would be categorized into different aspects related to the research questions, sub-problems and also met the aims and objectives of the research.

Descriptive statistics, namely frequencies and percentages for categorical data, would be used to interpret the information obtained. For certain categories, where necessary, standard deviations or medians and percentages for continuous data would be calculated.

The totals of all scales were calculated and frequencies were determined. As levels of stress were important to the study, the median of the scale was established to determine high and low levels of stress. A similar procedure was followed for both the perceived stress scale (PSS) and the Zung scale (ZS)

Correlations between all variables were then calculated, the main correlations done were between the following:

1) PSS and ZS;
2) PSS and SWLS;
3) PSS and JSS; and
4) SWLS and JSS

In other to determine if stress influenced job satisfaction, a linear regression analysis was calculated, using each perception of stress scale and the job satisfaction scale, and these were as follow

1) Perception (ZS) and JSS
2) Perception (PSS) and JSS

A qualified statistician used the statistical Package for the social sciences, to analyze the data that was obtained from the questionnaires in order to make conclusions that could fulfil the aims and objectives of the study.

METHODOLOGICAL AND MEASURMENT ERRORS

The methodological errors expected were as follows:

- That the sample size might not really be representative of the general population of Mafikeng employees;
- The research might be skewed towards a particular set of people within the town who use private health care;
- The use of a clinic base to obtain a sample might affect the results because of co-morbidity with other illnesses apart from the true feelings of the participants;
- The measuring instrument might have inherent flaws which were in conflict with cultural beliefs and other factors that might be difficult to totally remove from interfering with the thought process of the participants; and
- Measurement errors could arise from the type of questions in the questionnaire and its translation into the local language.

Measures taken to reduce these methodological errors were as follows

1) Making the questions short and direct and very easy to answer;
2) Avoiding ambiguous questions;
3) Using only interpreters that were well versed in English and the language of the participants;
4) Collecting information from any form of worker within the sample population so as to increase probability of representation of the general population;
5) The use of a standardized measuring instrument;
6) The measuring instrument was user friendly as possible in terms of length of questions and time to fill in the questionnaire.

PILOT STUDY

The sample size for the pilot study was 10 workers. The information obtained from them showed if the research questions would be answered correctly and with ease in a larger study. The participants in the pilot study were not included in the main study. The pilot study revealed that the questionnaire was participant friendly and the questions were clear.

ETHICAL ASPECTS

All the participants in the study took part voluntarily. Their consent was obtained after full information about the research was fully explained. Confidentiality was strictly implemented during the pilot and the main study. The rules related to research of relevant authorities such as the Health Professions Council of South Africa and the North West University were strictly followed. Permission for the study was obtained through the Graduate School of Business and Government Leadership from the Research Ethics Committee of the North West University and a copy of the research proposal was submitted to the ethics committee in North West University.

CONCLUSION AND SUMMARY

It is hoped that the information from the research will be of great relevance to society at large, and we, as a community, will be able to use the results to make better policies and develop strategies that will make employees more productive.

The identification of particular symptom patterns can also allow us to identify early warning signs among vulnerable employees before their productivity drops. This will encourage a pro-active approach towards the problem of stress at the workplace and at home.

88 participants were used for the study. Data was obtained using a questionnaire with five sections. The questionnaire measured perception of stress and investigated responses to satisfaction with life and satisfaction with the job.

Analysis of the data was done using descriptive categories, correlations and regression analysis.

CHAPTER 4: RESULTS

DESCRIPTION OF PARTICIPANTS

The results derived from the research data are depicted in various tables below:

The gender distribution of the participants is as follows:

TABLE 1: GENDER OF PARTICIPANTS

GENDER	Frequency	Percent	Cumulative Percent
MALE	41	46.6	46.6
FEMALE	47	53.4	100.0
Total	88	100.0	

The sample comprised of 88 participants of whom 41 (46.6%) were male and 47 (53.4%) were female

Table 2 depicted the age distribution among the participants in the study.

TABLE 2: AGE CATEGORIES OF PARTICIPANTS

Age	Frequency	Percent	Cumulative Percent
26-30	6	6.8	6.9
31 to 35	10	11.4	18.4
36 to 40	30	34.1	52.9
41 to 45	23	26.1	79.3
46 to 50	17	19.3	98.9
50 and above	1	1.1	100.0
Sub Total	87	98.9	
DNA	1	1.1	
Total	88	100	

Table 2 summaries the age categories of the participants. The majority of the participants were between the ages of 36 and 45 years. 53 participants were in that range, giving a total of 60.2% of all participants. The next group was between the ages of 46 to 50 years, who constituted 19.3 % of the sample

Table 3 below showed the marital status of the participants in the study

TABLE 3: MARITAL STATUS OF PARTICIPANTS

Marital status	Frequency	Percent	Cumulative Percent
married	45	51.1	51.1
single	23	26.1	77.3
divorced	12	13.6	90.9
widow	5	5.7	96.6
Living together	3	3.4	100.0
Total	88	100.0	

The participants were predominantly married (51.1%), the group was followed by those that were single (26.1%). Those that were divorced formed 13.6% of the sample and 3.4% were living together.

Table 4 depicts the educational level of the participants. It showed their highest level of formal education.

TABLE 4: EDUCATIONAL STATUS OF PARTICIPANTS

Educational status	Frequency	Percent	Cumulative Percent
matriculation	28	31.8	32.9
diploma	21	23.9	57.6
Bachelor's degree	20	22.7	81.2
postgraduate	16	18.2	100.0
Sub Total	85	96.6	
DNA	3	3.4	
Total		100.0	

Most of the participants had some level of formal education, the majority had written the matriculation examinations (31.8%), those with a diploma and a bachelors degree certificates were almost equally represented in the sample 21 (23.9%) and 20 (22.7%) respectively. Only 16 participants had a postgraduate degree certificate (18.2%).

Table 5 depicts the race of the participants in the study

TABLE 5: RACE OF PARTICIPANTS

Race	Frequency	Percent	Cumulative Percent
Black	88	100.0	100.0

All the participants were black as table 5 indicated

Table 6 depicts the occupation of the participants during the study.

TABLE 6: OCCUPATION OF PARTICIPANTS

occupation	Frequency	Percent	Cumulative Percent
Policeman	17	19.3	19.5
administrator	35	39.8	59.8
teacher	19	21.6	81.6
nurse	4	4.5	86.2
driver	2	2.3	88.5
policewoman	3	3.4	92.0
auditor	2	2.3	94.3
Self- employed	1	1.1	95.4
cleaner	1	1.1	96.6
artisan	3	3.4	100.0
Sub-Total	87	98.9	
DNA	1	1.1	
Total	88	100.0	

35 participants (39.8%) have administrative duties at their place of work. Teachers formed 21.6% of the sample while police personnel made up 21.7% of the sample. These were the prevalent occupation amongst the participants accounting for 70.7% of the sample size.

TABLE 7: NUMBER OF YEARS ON PRESENT OCCUPATION

Years	Frequency	Percent	Cumulative Percent
Less than a year	1	1.1	1.1
2 to 5	14	15.9	17.2
6-9	16	18.2	35.6
More than 10 years	54	61.4	97.7
DNA	3	3.4	100.0
Total	88	100.0	

The majority of the participants had worked for more than 10 years in their present jobs. That group made up a total of 54 participants, which translated into 61.4% of all participants. Above is Table 7 depicting the years of experience in their present jobs. Overall 70 participants (79.6%) had between 6 and 10 years or more of experience in the same job.

Table 8 depicts the frequency of how often the participants sought medical attention.

TABLE 8: FREQUENCY OF VISITS FOR MEDICAL ATTENTION

Range	frequency	percent	Cumulative percent
0-3 times in last 6 months	50	56.8	56.8
4-8 times in last 6 months	22	25	81.8
9-14 times in last 6 months	8	9.1	90.8
DNA	8	9.1	100
TOTAL	88	100	

The researcher also enquired if the participants had sought medical attention within the last six months. Below is the frequency table on how often participants sought medical attention within the stipulated period. The majority of the participants (56.8%) had sought medical attention between 0 to 3 times within the last 6 month.

Table 9 depicts the percentage of participants taking prescribed medication during the study.

TABLE 9: USE OF PRESCRIBED MEDICATION

Using prescribed drugs	Frequency	percent	Cumulative percent
Yes	49	55.7	55.7
No	16	18.2	73.9
DNA	23	26.1	100
Total	88	100	

The use of any form of medication was also ascertained by the researcher. Those that used anti-depressants and analgesics and other prescribed medication were 49 (55.7%). 16 participants (18.2%) were not on any prescribed medications.

DESCRIPTIVE STATISTICS

Table 10 below presents the descriptive statistics of all the variables used in the study. The minimums, maximums, means and standard deviations are depicted.

TABLE 10: DESCRIPTIVE STATISTICS OF VARIABLES

Scales	Min	Max	Mean	SD
ZS	35	76	45.79	7.46
PSS	0	30	22.47	5.351
SWLS	7	35	23.29	6.082
JSS	62	120	79.6	10.782

Note: ZS=Zung Scale; PSS=Perceived Stress Scale; SWLS=Satisfaction with Life Scale; JSS=Job Satisfaction Scale

Table 10 showed that the minimum score on the Zung Scale was 35 and the maximum was 76, the mean was calculated to be 45.79 and the standard deviation was 7.46. On assessing the Perceived Stress Scale, the minimum score was 0 and the maximum was 30, the mean was 22.47 and the standard deviation was 5.351. The minimum score on the Satisfaction with Life Scale was 7 and the maximum score was 35, the mean for this scale was 23.29 and the standard deviation was 6.082. The range of the scores on the Job Satisfaction Scale was between 62 for the minimum score, and 120 for the maximum score. The mean was 79.6 and the standard deviation was 10.782

RELATIONSHIP OF ALL THE SCALES

Correlations of all variables were calculated as Table 11 below shows.

TABLE 11: CORRELATION OF VARIABLES IN THE STUDY

Scales	PSS	ZS	SWLS	JSS
PSS	1.00			
ZS	0.07	1.00		
SWLS	-0.38	0.11	1.00	
JSS	-0.30	0.06	0.33**	1.00
** correlation is significant at the 0.01 level (2-tailed)				
* correlation is significant at the 0.05level (2-tailed)				

This was done to find out whether the variables in the study are related or not. The table showed that perceptions of stress (PSS) and satisfaction with life were negatively correlated as would be expected theoretically (r = -0.38) and the former was also correlated with job satisfaction (as measured by the *Job Satisfaction Survey* (r = -0.30). The results also showed that satisfaction with life significantly influenced job satisfaction (r = 0.33). The negative correlations between the stress scales (PSS and ZS) and satisfaction with life scale and the job satisfaction scales simply indicate that the higher the level of stress, the lower the level of satisfaction with life and job satisfaction.

PERCEPTION OF STRESS

Two scales were used to measure stress, with one based merely on perceptions of stress, (PSS) and the other based on a clinical diagnosis of stress (Zung Scale). The latter is more objective in terms of determining stress while the former is more subjective.

TABLE 12: PERCEPTIONS OF STRESS BY PARTICIPANTS

	Categories of PSS		Categories of ZUNG	
Levels of stress	Frequency	%	Frequency	%
Low	1	1.1	2	2.3
Moderate	25	28.4	17	19.3
High	60	68.2	48	54.5
DNA	2	2.3	21	23.9
Total	88	100	88	100

DNA- Did Not Answer

Table 12 summarises perceptions of stress based on these 2 instruments. For the purpose of this study, the levels of stress were categorized in low, moderate and high.

Table 12 showed that there was agreement between the 2 scales in terms of levels of stress among the participants. That suggested that both the objective (Zung Scale) and subjective (PSS) measures of stress indicated that the participants in the study had high levels of stress. Participants were grouped into the different levels of stress using the total score on each of the scales.

CHAPTER FIVE: DISCUSSION

The main aim of this study was to find out the level of stress among employees in the Mafikeng community how they exhibited outward signs of stress. The sub-problems were to determine answers to the following research questions.

1. What is the employees' perception of stress?
2. Is there any relationship between job satisfaction variable and stress variable?
3. Determine relationships between the various variables (perceived stress, clinical manifestation of stress, satisfaction with life and job satisfaction)

The study looked at the negative reactions found in employees' responses to distress and the extent to which these signs and symptoms were present in the working populace. Among those that exhibited these signs and symptoms, the study found out which symptoms and signs were present and the relationship to work.

MAIN FINDINGS

Both the objective (Zung Scale) and subjective (PSS) measures of stress indicated that the participants in the study had high levels of stress.

In line with the aim of the study, the results showed that, on the perceived stress scale the five most common **negative** signs or characteristics over the last one month prior to the study were as follows:

Characteristic of **negative** perception of stress	frequency	Percentage of respondents
(PSS7) sometimes unable to control irritations in life	43	48.9% of respondents
(PSS 10) sometimes feeling that difficulties are piling up so high that you cannot overcome them	42	47.7% of respondents
(PSS8) sometimes unable to control important things in life	40	45.5% of respondents
PSS1) sometimes upset because of something that happened unexpectedly	37	42% of respondents
PSS9) Sometimes angry because of things that are outside your control	32	36.4% respondents

The most common **positive** characteristics were as follows:

(1) Respondents still sometimes felt things were going their way (53.4% of respondents); and

(2) Respondents sometimes or fairly often felt confident about their ability to handle their personal problems.

These findings were in keeping with the results of the study by Bovier et al., (2004). They came to the conclusion that the belief that one's resources were poor could lead to the appraisal that an event was unmanageable and thus stressful. Self-esteem also had direct beneficial effect on mental health, but whether self-esteem buffered the relationship between stress and mental health, was less clear than for mastery. When people feel good about themselves, they cope with stress better. They also concluded that social support was positively related to mental health in bi-variable analysis, but this relationship disappeared after they adjusted for internal resources and stress.

Neither social support subscale was independently associated with mental health, nor did they buffer the impact of stress on mental health. That observation suggested that social support exerted its beneficial effect by strengthening internal resources and/or diminishing perceived stress (an indirect effect)(Bovier et al., 2004). In the study by Abramson, Metalsky and Alloy (1989), based on the results of hierarchical regression analyses, their study found that optimism partially moderated the relations between stress and measures of psychological adjustment (viz. depressive symptoms and life satisfaction). In the study by Chang (1998), the author looked at the extent to which dispositional optimism moderated influence of life stress on psychological well-being. The conclusion in the study was that the findings for predicting depressive symptoms were consistent with those obtained in studies on hopelessness depression (Abramson et al., 1989). The findings in these studies above were in keeping with the present study. Most of the perceived stress common symptoms found in this present study are related to loss of self esteem and decreased optimism.

On the Zung scale which deals with cognitive and physical symptoms that depict stress. The most common **negative** affective and cognitive symptoms were as follows:

Characteristic of **negative** cognitive symptom of stress	frequency	Percentage of respondents
(Z9) feeling a little at a time that others will be better off if the respondents were dead	61	69.3% of respondents
(Z3) Respondent has crying spells or feels like it a little at a time	43	48.9%
(Z1)Respondent feels down hearted and blue some of the time	42	47.7% o respondents
(Z6) respondent some of the time finds it hard to make decisions	40	45.5%

The most common **positive** characteristic was that respondents still felt hopeful about the future most of the time (48% of respondents).

The five most common physical or somatic signs or characteristics were as follows:

Physical symptoms or characteristic	Frequency	Percentage
(Z16) Respondent's heart beats faster than usual a little at a time	44	54.5% of respondents
(Z14) Respondent noticed weight loss (subjectively or objectively) some of the time	47	53.4% of respondents
(Z15) Respondent had trouble with constipation a little at a time	48	50% of respondents
(Z20) Respondent feel restless and cannot keep still a little at a time	41	46.6% of respondents
(Z11) Respondent had trouble sleeping at night a little at a time	38	43.2% of respondents

It should be noted that, with regard to these most common physical or somatic symptoms or characteristics, most of the respondents only felt those symptoms a little at a time or sometimes. That meant that expecting an overt and clearly defined assertion that the symptom was always present would lead to a wrong conclusion that stress might be absent.

Previous literature review showed that depression symptomatology could be thought of as consisting of three discrete domains. Kitamura et al., (2004) performed a factor analysis for all the SDS items. The three factors extracted were namely, affective, cognitive and somatic.

Kitamura et al., (2004) reported that the Self-rating Depression Scale (SDS) items with high factor loadings on the first factor, included irritability, depressed affect, fatigue, and crying spells. That factor was interpreted as reflecting the **affective** symptoms.

The items with high factor loadings on the second factor included personal devaluation, emptiness, hopelessness and indecisiveness. Thus, the second factor was interpreted as reflecting the **cognitive** symptoms.

The items with high factor loadings on the third factor included decreased appetite, decreased libido, and psychomotor retardation. That factor was thus interpreted as reflecting the **somatic** symptoms. When the same analyses were conducted for the two sexes separately, virtually the same results were observed.

Therefore, SDS items could be divided clearly into three clinically interpretable domains, namely affective, cognitive, and somatic. These divisions correspond to psychopathological consideration as well as Zung's (1965) original proposal of the three domains. They also concluded that reviewed literature suggested that affective and cognitive symptoms were fairly consistent constellations across studies. Somatic symptoms were less consistent but had a potential to consistitute an independent constellation.

Similar to the study by Kitumura et al., (2004) symptomatology findings from this study could also be used by clinicians and Employee Assistance Programme (EAP) workers in Mafikeng, by using these subscales and most commonly identified symptoms under each domain to improve assessment of their patients. Also, new findings may be obtained by employing these subscales. The findings in this study may be used in a clinical setting.

For example, clinicians can use the subscales of the SDS to identify common symptom for early identification of stressed workers and also for monitoring throughout the course of treatment. They may also use the profile of the subscales of the SDS in selecting the treatment approach. It may be that cognitive behavioural therapy is more effective for patients with higher scores on cognitive symptoms (Kitamura et al., 2004).

RELATIONSHIP BETWEEN VARIABLES (measured with the scales)

The result shows that the perceived stress and the satisfaction with life are correlated in that high perception of stress means that satisfaction with life is low. This reaffirms the theoretical assumption (Negative correlation, r = -0.38).

In a study by Peterson et al., (2005), the authors looked at the relationship between orientation to happiness and life satisfaction. Considered individually, each of the orientations to happiness predicted life satisfaction, from small (pleasure) to moderate (engagement, meaning) degrees. A hierarchical multiple regression predicting life satisfaction was then computed, they then grouped the respondents in various ways on each of the three subscales (e.g., low versus high, low versus medium versus high, quartiles, quintiles, deciles, and so on) and graphed life satisfaction scores as a joint function of these groupings. Their conclusion was that, no matter how they grouped the respondents, the same patterns emerged: (a) somewhat higher life satisfaction scores for respondents simultaneously near the top of all three Orientations to Happiness subscales; and (b) notably lower life satisfaction scores for respondents simultaneously near the bottom of all three subscales. Respondents simultaneously low on all three orientations (or what might be called the ''Empty Life'') reported the least life satisfaction, whereas those simultaneously high on all three orientations reported the greatest life satisfaction. In their conclusion they also found out that many of the individuals who simultaneously scored low on all three orientations were likely depressed, anxious, or otherwise distressed. The present study affirmed that as well that distressed individuals had low satisfaction with life.

The present study also showed that perception of stress also correlated with job satisfaction. A high perception of stress correlated with low job satisfaction and a low perception of stress correlated with high job satisfaction. (Negative correlation, r = -0.30)

The results also showed that satisfaction with life significantly influenced job satisfaction. A high degree of satisfaction correlated with a high degree of job satisfaction and vice versa. (r = 0.33)

Rice et al., (1980) reviewed past work on relationship between job satisfaction and satisfaction with life and the review indicated clearly that the empirical job satisfaction/ life-satisfaction relationship was weak for aggregated samples. However, they were not ready to conclude that work and non work relations were so trivial a matter that it lacked policy or theoretical implications. They concluded that more research needed to be done to affirm the theory suggested from the review of previous work. Thus their position was that the philosophical, logical, and theoretical arguments in support of such an assumption remained compelling even if its current support was weak.

There is a difference of opinion from the results of the present study. Contrary to the results of the review done by Rice et al., (1980), the correlation between the two variables is high and significant. The results from the study supported the theory that a high degree of satisfaction with life directly correlated with a high degree of job satisfaction.

RELATIONSHIP BETWEEN SUBJECTIVE PERCEPTION OF STRESS AND OBJECTIVE CLINICAL SYMPTOMS OF STRESS

From the results, both measurements were in accord with each other. Most of the participants showed high presence of perceived stress (68.2% of participants) and most participants also showed a high presence of clinical symptoms, (54% of participants) that act as pointers to presence of stress.

RELATIONSHIP BETWEEN STRESS LEVELS AND JOB SATISFACTION

In line with the aim of the study, it was determined whether stress levels would predict job satisfaction. A linear regression analysis was calculated. The results showed that stress influenced 70.5% of the variance in job satisfaction. The contribution made by the subjective measure of stress (as measured by the *Perceived Stress Scale*) was significant ($t=12.24$, $p<0.01$, $\beta=0.84$) and the contribution made by the objective measure of stress (*Zung Scale*) was not significant ($t=0.08$, $p<0.94$, $\beta=0.05$). That suggested that perceptions were more important to job satisfaction.

RECOMMENDATIONS

Most of the participants worked for the government either at provincial or national level. It would be desirable for the government, as a major employer, to put in place measures to have early detection of signs of stress at the work place. This may be achieved through simple standardized questionnaires that are administered periodically. Suspected individuals can hence be referred for further assessment, and early intervention can be instituted before job performance begins to suffer.

The research was done at a general medical practice. The high presence of underlying perception of stress among the participants reaffirmed that stress related issues constituted a large percentage of reasons for visits to the health facility. The medical practitioners in the community should be made aware that the most common clinical symptoms were subtle in nature. Most of the participants still coped with other aspects of life and would not respond positively to what could be termed as classical symptoms of depression.

It should be publicised among employee assistance programme coordinators and medical practitioners that perceived stress by an individual at the workplace rather than objective measurement of stress had more influence on job satisfaction.

Common negative perception of stress, negative cognitive symptoms and physical symptoms of stress should be emphasized. This is achievable through employees-based mental health education programmes. This will help to develop a higher level of good mental health seeking behaviour among the e in the community.

Subjective perception of stress is actually more influential on job satisfaction. Therefore, it will be most rewarding for employers to implement strategies that will ensure stress free environment. This will impact positively on job satisfaction of the employees.

REFERENCES

Abramson, L. Y., Metalsky, G. I. and Alloy L. B. (1989). Hopelessness depression: A theory-based subtype of depression. *Psychological review*, Vol. 96 pp.358-372.

Anders, J. and Jehad, H. (2006). Work related post-traumatic stress as described by Jordanian emergency nurses. *Accident and Emergency Nursing*, Vol. 14, pp.89–96

Atkinson, W. (2000). When stress won't go away. *HR magazine*, Vol. 45, No.12 pp.104-110

Bovier, P.A., Chamot, E. and Perneger, T.V. (2004). Perceived stress, internal resources, and social support as determinants of mental health among young adults. *Quality of Life Research*, Vol. 13, pp.161-170

Carey, P. D. (2004). Worry, Anxiety and Tension – importance, identification and management in primary care. *SA journal of Continuous Professional Development.* Vol. 22, No 10, pp.560

Cartwright, S. and Boyes, R. F. (2000). Taking the pulse of executive health in the UK. *The Academy of management executive*. Vol. 14. No. 2 pp.16-24

Chang, E. C. (1998). Does dispositional optimism moderate the relation between perceived stress and psychological well-being? : A preliminary investigation *Personality and Individual Differences*. Vol. 25 pp233-240

Cohen, S., Kamarck, T. and Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior* Vol. 24, pp.385–396

Cole, S. R. (1999). Assessment of differential item functioning in the Perceived Stress Scale-10. *Journal of Epidemiology and Community Health*, Vol. 53, pp.319–320

Diener, E., Emmons, R., Larsen, R. J., and Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, Vol. 49, pp.71–75.

Dishman, R.K., Nakamura, Y., Garcia, M. E., Thompson, R.W., Dunn A.L., and Blair S.N. (2000). Heart rate variability, trait anxiety, and perceived stress among physically fit men and women. *International Journal of Psychophysiology* Vol. 37, pp.121-133

Dugan, W. A., Mcdonald, M.V., Passik, S. D., Rosenfeld, B.D., Theobald, D. and Edgerton, S. (1998). Use of the Zung self-rating depression scale in cancer patients: Feasibility as a screening tool. *Psycho-oncology* Vol. 7, pp.483–493

Fairbrother, K. and Warn, J. (2003). Work place dimensions, stress and job satisfaction. *Journal of Managerial Psychology* Vol. 18 No. 1, pp. 8-21

Fountoulakis, K. N., Lacovides, A., Samolis, S., Kleanthous, S., Kaprinis, S.G., St Kaprinis, G. and Bech, P. (2001). Reliability, validity and psychometric properties of the Greek translation of the Zung depression rating scale. *BMC Psychiatry*, Vol.1 No.6

Kitamura, T., Hirano, H., Chen, Z. and Hirata, M. (2004). Factor structure of the Zung Self-rating Depression Scale in first-year university students in Japan. *Psychiatry Research* Vol. 128, pp.281– 287

Le Fevre, M., Matheny, J. and Kolt, G. S. (2003). Eustress, distress and interpretation in occupational stress. *Journal of Managerial Psychology*, Vol. 18, No. 7, pp.726-744

Martin, S. (1999). The role of the workplace in the production and containment of health costs: the case of stress-related disorders. *International Journal of Health Care Quality Assurance incorporating Leadership in Health Services*, Vol. 12, No. 2, pp.I-VII

Midgley, S. (1997). Pressure points (managing job stress). *People management*. Vol. 3. No.14. pp 36

Michie, S. (2002). Causes and management of stress at work. *Occupation Environmental Medicine*, Vol. 59: pp.67-72

Pavot, W. and Diener, E. (1993). Review of the Satisfaction with Life Scale. *Psychological Assessment*, Vol. 5, No 2, pp.164-172

Peterson, C., Park, N. and Seligman, M.E.P. (2005). Orientations to happiness and life satisfaction: The full life versus the empty life. *Journal of Happiness Studies* Vol. 6, pp.25–41

Remor, E. (2006). Psychometric Properties of a European Spanish Version of the Perceived Stress Scale (PSS), *The Spanish Journal of Psychology*, Vol. 9, No. 1, pp.86-93

Rice, R. W., Near, J. P. and Hunt, R.G. (1980). Job satisfaction/ life-satisfaction relationship: A Review of Empirical Research. *Basic and Applied Social Psychology* Vol. 1, No. 1, pp37- 64

Schafer, W. (1987). *Stress Management for Wellness*, Holt, Rinehart and Winston Inc, Chicago, pp.6-9

Shankar, J. and Famuyiwa, O. (1991). Stress among factory workers in a developing country, *Journal of psychosomatic research*. Vol. 35. No. 23, pp.163-173.

Shevlin, M., Brunsden, V. and Miles, J. N. V. (1998). Satisfaction with Life Scale: analysis of factorial invariance, mean structures and reliability. *Personality and Individual Differences* Vol. 25, pp.911-916

Sparks, K. and Cooper, C. L. (1999). Occupational differences in the work strain relationship: towards the use of situation specific methods. *Journal of occupational and organizational psychology*, Vol. 72, pp 219-229

Wu, C. and Yao, G. (2006). Analysis of factorial invariance across gender in the Taiwan version of the satisfaction with life scale. *Personality and Individual Differences* Vol. 40, pp.1259–1268

Zukauskas, G., Dapsys, K., Jasmontaite, E., and Susinskas, J. (2001). Some psychological problems of police officers in Lithuania, *Policing Journal of Police Strategies and Management*, Vol. 24, No. 3, pp.301-309

Zung, W.W.K. (1965). A self-rating depression scale. *Archives of General Psychiatry*. Vol. 12, pp.63–70.

APPENDIX

CONSENT FORM

This questionnaire is part of a study for the fulfillment of a requirement for the awarding of a Master in Business Administration (MBA) degree at the North West University.

There are no right or wrong answers. Please answer the question truthfully.

The content of your answers will be **strictly** confidential. Your answers will not be used for any other purpose than for research.

I am willingly participating in this study

YES	NO

Signature_____

For office use only
Questionnaire No.

RESEARCH QUESTIONAIRE

Please answer the following questions. Indicate your answer by marking or ticking the appropriate space

Gender

Male		Female	

Age

18 to 25	26 to 30	31 to 35	36 to 40	41to 45	46 to 50	Over 50

Marital *Status*

Married	Single	Divorced	Widow	Living together

Present Education Level

matriculation	Diploma	Bachelor's degree	Post graduate

Race

Black	Indian	Colored	White

How long have you been employed in your present job

Less than a year	2-5 years	6-9 years	More than 10 years

Present occupation

How many times have you visited a health facility in the last 6 months?

Are you presently on any medications?

antidepressants	analgesics	others	1	2	3
		4	5	6	7

PERCEIVED STRESS SCALE

The questions in this scale ask you about your feeling and thoughts during the last month. In each case, please indicate with a check how often you felt or thought a certain way.

1) In the last month, how often have you been upset because of something that happened unexpectedly?

0	1	2	3	4
Never	Almost never	Sometimes	Fairly often	Very often

2) In the last one month, how often have you felt that you were unable to control the important things in your life?

0	1	2	3	4
Never	Almost never	Sometimes	Fairly often	Very often

3) In the last one month, how often have you felt nervous and stressed?

0	1	2	3	4
Never	Almost never	Sometimes	Fairly often	Very often

4) In the last one month, how often have you felt confident about your ability to handle your personal problems?

0	1	2	3	4
Never	Almost never	Sometimes	Fairly often	Very often

5) In the last one month, how often have you felt that things were going your way?

0	1	2	3	4
Never	Almost never	Sometimes	Fairly often	Very often

6) In the last one month, how often have you found that you could not cope with all the things that you had to do?

0	1	2	3	4
Never	Almost never	Sometimes	Fairly often	Very often

7) In the last one month, how often have you been able to control irritations in your life?

0	1	2	3	4
Never	Almost never	Sometimes	Fairly often	Very often

8) In the last one month, how often have you felt that you were on top of things?

0	1	2	3	4
Never	Almost never	Sometimes	Fairly often	Very often

9) In the last one month, how often have you been angered because of things that are outside your control?

0	1	2	3	4
Never	Almost never	Sometimes	Fairly often	Very often

10) In the last one month, how often have you felt difficulties were piling up so high that you could not overcome them?

0	1	2	3	4
Never	Almost never	Sometimes	Fairly often	Very often

ZUNG SELF RATING SCALE

Please read the statement and decide which option describes how you feel. Use the following levels for yourself rating.

1	2	3	4
A little at a time	**Some of the time**	**Good part of the time**	**Most of the time**

Circle the appropriate number 1, 2, 3 or 4

I feel down hearted and blue	1	2	3	4
Morning is when I feel the best	1	2	3	4
I have crying spells or feel like it	1	2	3	4
I feel hopeful about the future	1	2	3	4
I am more irritable than usual	1	2	3	4
I find it hard to make decisions	1	2	3	4
I feel that I am useful and needed	1	2	3	4
My life is pretty full	1	2	3	4
I feel that others would be better off if I were dead	1	2	3	4
I still enjoy the things I used to do	1	2	3	4

I have trouble sleeping at night	1	2	3	4
I eat as much as I used to	1	2	3	4
I still enjoy sex	1	2	3	4
I notice that I am losing weight	1	2	3	4
I have trouble with constipation	1	2	3	4
My heart beats faster than usual	1	2	3	4
I get tired for no reason	1	2	3	4
My mind is as clear as it used to be	1	2	3	4
I find it easy to do the things I used to do	1	2	3	4
I am restless and can't keep still	1	2	3	4

TOTAL ZUNG SCORE

SATISFACTION WITH LIFE SCALE

Below are five statements with which you may agree or disagree.
Using the 1 to 7 scale below, indicate your agreement with each item by crossing the appropriate in line with that item.

Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree

1) In most ways my life is close to my ideal

Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree

2) The conditions of my life are excellent

Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree

3) I am satisfied with my life

Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree

4) So far I have gotten the important things I want in life

Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree

5) If I could live my life over, I would change almost nothing

Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree

JOB SATISFACTION SURVEY

Please tick one number for each question that comes closest to reflecting your opinion about it using the choices below.

1	2	3	4	5	6
Disagree very much	**Disagree moderately**	**Disagree slightly**	**Agree slightly**	**Agree moderately**	**Agree very much**

1) I feel I am being paid a fair amount for the work I do.

1	2	3	4	5	6
Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much

2) There is really too little chance for promotion on my job.

1	2	3	4	5	6
Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much

3) My supervisor is quite competent in doing his/her job.

1	2	3	4	5	6
Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much

4) When I do a good job, I receive the recognition for it that I should receive.

1	2	3	4	5	6
Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much

5) Many of our rules and procedures make doing a good job difficult.

1	2	3	4	5	6
Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much

6) I like the people I work with

1	2	3	4	5	6
Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much

7) I sometimes feel my job is meaningless.

1	2	3	4	5	6
Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much

8) Communications seem good with this organization

1	2	3	4	5	6
Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much

9) Salary increases are few and far between.

1	2	3	4	5	6
Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much

10) Those who do well on the job stand a fair chance of being promoted.

1	2	3	4	5	6
Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much

11) My supervisor is unfair to me.

1	2	3	4	5	6
Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much

12) The benefits we receive are as good as most other organizations offer.

1	2	3	4	5	6
Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much

13) I do not feel that the work I do is appreciated

1	2	3	4	5	6
Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much

14) My efforts to do a good job are seldom blocked by red tape.

1	2	3	4	5	6
Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much

15) I find I have to work harder at my job because of the incompetence of people I work with.

1	2	3	4	5	6
Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much

16) I like doing the things I do at work

1	2	3	4	5	6
Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much

17) I have too much to do at work

1	2	3	4	5	6
Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much

18) I have too much paper work

1	2	3	4	5	6
Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much

19) My job is enjoyable

1	2	3	4	5	6
Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much

20) I feel a sense of pride in doing my job.

1	2	3	4	5	6
Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much