Stress and demographic factors affecting job satisfaction among academics in one South African University

By

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Dissertation submitted in fulfilment of the requirements for the degree of Master of Learner Support in the Faculty of Education at the North-West University, Vaal Triangle Campus.

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DECLARATION

I declare that this Master’s dissertation, which I hereby submit for the degree of Masters in Learner Support in the Faculty of Education at the North-West University, Vaal Triangle Campus, is my true and original work and has not been previously submitted for a degree at any institution and that due acknowledgement has been made in the references to all sources of information, print or electronic.

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Signature: ______________________________

Date: June 2015
ACKNOWLEDGEMENTS

I thank God Almighty who gave me strength and sustenance to complete this study.

I wish to express my sincere gratitude to the following:

- My supportive supervisor, Dr. Noorullah Shaikhnag, for his expert advice, guidance, and encouragement throughout the duration of this study.
- Dr Washington Dudu, for the guidance and timely feedback he offered to me. His advice and suggestions during the entire duration of the study were invaluable.
- Mr Maruma Naphtaly for his assistance with the statistical analysis of this research.
- I would like to thank Dr Hove Liberty for his assistance with editing the language aspects and his constant encouragement.
- I would also like to thank all Mafikeng campus academics who participated in the completion of the questionnaires, especially Dr Madiala Loate for her input, encouragement and unconditional support.
- My husband and children were always there for me when I felt discouraged and frustrated.
- I thank Dr Nnior Morake for her coaching and mentoring.
- I am also grateful to all members who gave their full collaboration and involvement in order for me to complete this research project. Without the support and guidance, I would not have been able to complete this research on time.
ABSTRACT

Academic staff members providing learning and teaching services are at risk of experiencing stress that may influence job satisfaction. Furthermore, external factors such as demographics may increase the level of stress as well as job satisfaction. The purpose of this study was to identify and examine the role of stress and demographic variables in determining job satisfaction among academic staff of the North West University (NWU) of the Mafikeng Campus. The primary focus for this study was to examine whether there was a negative correlation between stress and job satisfaction among academics and whether age, years of service, level of education and salary were positive predicting factors of job satisfaction among academics.

For this study, a sample of 60 academics from the Mafikeng campus was randomly selected using the simple-random sampling technique. A questionnaire method was implemented to obtain the data for this study. In generating relevant data, the researcher employed the quantitative research method using Cronbach’s alpha coefficient and Spearman’s rho test (SPSS). Statistical analyses were performed with the data collected in the Likert-type scale for level of satisfaction/dissatisfaction with each of four factors of job satisfaction and dissatisfaction as compared with each demographic variable. Statistically significant correlations were tested to determine whether significant different groups existed between the various groups. Additionally, this study examined if there is a statistical significant difference between job satisfaction and stress levels among academics. The findings for this study indicate that several correlations exist between stress, age, salary, length of service and level of education. To increase validity for future studies, there is need for a university wide sample size that includes all academics from the three campuses which will benefit overall research findings. The recommendations of the study are that there is need for target-specific research to be undertaken that focuses on interventions that can be implemented to reduce stress amongst academics. The current literature does not include best practices of how stress amongst academics can be addressed adequately.

Keywords: Academics, Lecturers, Job Stress, Job Satisfaction, University teachers.
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CHAPTER ONE

1.1 INTRODUCTION

This chapter looked at the introduction and background of the study, statement of the problem, purpose of the study and hypotheses as well as the aims and objectives of the study. It also provided the significance of the study. Furthermore, definition of terms, delimitations, limitations, and a summary of the chapter was also presented. Academic staff members providing learning and teaching services are at a risk of experiencing stress that may influence job satisfaction levels (Macklin, Smith, & Dollard, 2006: 131; Ahsan, Abdullah, Fie & Alam, 2009: 121). Furthermore, demographic factors, that is factors which are related to contextual and the external environment of the work, may increase the level of stress as well as job satisfaction levels (Ghafoor, 2012:31; Khalid, Irshad & Mahmood, 2012: 127). Such factors are thought to negatively affect job satisfaction or lead to job dissatisfaction. These factors comprise the background of one’s work and the environment setting. A good understanding of job satisfaction and factors associated with it helps institution management to guide academic employees’ activities in a desired direction. However, stress, in and of itself, can greatly impact job satisfaction levels (McAlister, Dolbier, Webster, Mallon & Steinhardt, 2006:183).

1.2 BACKGROUND OF THE STUDY

The nature of work in every organization is changing as it is driven by rapid advances in technology, globalization, and economic demand for increased operational productivity. These changes often have a negative impact on both individuals and organizations because they tend to result in increased work stress and decreased job satisfaction. Although the nature of work is changing across all organizations, the negative effects of change at work are not experienced equally by all individuals (Burke & Ng, 2006: 1). Whereas individuals are affected differently by work routines and technological advances, teaching within the organizational context of a university having different departments and fields of studies is specifically challenging. A university employs staff with diverse personalities and varying degrees of professional skills and qualifications that allow the staff to deal with dynamic situations which require frequent interaction and co-operation. The
environment of a university is highly demanding, and requires academics to be committed and devoted to their profession. Academics need to be emotionally involved with their profession as well as being mentally and physically balanced (Grandpur, Rehman, Khan & Khan, 2011:21).

Organizations are constantly re-examining ways to streamline production processes with the view to achieve best levels of efficiency. In the midst of this efficiency improvement, academic employees face an increasing workload due to the greater frequency of electronic communication. Commonly, academic employees are given fewer resources to manage their increased workload, such as less time for each project due to increasing responsibilities and less staff assistance. In recent years, the university sector has undergone large-scale organizational change, including restructuring and downsizing. At the same time, research from across the globe suggests an alarming increase in the occupational stress experienced by academic staff (Gillespie, Walsh, Winfield, Dua & Stough, 2001: 53).

Although the changes that academic workers are experiencing on the job can bring about opportunities, frequent changes in the workplace can also lead to increased work stress. Stress is considered to be any pressure which exceeds the individual’s capacity to maintain physiological, psychological and emotional stability. Stress is commonly associated with psychological, physical and behavioural strains or consequences. In addition, such strains or consequences which are associated with stress may influence academics’ perception and feelings of job satisfaction. Stress is anything that changes one’s physical, emotional, behavioural or mental state while the individual encounters various stimuli in their environment (Iqbal & Kokash, 2011:137).

Feeling “stress” at work is not unusual. Stress, as a phenomenon, has an inverse relationship with job satisfaction, which can be described as the quality of life at work as experienced by the employees, and the condition that could be promoted by social responsibility programmes executed by the employer (Iqbal & Kokash, 2011:137). In the workplace, it can serve to promote an individual’s motivation, performance, satisfaction and personal achievement. In other words, stress is
considered to be any pressure which exceeds the individual’s capacity to maintain physiological, psychological and/or emotional stability (Iqbal & Kokash, 2011:137). Work-related stressors can have a wide range of negative effects on individuals. Occupational stress is associated with increases in negative work-related outcomes such as job dissatisfaction, ill-health, absenteeism, high turnover and low productivity as indicated by Jackson and Rothmann (2006:75) as well as Kinman and Jones (2003:21). The employer’s cost of occupational stress-related illnesses and injuries continues to increase along with the rising costs of healthcare. Occupational illnesses and injuries not only increase the operational expenses of the organisation through medical and lost time expenses, but the cumulative effects of occupational stress can also distract from work through lost productivity. In addition, job satisfaction has been related to quality of life and life satisfaction in a broader sense. The link between work stress and job satisfaction has been well established in empirical research, with findings confirming that one of the most commonly cited predictors of job satisfaction remains work stress (McAlister, Dolbier, Webster, Mallon & Steinhardt, 2006:183).

Mark and Smith (2012:64) state that academics have a large number of competing roles such as teaching, research, seeking funding, writing papers, meetings, seminars and tutorial commitments. They found that 74% of academic staff were moderately stressed and nearly 15% were seriously stressed with academics the most negatively affected, followed by research assistants and professors. Furthermore, Mark and Smith state that stress levels in academic institutions are high compared to many other populations, and that stress has increased significantly over the last 15 years.

Job dissatisfaction resulting from stress can have a negative impact on academic employees. Job dissatisfaction is not uncommon. In addition to the negative impact that job dissatisfaction has on academic employees at work, a spill over effect is seen between satisfaction at work and dissatisfaction with other aspects of an individual’s life. For many individuals, their jobs are an important part of their life. For these individuals, job satisfaction impacts on work as well as satisfaction with life outside of work. However, a review of published research reveals that there appears to be a general agreement that job satisfaction is an effective reaction to a job that
results from the comparison of actual outcomes with those that are desired (Oshagbemi, 2003: 1210).

In recent years, professionals in workplace settings have recognized stress as a part of their work environment. As mentioned earlier, stress is commonly associated with psychological, physical and behavioural strains or consequences. Such strains or consequences associated with stress may influence academics’ perception and feelings of job satisfaction. Thus, stress is anything that changes the physical, emotional, behavioural or mental state while employees encounter various stimuli in their environment (Iqbal & Kokash, 2011:137).

Demand-control concepts suggest that high work demands and low worker control greatly influence and increase stress while equity concepts suggest that when the perception of work inputs and outputs are not equal and unfair, academic workers experience stress as well as job dissatisfaction. Frequently, academic staff positions are associated with high work demands and minimal to non-existent worker control that may often influence the perception of unfairness. University academic employees suffer work-related stress with high levels of dissatisfaction with pay and workload (McAlister, Dolbier, Webster, Mallon & Steinhardt, 2006: 184; Tytherleigh, Webb, Cooper & Ricketts, 2005: 42).

Watts and Robertson (2011:34) state that the Demands–Control Model (DCM) articulates job stress as the result of high workplace demands coupled with perception of low control. In contrast, the Job Demands–Resources model (JDR) proposes that stress results from interaction between job demands such as work overload and disruptive students and inadequate social, organisational, physical or psychological resources to meet these workplace demands. To clarify and attempt to find some common ground, Barkhuizen and Rothmann (2008: 321), argue for the centrality of individual cognitions who experience stress. This is dependent upon each academic’s appraisal of potential stressors as negative or threatening. However, research on external factors that represent work-life balance concepts may have additional influence on stress and job satisfaction in such working environments.
There are recent studies that have addressed job satisfaction among academic staff populations serving in the higher education context (Vuong & Duong, 2013:11; Duong, M.-Q. 2014:80; Paul & Phua, 2011:141-142). The factors that have been identified to influence job satisfaction among tertiary education academics were demographically related. These include, age, education level, gender, salary and length of employment. Similarly, researchers are exploring the outputs of job satisfaction/dissatisfaction through measuring variables of involvement and commitment (positive-outcomes) and absenteeism and turnover (negative results) to show different work-related attitudes which emerge from job satisfaction and dissatisfaction (Saif, Nawaz & Jan, 2012:34).

According to Ghafoor (2012:31), intrinsic factors are those factors which are related to internal satisfaction which are also treated as motivators and satisfiers. Examples include achievements, recognition, responsibility, advancement and growth. While extrinsic factors are those factors which are related to the external environment of the work, these factors are also known as hygiene factors. Examples include administration of the organization and its policies, supervisory behaviour, relationship with superiors, working environment, salary, relationships with co-workers, relationships with subordinates, status, personal life, and safety measures.

On the contrary, the level of an individual’s job satisfaction is affected by intrinsic and extrinsic motivating factors, the quality of supervision, social relationships within the working group and the degree to which the individual experiences success or failure in their work. Most studies (Khalid, Irshad & Mahmood, 2012: 127; Aggarwal & Medury, 2012: 39; Malik, 2011: 267) suggest that academics put more emphasis on intrinsic satisfiers, but other studies (Saner & Eyupoglu, 2012: 1021; Toker, 2011:157; Ghafoor, 2012: 31) suggest that a mix of intrinsic and extrinsic satisfiers are best predictors of academic job satisfaction. Intrinsic satisfaction can come from teaching activities, whereas, extrinsic factors have been associated with academic staff’s satisfaction, including salary, perceived support from supervisors and co-workers, university safety, and availability of university recourse (Khalid, Irshad & Mahmood, 2012: 127). Therefore, external and internal factors may increase the level of stress as well as job satisfaction among academic staff, and also impact various intervention techniques such as stress management and coping strategies.
Work represents an important context for studying the wellbeing of individuals, especially because it provides a source of income that impact on various life roles, since it demands a significant part of the individual’s time and energy. Work also provides a large emotional cost to academic employees’ wellbeing and puts a considerable financial burden on organisational performance. This facet plays a tremendous role in academics’ lives as it is a significant source of income, personal realization, and professional improvement. One of the central roles of work in academics’ lives, job satisfaction, is an important component of one’s general well-being as well. Work occupies a large part of each academic’s day, and, naturally, affects one’s physical and mental health (Saner & Eyupoglu, 2012:250). In accordance with the stress definitions mentioned earlier, this study conceptualizes academic job satisfaction as academics’ affective reactions to their work or to their teaching role (Zembylas & Papanastasiou, 2005: 436).

The most popular and influential theory of workplace stress which identifies the stressors as key factors in the onset of stress-related illness is the Demand-Control-Support Model, which predicts that high levels of job demands (external pressures and workload), low levels of job control (over events, and chance to use skills), and low levels of social support (from supervisors, colleagues, feedback) are associated strongly with negative health outcomes. This model predicts interactions between demands and control, and demands and social support so that control and support buffer the negative effect of job demands on health outcomes (Mark & Smith, 2012:65). On the other hand, equity concepts suggest that when the perception of work inputs and outputs are not equal and unfair, academic workers experience stress as well as job dissatisfaction.

The second popular model, is the Effort-Reward imbalance model, which predicts that high levels of extrinsic effort (from external pressures) and intrinsic effort (internal motivations / work “over commitment”) and low levels of reward (pay, job security, recognition, and promotion prospects) significantly predict negative health outcomes. Reward is predicted to buffer against the negative effect of efforts on health outcomes (Mark & Smith, 2012:65). These two models have been found to be good predictors of physical and psychological health outcomes including heart disease, mortality, and depression in many occupational groups. These two models
are, therefore, suitable for studying many of the stressors that university academics are exposed to.

The role of an academic is broad. Academics are directly responsible for shaping the quality of their students. To be able to play this role effectively, academics need to be committed to their job as educators. On the other hand, commitment may depend on several factors such as work ethics, job satisfaction and job involvement. Normally, academics are committed if they are really satisfied with their present job. The satisfaction normally depends on what the academic employees get or receive from the job (Awang, Ahmad & Zin (2010:243). In addition, academic workers’ emotional or obligated commitment to a particular work position or setting may impact job satisfaction.

Education is an important aspect in everyone’s life. It is undeniable that education contributes towards ensuring development in a country. Hence, the education system should be strategically planned in order to produce the best results for all concerned. The main players in the education field are the educators, who may be termed as teachers, academics, facilitators or lecturers. Regardless of the title, or the institutions where they work, educators shoulder heavy responsibilities in educating students (Awang et al., 2010:241). In addition, they indicate that the roles of academics are broad and challenging. Academics not only have to give lectures; they are also expected to provide professional consultation, to conduct academic research and to publish their findings so that the community benefits. They also need to keep up with new knowledge, modern technology and new techniques in order to deliver cutting-edge research that is tailored for the best in their students.

As humans, academics are also subject to problems of dissatisfaction at workplace. If they are not satisfied, they may not be committed to deliver the best. In addition, there is the possibility that their performance may not achieve the target. This would, of course, lead to other adverse effects to the university. Hence, there is a strong need to understand the factors that contribute towards job satisfaction among academics so that steps can be taken by management to create a conducive working environment that is in line with their expectations (Awang et al., 2010: 242).
This study focuses on how stress and demographic factors affect job satisfaction among academics at North-West University, Mafikeng Campus. In order to ensure that the academics are able and willing to carry out their duties successfully, administrators as well as the management need to understand that demographic factors can cause job stress and dissatisfaction among academic staff and consequently shed some light on their work commitment levels. The selected demographic variables examined in this study included salary, age, years of service and level of grades of the academics.

This study used the quantitative research method and more significantly the descriptive quantitative research design was used for the present study where a broader area of quantitative data could be analysed relatively quickly and the researcher could easily interrogate results (Denscombe, 2010:269). In this study, utilizing the simple random sampling design allowed the variables to be examined without changing or manipulation of any conditions that explores the nature of relationships between job satisfaction and dissatisfaction variables. A Likert-type scale and Spearman rank correlation for rating factors of satisfaction and dissatisfaction were also used.

1.3 STATEMENT OF THE PROBLEM

Both work stress and job satisfaction are important factors which directly influence organizational outcomes. These factors may either have a positive or negative (stress) impact on an individual’s well-being and overall satisfaction. As noted in the preceding section, stress levels in academic institutions are high compared to many other populations, and stress has increased significantly over the last 15 years. The persistent demands of academic life are likely to lead to negative consequences for staff (Mark, & Smith, 2012:64). Factors that have been identified to influence stress and job satisfaction among academics are age, salary, gender, academic qualifications and length of employment. (Paul & Phua, 2011: 141-142).

In view of the above, it would be beneficial to the field of psychological studies, as well as to North-West University (NWU) academic staff, to know the effects of stress and demographic factors on job satisfaction. For example, research conducted in the
United Kingdom (UK), United States of America (USA), Australia and New Zealand identifies several key stressors commonly associated with stress among academic staff. These include work overload, time constraints, lack of promotion opportunities, inadequate recognition, inadequate salary, changing job roles, inadequate management, role ambiguity, diminishing resources, high staff-student ratios, job insecurity, scarce funding and increased teaching loads (Tytherleigh, Webb, Cooper & Ricketts, 2005: 42). The question raised here is: are some of these key stressors impacting negatively on academic staff members and applicable to members of staff at the North-West University, the institution under study? The problem therefore is that, not much is known about the impact of stress and job satisfaction on the academic staff at NWU.

Available previous research has established that academic staff experience extreme working conditions and an environment which was consistently exposed to work-stressors such as high workload, incommensurate salary, poor management, poor resources, workers conflict, resignations, absence of promotion opportunities and lack of communication (Mark & Smith, 2012:64). As a result, such work stressors commonly influence the psychological, physical and behavioural strains such as health problems, absenteeism, turnover, alcohol and drug use and purposefully destructive behaviours (Jackson & Rothmann, 2006:75). The aim of this study therefore is to conduct an investigation among NWU academic staff regarding stress and the effects of demographic factors on job satisfaction.

1.4 PURPOSE OF THE STUDY

The purpose of this study was to examine the role of stress and demographic variables in determining job satisfaction among academic staff of the NWU at the Mafikeng Campus. The primary focus of this study was to establish whether or not there was a negative correlation between stress and job satisfaction among academic staff and whether or not gender, age, salary, level of grades and years of service were positive predicting factors of job satisfaction among academic staff members.
1.5 NULL HYPOTHESES

Based on the statement of the problem, the following null hypotheses were tested in this study:

- There is no statistically significant difference between job satisfaction experienced by academic staff and their age, salary, level of grades and years of service.
- There is no statistically significant difference between job satisfaction and stress levels among academic staff members.

1.6 AIMS AND OBJECTIVES

This study aimed at investigating stress and demographic factors on job satisfaction among North-West University (NWU) academic staff, Mafikeng Campus. This aim was achieved by pursuing the following objectives:

- Investigation of the correlation between gender, age, salary, level of grades, years of service and job satisfaction among academic staff and
- Establishing if academics experience a great deal of stress working at the NWU.

1.7 RATIONALE AND SIGNIFICANCE OF STUDY

The researcher is a subject librarian for education who has worked for a number of years at North-West university library. She has observed that the demands upon academics such as work overload, an increased lecturer-student ratio, the growing scope of syllabuses and the changes inspired by rapid advances in technology have had some toll on academics and this in turn, motivated the undertaking of this study.

The researcher’s personal experiences, as well as discussions with colleagues about stress and job satisfaction in the workplace, further sensitized the researcher to this problem. The on-going academic debates around job satisfaction/dissatisfaction and stress among university academic employees further enhanced the need for this study.

Job satisfaction in the workplace today is a key to increasing productivity, organizational commitment and effectiveness. Keeping academic employees
satisfied with the work they do and the personal relationships they maintain in the workplace leads to a reduction in turnover and an increase in productivity (Klassen & Chiu, 2010: 741). Numerous studies have shown that education is an important factor that leads to an academic employee’s satisfaction (Jackson & Rothmann, 2006: 76; Dirani, 2006: 559; Mheta, 2012: 55; Fisher, 2001: 146). Okpara, Squillace and Erondu (2005: 178) believe that determining job satisfaction factors for academic staff members helps in enhancing innovative approaches to teaching.

A study of job satisfaction facilitates the change of extrinsic factors that decrease dissatisfaction of academic employees and puts in place elements that increase levels of satisfaction (Oshagbemi, 2000: 331). In addition, determining the satisfaction levels of academic staff members at the Mafikeng campus with regards different aspects of their employment, the study findings contribute to improved practices relative to institutional policies and procedures pertaining to employment.

Mir (2012: 84) for example, has found that job satisfaction is caused by several factors. One of them is when academics are satisfied with the job and they attribute their job satisfaction to the work itself. Job satisfaction is also caused by a set of factors related to the work itself such as the nature of the job, achievement on the job, possibilities of promotion and recognition. These factors are called motivators, as they motivate academic staff members towards better execution of their work.

The role of the academic staff, according to Saba (2011: 1), is crucial: they are the source of guidance at many crucial steps in the academic life of students. When academics are satisfied with their job, they perform their responsibilities with more concentration, devotion and competence. At the same time, education is one of the crucial elements in the life of all human beings. Noordin and Jusoff (2009: 122) state that societal expectations depend upon the successful running of the education system. The success of the education system depends upon the involvement, effort and the contribution of academic staff, especially their professional expertise. Academic staff job satisfaction therefore has important consequences for the individual staff member, the university, the student, and the society in general.
The degree of stress experienced by academics, and the ways in which such academics react to this stress are invariably influenced by a number of other factors (Rollinson, 2005: 270). Academic employees generally work under considerably high stress levels that affect their job satisfaction. A number of studies have indicated a negative correlation between stress and job satisfaction (Watts & Robertson, 2011: 34; Jackson & Rothmann, 2006: 92; Kyriacou, 2001: 27). Role conflict can also have a negative impact on job satisfaction within the workplace (Mark & Smith, 2012: 64). Therefore, it is hoped that the findings from this study on levels of job satisfaction of academic staff contribute to the existing literature on job satisfaction or dissatisfaction among academic members of universities.

It is hoped that the findings from this study have important implications for academic employees' satisfaction as well as their retention by the organization. Furthermore, this study also provides a foundation for future intervention strategies designed to reduce work stress and increase job satisfaction.

### 1.8 Delimitations of the Study

According to Meyer (2005: 42) delimitation means that the researcher has to select, refine and pursue a researcher’s topic, and that the breadth, depth and level of the researcher is considered. In this study, the research is confined to job satisfaction and stress among NWU academic staff of the Mafikeng Campus. The sample for this study has been taken from one of the three NWU campuses, namely, Mafikeng Campus. That is to say, it excludes the other two campuses: Vaal Triangle and Potchefstroom.

### 1.9 Limitations of the Study

The study has limitations due to the relatively small sample size that was used: it deals only with academic staff of the Mafikeng Campus. The fact that not all three campuses were used, limits the scope of the study. Work demands and pressures facing the researcher and travelling between three campuses may have had a significant influence on the study. Participants for this study were restricted to the NWU academic staff, including part-time academics of the Mafikeng Campus, holding the positions of Junior Lecturer, Senior Lecturer, Associate Professor and
Full Professor; hence it is limited in its scope for purposes of generalization of the findings. A more extensive study of the three campuses is envisaged to yield more robust findings that cover the entire amalgamated university.

1.10 DEFINITION OF TERMS

1.10.1 Stress is considered to be any pressure which exceeds the individual's capacity to maintain physiological, psychological and/or emotional stability. That is, stress is an experience and stimulus that changes the physical, emotional, behavioural or mental state of an individual in their environment (Iqbal & Kokash, 2011: 137).

1.10.2 Fisher (2001: 146) defines job satisfaction as a feeling that arises when an individual perceives their job as fulfilling those tangible and intangible values that are considered important to that individual. Alternatively, job dissatisfaction results when a job, for whatever reason, fails to fulfil an individual's perceived job-related values.

1.10.3 Demographics are defined as a set of qualities or characteristics of a population or group of individuals (Merriam-Webster, 2011: 436). These characteristics are measured by years of service, marital status, gender, age and level of grades.

1.10.4 Years of service or length of employment refer to the total years spent in the provision of a service. In this study, an academic's years of service suggest the time spent in the teaching profession as measured by data generated from a demographics form revealing that the overall job satisfaction of university teachers is significantly correlated to length of service in the present university (Oshagbemi, 2003: 1217).

1.10.5 Gender refers to the biological classification of being female or male by data generated from a demographics form. Sabharwal and Corley (2009: 553) report that male academics had significantly higher levels of overall job satisfaction than their female counterparts. On the
other hand, Chimanikire, Mutandwa, Gadzirayi, Muzondo & Mutandwa (2007: 167), concede that both male and female display similar levels of overall job satisfaction but differ in specific areas.

1.10.6 Level of education refers to a participant’s present position/job title as measured by a demographics form. Paul and Kheng (2012: 4) assert that academic qualifications have only negligible effect on the level of job satisfaction of academic staff. However, Eyupoglu and Saner (2009: 689) believe that university employees with doctorates display significantly higher levels of job satisfaction than their counterparts with a master’s or bachelor’s degree.

1.10.7 Age refers to a participant’s chronological age as measured by data generated from a demographics form (Paul and Kheng, 2011: 53). Furthermore, Paul and Kheng add that job satisfaction increases with age and academic employees aged 50 and above show significantly higher job satisfaction than their younger counterparts.

1.10.8 Salary refers to the amount of financial remuneration that is received and the degree to which this is viewed as commensurate with work and duties executed vis-à-vis that of others in similar organizations (Luthans, 2005: 212). Danish and Usman (2010: 160) argue that financial rewards and recognition programmes keep academic employees in high spirits, boost their morale and create a strong nexus between performance and motivation of the academic employees. The basic purpose of recognition and reward programmes is to define a payment system and communicate it to the academic employees so that they link their reward to their performance which ultimately leads to an academic employee’s increased job satisfaction.
1.11 SUMMARY

This introduction sketched the research problem, the aims and objectives of the study and provided both a delimitation of the focus area and the limitations inherent in the sample. Key terms were defined in order to provide a refined focus for this study. Key theorists were discussed in the main rational of the study in order to frame the study within a psychological study of job-related stress patterns and their consequences on performance and execution of duties within tertiary academic institutions.

In the next chapter, the literature review includes discussions on areas of stress and job satisfaction as well as demographic factors. The concepts of job satisfaction, significance of job satisfaction, as well as intrinsic and extrinsic factors of job satisfaction are discussed. Theories of stress and job satisfaction are also thoroughly studied along with various other measurements of control. This study addresses stress and job satisfaction among NWU academic staff members.
CHAPTER TWO

LITERATURE REVIEW

2.1. INTRODUCTION

This chapter provides a review of related literature. The main objective of this chapter is to review the literature relevant to the study, including deep interrogation and discussions on stress and job satisfaction as well as the function and role of demographic factors. The concept of job satisfaction, significance of job satisfaction, as well as intrinsic and extrinsic factors of job satisfaction are also discussed. Theories of stress and job satisfaction are critically discussed in order to unpack the various measures of control that permeate the discourses on job satisfaction and consequent performance levels. In a nutshell, this study addresses stress, demographics and job satisfaction among NWU academic staff members. A summary of the literature review is provided at the end of the chapter.

2.2. CONCEPT OF JOB SATISFACTION

Job satisfaction is a frequently discussed experience about work in the field of organizational behaviour. It establishes and indicates an attitude developed by an employee towards their job on the basis of a personal evaluation of their job and work context. It is an individual’s pleasurable emotional state emanating from the appraisal of one’s job; it is an affective reaction to the job and reflects an employee’s attitude towards their job (Franek & Vecera, 2008: 63). According to Katuwal (2011: 1), an academic employee develops a positive or negative attitude towards his/her job and its elements are influenced from various institutional and individual characteristics. It is the total sum of attitude developed by an academic employee toward different aspects of the job.

Job dissatisfaction is associated with injustice and commonly influences counterproductive work behaviour. Although most work environments strive to practise fairness among academic workers, the perception as well as the reality of inequality remains. As a result of increased job dissatisfaction, there is a
demonstrated potential of counterproductive work, behavioural challenges and often, violence manifested in such acts as retaliation among employees (Kumar, Bakhshi & Rani, 2009: 148). Furthermore, job satisfaction is often described as the quality of life at work as experienced by the employees, and the condition that could be promoted by social responsibility programmes executed by the employer, in this case towards academic employees at NWU.

Job satisfaction is described as the quality of a job, the objective conditions of the job and subjective attitude of the employee towards a specific job. It is vital to identify the factors that affect job satisfaction in order to understand the major factors that affect job satisfaction. Job satisfaction is also framed by a set of factors related to the work itself. Among these are the nature of the job, achievement in the job, possibilities of promotion and recognition. These factors are called motivators insofar as they motivate academics towards a better performance. Okpara, Squillace & Erondu (2005: 178), mention that determining job satisfaction factors for academics helps in the improvement and innovation in teaching that helps retain the academics.

Schulze (2006: 322) believes that aspects of academics’ jobs that cause dissatisfaction include factors such as:

- poor communication with university authorities,
- failure to provide agreed job descriptions and-, authoritarian management structure,
- lack of consultation and top down communication,
- government policy towards universities and extensive-, working hours,
- lack of co-ordination in management,
- not getting promoted unless one applies for it,
- lack of proper departmental strategy on teaching and research,
- poor retirement benefits,
- excessive bureaucracy,
- lack of leadership from the centre of the university,
- inconsistency in planning and-, location of university,
- changes in university funding mechanisms,
- not being able to retire with full benefits at 60,
- lack of time to think,
- difficulty with managing the separate responsibilities of administration, teaching and research, and
- indifferent and inefficient management.

Fisher (2001: 146) defines job satisfaction as a feeling that arises when an individual perceives their job as fulfilling values that are considered important to that individual. Alternatively, job dissatisfaction results when a job, for whatever reason, fails to fulfil perceived job-related values. Job satisfaction may thus be defined as an attitude which results from a balancing and summation of many specific likes and dislikes experienced by an academic employee in the performance of their job; or an academic employee’s judgment of how well his or her job, on the whole, provides opportunities to satisfy his/her needs. This satisfaction and dissatisfaction with one’s job depends upon the positive or negative evaluation of one’s own success or failure in the realization of personal goals and perceived contribution of the job towards the actualisation of these personal goals.

An understanding of the factors involved in job satisfaction is crucial to improving the happiness of academic employees and there is a need to understand the attitudes of academic employees towards their work. In addition, job satisfaction has often been linked to organizational commitment, turnover intentions, and absenteeism. These variables are costly to organizations as they often lead to poor performance and high turnover. From a theoretical perspective, it is essential to enhance a dynamic understanding of job satisfaction (Okpara et al., 2005: 178).

According to Klassen and Chiu (2010: 741), job satisfaction is usually associated with increased productivity and organizational commitment, lower absenteeism and turnover as well as increased organizational effectiveness. However, individual perception and job aspects may significantly determine job satisfaction (Muindi, 2011: 4). Although job satisfaction is difficult to determine, academic employees as well as organizations take various preventative measures to decrease potential job dissatisfaction and increase overall job satisfaction (Holtz & Harold, 2009: 1186).

In addition, Dirani (2006: 559) indicates that job satisfaction in academic institutions refers to the favourable feelings or positive attitudes that academic employees gain
from aspects of their work and work environment. Job satisfaction is the result of an academic employee’s perception of how well the job provides those things that are viewed as important. Kumar et al. (2009: 147) indicates that job satisfaction or academic employee satisfaction is one of the most significant variables in organizational behaviour. An individual’s perceptions, opinions, beliefs and expectations regarding the organization are the focus of his or her cognition. Cognition in which the individual perceives that his or her expectations have been met generally leads to positive evaluation.

However, if job satisfaction is absent and other work opportunities present themselves, turnover could well increase. Job satisfaction, or the nemesis of dissatisfaction, can also be viewed as a reaction to a job, arising from what an individual seeks in a job in comparison with the actual outcomes that the job provides to the individual (Lumley, Coetzee, Tladinyane & Ferreira, 2011: 102).

The preceding paragraphs attest to the fact that job satisfaction is a key issue concerning both the individual as well as the organization. A highly satisfied academic employee is often able to perform better in some situations than an academic who is not satisfied. Higher expectations from the job, if not met, often lead to lower job satisfaction. Oshagbemi (2000: 331) states that many a time, academic employees get carried away by the adage that “grass is greener on the other side of the fence,” and they tend to perceive all their present work as a grind. That is, the major predictor of job satisfaction is when academic employees see themselves as having a future in the present job and in being treated by their superiors with the dignity and rewards commensurate to their positioning. People work for employers and many a time, people leave because of employers. Having more satisfied academic employees is a good indicator of high morale which leads to higher productivity (Mehta, 2012: 55).

2.2.1. Significance of Job Satisfaction

Job satisfaction has been a topic of interest and study to many researchers for many decades. One of the most often cited definitions of job satisfaction is the one given by Spector (1997) according to whom job satisfaction has to do with the way and how
academics feel about their job and its various aspects. It has to do with the extent to which academics like or dislike their jobs. That is why job satisfaction and job dissatisfaction have become sites of rigorous research and academic contestation in work situations (Narang & Dwivedi, 2010:2; Fisher, 2001: 146; Muindi, 2011: 3).

Oshagbemi (2000: 331) states three reasons for studying job satisfaction. First, he states that organizations can be directed by humanitarian values and based on these values, organizations attempt to treat their academic employees in a humane manner and with respect. Evaluation and continuous assessment of job satisfaction can then serve as indicators of the extent to which academic employees are dealt with satisfactorily and efficiently. The second reason, according to Oshagbemi, is a utilitarian position in which academic employees’ behaviour would be expected to influence organizational operations according to the academic employees’ degree of job satisfaction or dissatisfaction. Academic employees can express job satisfaction through positive behaviours and job dissatisfaction through negative behaviours. A third reason is that job satisfaction can be an indicator of the efficiency of organizational operations. Organizational evaluation and assessment of academic employee’s job satisfaction helps the organization to identify various levels of academic employee’s satisfaction and organizational areas in need improvement (Oshagbemi, 2000: 331; Nguyen, Taylor & Bradley, 2003: 2).

Research on stress and job satisfaction of academic staff is perceived as important because understanding of factors influencing academic staff job satisfaction in an institution of higher learning could help the institution’s management to put in place measures that may lead to improvement in the quality of academic work and improvement of the institution’s performance indicators for purposes of ranking and ratings against similar establishments (Muindi, 2011: 3).

2.2.2. Intrinsic Factors of Job Satisfaction

Numerous research studies have examined intrinsic factors (achievement, autonomy, recognition, responsibility, growth and advancement) in relation to job satisfaction among university academic employees and have found these as
important determinants of job satisfaction (Sachau, 2007: 377; Ghafoor, 2012: 31). These same factors are also important in demonstrating support for the role intrinsic factors play in job satisfaction among university academic staff.

According to Ghafoor (2012: 31), intrinsic factors are those factors which are related to internal satisfaction and which are also treated as motivators and satisfiers. While extrinsic factors are those factors which are related to the external environment of the work, these factors are also known as hygiene factors and embrace such facets as administration of the organization and its policy, supervisory behaviour, relationship with superiors, working environment, salary, relationship with co-workers, relationships with subordinates, status, personal life, and safety measures at the workplace.

Oshagbemi (2003: 1212-1218) conducted a study in the United Kingdom on the effect of intrinsic variables on job satisfaction of academic employees. He found that work values, along with job experience and identified demographic variables, had an effect on job satisfaction among academic employees. Females showed a lower degree of job satisfaction than did their male counterparts. Rank, age and experienced academic employees expressed higher job satisfaction than did their young peers. However, type of degree and educational status had no impact on job satisfaction among academic members. A similar study in developing countries such as India and Cyprus on job satisfaction of academic members suggests that middle and higher-ranking academic members experienced more job satisfaction than did their lower ranked counterparts (Mehta, 2012: 55; Eyupoglu & Saner, 2009: 610).

Sachau (2007: 377) posits that job satisfaction and dissatisfaction stem from two types of needs. The first type of motivators or intrinsic factors is a set of needs related to the nature and challenge of the work itself. Some intrinsic factors include the work itself, recognition, growth, responsibility and advancement. Furthermore, job satisfaction may also be influenced by promotion, potential upward mobility, autonomy, characteristics of the job itself and robust professional relationships within the organisation.
Academic staff participation in teaching and research, creativity and innovative ideas are consistently mentioned as satisfiers in higher education as revealed in some studies on academic job satisfaction (Oshagbemi, 2000: 332; Malik, 2010: 51). However, the findings in a study by Eyupoglu and Saner conducted in Northern Cyprus (2009: 210) report that teaching and research have been found to be associated with academic employees' job satisfaction. Education level, salary and working environment are identified as major sources of academic dissatisfaction. Furthermore, they reported that academic employees want work tasks that correspond to their personal interests and allow them considerable autonomy in task-selection and decision-making; they want a sense of achievement, facilitated by informative feedback from supervisors; they want clarity on what is expected of them and harmony among the various stakeholders that they work with; they want salaries awarded equitably and at a level that meets their expenses and they want promotions to be fairly transparent. In short, academics who found their work less intrinsically satisfying than others more commonly intended to leave the university.

In the classical motivational literature of Ryan & Deci (2000: 56), intrinsic motivation is defined as doing an activity for its inherent satisfaction rather than for some separable and exterior rewarding or beneficial consequences. Intrinsic motivation is thus described as something desirable, often leading to long-term engagement and sustained effort of individuals in selected activities, as well as high-quality learning and creativity. Therefore, intrinsically, most academic employees have a desire to feel needed, valued and appreciated in their roles. This type of reinforcement not only results in happier academic employees, but also in a more productive workforce and hence improves academic employee motivation and job satisfaction.

### 2.2.3. Job Satisfaction Theories

Whatever the theoretical approach used to study job satisfaction, most researchers have generally agreed that job satisfaction involves the attitudes, emotions and feelings about a job, and how these attitudes, emotions and feelings affect the job and the academic employee’s personal life (Saif et al, 2012: 1383). Given the many definitions of job satisfaction, many scholars have proposed various theories of job satisfaction. These theories have been developed and are either supported or
rejected by others in the field of work according to academic discourse inclinations and research interests surrounding motivation and behavioural research. Job satisfaction is a general attitude toward the job and the degree to which the academic employees like their job and show positive and negative behaviour in actual work environments. It is generally acknowledged that a positive attitude in a person corresponds to a high level of job satisfaction and contributes positively, while a person who is dissatisfied harbours a negative attitude about the job (Eyupoglu & Saner, 2009: 611).

Job satisfaction has received considerable attention from researchers in academic and non-academic work-related studies. Satisfaction is considered as contentment felt after a need is fulfilled, a general attitude which is determined by the job predictors such as salary, jobs, superior behaviour, environment, personal attitude (demographics) and other social and group factors. People working in academic institutions bring with them certain drives and needs that mould their performance at the work place. Therefore, understanding how these needs fuel performance and how rewards for such performance lead to ultimate job-satisfaction is crucial for the academic employees and managers at their work place (Saif et al., 2012: 1383).

Other researchers determine job satisfaction on the basis of positive and negative attitude to the job in relation to fellow workers, company policies, salaries, advancement, promotion and customers (Saif et al., 2012: 36). Similarly, Luthans (2005: 212) strongly identifies work, salary, promotion, co-workers, and supervision as the main factors of job satisfaction. Luthans’ findings are corroborated by Eker, Anbar and Kirbiyik (2007: 68) who state that job-dimensions such as salary, level of position at work, supervision, promotion opportunity, co-workers relationship and the demographic features of academic employees determine job satisfaction. In addition, age, gender, education level, benefits, work experience, excellent working conditions, management policy, salary, the size of an organization and achievements through talents also have significant effect on the job satisfaction levels of academic employees (Paul & Phua, 2011: 141-142; Mehbboob, Sarwar & Bhutto, 2012: 1).

The exiting literature shows that the absence of satisfiers and the presence of dissatisfiers lead to job dissatisfaction (Mir, 2012: 84). Mir (ibid.) states that working environmental features such as physical working conditions, salary, job security,
quality of supervision and relationship with others cause job dissatisfaction. However, there is another set of factors referred to as motivators. These motivators include the work itself or job-content, achievement and responsibility. These motivators cause job satisfaction. Academic employees who are satisfied at work attribute their satisfaction to internal factors, while dissatisfied academic employees ascribe their behaviour to external factors. Factors that play a role in contributing to the satisfaction of academic employees are called motivators, while hygiene factors as largely contributing to job dissatisfaction.

The most recent addition to the research into employee retention is the role that a balance between work and life has in an academic employee’s decision to remain with the organisation. It would appear that the conflict between these important dimensions of human activity can cause both job dissatisfaction and a departure from an organisation as well as causing conflict with family members and family activities. Strategies to ameliorate these tensions have been introduced into a number of organisations, but there is still need for a substantial improvement since such initiatives trail behind in ensuring a balance (Deery, 2008: 800). Furthermore, individuals exhibiting work-life balance often demonstrate psychological well-being and job satisfaction (Rathi, 2009: 55). Although the concept of work-life balance is based upon balancing work and non-work behaviours, it can be an innovative indicator for job satisfaction measures.

Failure to achieve work-life balance may lead to frustration, exhaustion, lack of motivation and ultimately, job dissatisfaction. Furthermore, extant literature suggests that individuals experiencing a lack of work-life balance are at greater risk of overall stress and its associated strains (Noor, Nilai & Sembilan, 2011: 241). Although the concept of work-life balance is based upon balancing work and non-work behaviours, it can be a significant measurable variable for indicating job satisfaction.

Equity theory provides a structure for understanding the potential effects of gender differences and job satisfaction upon university academics. Although the majority of research in the field of equity theory has focused on monetary outcomes, it is also applicable to non-monetary outcomes such as job assignments and promotions. Equity theory suggests that individuals compare their contributions (e.g. skills, performance) and outcomes (e.g. pay, promotions, and supervision) to the
contributions and outcomes of significant others. Individuals who feel that they have been underpaid, or not promoted, relative to others of equal standing and qualification tend to get distressed and attempt to resolve the inequity through behavioural or psychological subversive or compensatory practices (Okpara et al., 2005: 178).

The amount of distress and the motivation to resolve the inequity increases as the size of the inequity increases. In conditions of perceived underpayment, individuals are likely to be angry. They might achieve equity by lowering their contributions (e.g. diminished performance, calling in sick, taking leave), increasing their outcomes or decreasing the organization’s outcomes (e.g. sabotaging equipment). Perceptions of underpayment also create unfavourable job attitudes. Based on the above discussion, it would be expect that the job attitudes of individuals (e.g. job satisfaction, motivation, commitment) who have been discriminated against (commonly female side-lined over male preferences) underpaid in organizational placement decisions tend to decline as the size of the inequity increases (Okpara et al., 2005: 178). Furthermore, providing worker happiness frequently benefits the worker as well as the overall institution.

2.2.4. Extrinsic Factors of Job Satisfaction

Extrinsic factors are related to the external environment of the work. These factors are also known as hygiene factors, for example, administration of the organization and its policy, supervisory behaviours, relationships with superiors, working environment, salary, relationships with co-workers, relationships with subordinates, status, personal life, and safety measures operational at the workplace (Ghafoor, 2012:31). Such factors, if not present, are thought to negatively affect job satisfaction or lead to job dissatisfaction. However, Malik (2010:50) conducted a study at University of Balochistan in Pakistan found that work place relationships and an atmosphere of teamwork have a high positive impact upon academic employees’ satisfaction. These factors comprise the background of one's work and the environment's setting. A better understanding of job satisfaction and factors associated with it helps institutional management to guide academic employees' activities in a desired and productive direction. The morale of academic employees is a deciding factor for the organization's efficiency. Thus, it is fruitful to ensure that
academic employees and institutional management focus their efforts towards ways of improving job satisfaction.

Various extrinsic factors which have been reported to affect job satisfaction or dissatisfaction among academic members in various institutions include salary and other forms of rewards or benefits (Basak, 2014:501; Awang et al., 2010: 244). The results from similar studies show that salary, promotion, working conditions and support of research significantly and positively correlated to job satisfaction. However, Oshagbemi (2000: 333) indicates that although these factors have been found to negatively impact on academic staff satisfaction, low salary has little effect on global job satisfaction. In contrast to Oshagbemi, Noordin and Jusoff (2009: 122), a study conducted in Malaysia to determine levels of academics’ satisfaction, found that salary is a major determinant of academic employees’ satisfaction.

Other external factors thought to have negatively affected academic satisfaction include low salary, promotions that are perceived as unfair, and unsavoury relationships with co-workers, weak organizational support and lack of innovation, obstructive company policies, inefficient supervision and general insecurity (Khalid et al., 2012: 128). Supervisors contribute to high or low morale of academic employees in the workplace. High and positive relationships nurtured by supervisors have been established to be another factor which strongly impacts on job satisfaction. Luthans (2005: 212) suggests that salary, promotion, work, supervision and amenable fellow workers are the main determinants of academic job satisfaction.

In a UK study, academics employed eight scales designed to measure job satisfaction with respect to different components of university academics’ overall job satisfaction: teaching, research, administration and management, present salary, promotion opportunities, supervisors’ behaviour, behaviour of co-workers, physical conditions and working conditions. The outcome of this study revealed that 80% of the UK academic members were most dissatisfied with their working conditions and supervisors’ behaviour in teaching, 65% were not satisfied with their present salary and 40% were not satisfied with institutional management (Khalid, Irshad, & Mahmood, 2012: 128). On the other hand, the study of Chimaniikire et al., (2007:167), revealed that adequate equipment, requisite resources, training
opportunities and an equitable workload all affect academics’ job satisfaction. This extensive research that has been done on levels of job satisfaction may have distinctive applications to academic employees at the NWU. This is especially true when the distinction between satisfaction and dissatisfaction is viewed in relation to the intrinsic and extrinsic characteristics of academic employment in South Africa, and the NWU in particular.

2.2.5. Job satisfaction among academics

There are several recent studies that address job satisfaction among academic staff populations serving in the higher education context. The factors that have been identified to influence job satisfaction among tertiary education academics are demographically related. These include, age, gender, salary, length of employment and job position or rank (Paul & Phua, 2011: 141-142; Sachau, 2007: 377).

Given that an employee's job satisfaction depends on several personal, job-related and environmental factors, managers take all out efforts to use these factors as predictors of academic employees’ attitudes. Several studies have been conducted to measure the demographic attributes of academic employees on their attitudes of satisfaction or dissatisfaction through tests of significance (Saif et al, 2012: 34; Oshagbemi, 2003: 1218). It is highly important that university management understands the needs of academic employees, introduces a constant appraisal system, and appreciation should be given to motivate academic employees at the workplace because motivation is a key factor towards reducing job stress and results in high performance and productivity (Ahsan, Abdullah, Fie & Alam, 2009: 128).

University academic employees do complex work in increasingly demanding and competitive environments. Universities are the only institutions focussed on dual core functions of knowledge creation and knowledge transmission through the processes of research and teaching respectively. The work life of university academics is predominantly framed and shaped by commitments to and performance in these functions (Houston, Meyer & Paewai, 2006: 17).
However, university management should know that too many demands on academics could contribute to uncertainty in terms of academic roles and work conflicts among academic employees. Briggs (2005: 257) proposes that a lack of clarity about roles introduces role ambiguity and role conflict that have significant impact on the achievement of personal and organisational goals, resulting in academic employee anxiety, dissatisfaction and lack of organizational effectiveness. Multiple workplace roles by university academics alongside institution pressure are likely to be viewed by academics as significant triggers that influence their state of perceived work-life balance and satisfaction which, in turn, influences their occupational attitudes such as job satisfaction, organisational commitment and intention to leave the institution.

Although there is increasing interest in employee satisfaction in higher education, the majority of theoretical and empirical work is concentrated in the affluent Western European countries and North America where work environment conditions are better (Rutto, 2012:30; Awang, Ahmad & Zin, 2010:244). This study examines potential differences between NWU academic staff and US reported norms in regard to factors that may affect job satisfaction, namely, age, gender, salary, length of employment and job position. As a precursor to the present study, this section reviews previous research studies and empirical evidence on work environment factors and demographic variables that affect satisfaction or dissatisfaction among academics in higher education (Basak, 2014:502).

2.3. STRESS

Stress remains a difficult concept to define, with researchers employing various models to explain aversive experiences among academic staff members (Watts & Robertson, 2011: 34). Stress is the non-specific response of the body to any negative demand for change or adjustment. With academic stress, the response can be physical, mental, and/or emotional; the demand can be any combination of frustration, conflict, pressure and self-imposed stress that is academic related. Work experiences that result in stress are often referred to as stressors, while the effects of stress, as related to health and employee behaviour, are referred to as strain (Lawrence & Kacmar, 2012: 42). Stress has been defined as the experience of
negative emotional states such as frustration, worry, anxiety and depression attributed to work-related factors (Kyriacou, 2001: 27).

The phenomenon of stress is highly individual in nature. Recent researchers demonstrate that individual responses to stress differ according to the stressors and varying environmental and personal factors (Iqbal & Kokash, 2011: 137; Jackson & Rothmann, 2006: 76). Some people have high levels of tolerance for stress and thrive very well in the face of several stressors in the environment. On the other hand, some individuals are unable to perform well except when subject to a level of stress that activates and energizes them to put forth their best efforts. This shows that individual differences may cause some to interpret these stressors as positive stress or eustress (which stimulate them), while others experience negative stress or distress (which detracts from their efforts). These effects may be short term and diminish quickly or they may last long (Iqbal & Kokash, 2011: 137).

According to Raza (2012: 6913-6914), stress in teaching has the sufficient attention of current educational thinkers; research and academic interest on this subject is expanding. The increased job-shift tendency in the teaching profession is indicated by the trend that a majority want to leave this profession, while there is a decreasing trend towards joining this same profession. Occupational stress is considered as the root cause of this declining trend which is one of the major causes of job stress. The newly developed workplace environment in universities such as increase in female academics and students, impacts of corporate sector and close relationship with stakeholders has made this profession very demanding. Due to recent dramatic developments in socio-economic life, the teaching profession has become highly demanding while the control (discipline) issues have become a major problem for many educational institutions.

Stress is generally used to describe employees’ negative response to everyday pressures. In general, the term stress is used to indicate a situation where academic employees do not feel that they can cope effectively with a specific threat. This description of stress also focuses attention on the cognitive factors of stress. Two individuals can be faced with exactly the same work situation, for example the annual appraisal, but one may see it as stressful while the other may feel totally at
ease in the same situation (Oosthuizen & Berndt, 2008: 93). Lussier (2009: 299) believes that stress is a body’s reaction to environmental demands and changes that requires it to adapt physically, mentally, and emotionally. This author indicates that stressors are factors that cause people to feel overwhelmed by anxiety, tension and pressure.

Stress can be described as functional or dysfunctional. Functional stress improves performance by motivating academic employees to reach set objectives. However, excessive stress can result in a variety of negative emotional and physical reactions, thus dysfunctional stress results in academic employees dissatisfaction, absenteeism, turnover and lower levels of productivity (Lussier, 2009: 299). Iqbal and Kotash (2011: 137) enhance the above as they state that the stress phenomenon has an inverse relationship with job satisfaction, which can be described as the quality of life at work as experienced by the academic employees, and the condition that could be promoted by social responsibility programmes executed by the university employer.

Aniedi, Offiong and Otu (2010: 218) emphasize that everyone experiences stress a little differently, it can be a good thing, but an overload of it generates debilitating effects. They explain that stress overload is caused by the overreaction or failure of the stress response to turn off and reset itself properly. Similarly, Palmer, Cooper and Thomas (2004: 2) define stress as the adverse reaction a person has to excessive pressure, and they maintain that stress affects academic employees in different ways at different times and is often the result of a combination of factors in personal and working lives. These scholars admit that stress is not a weakness, but if unnoticed it can lead progressively to a decrease in performance, poor health and long term absence from work. The National Institute of Occupational Safety and Health in the United States explains job stress as the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources and needs of the academic employees (Palmer, 2003: 134).

Furthermore, Ahsan et al. (2009: 123) point out that stress inducing factors among academic staff include: work overload, homework interface, role ambiguity and performance pressure. Abbas, Roger and Asadullah (2012: 2) include poor time
management, inability to concentrate, irritation and aggression, withdrawal from supportive relationships, abuse of alcohol or tobacco if not managed properly which lead to absenteeism, resignation, and turnover intensions. For example, in Australian universities, a national survey on occupational stress revealed that academic staff were worse off than general staff. Furthermore, several theories have been used to support this research which includes the physiological theory of stress and development stress theory. However, even though much has been done in this area, none has highlighted the subject matter with respect to the institutions in North-West University, Mafikeng Campus, which is the gap that this study intends to bridge.

Individual perception and coping strategies on stress differ in results and overall outcomes. Research on stress suggests that individual characteristics such as sense of control, self-esteem and organization, result in positive outcomes when dealing with stress (Macklin, Smith & Dollard, 2006: 132). However, individual characteristics such as working very hard, commitment and individual sacrifice may influence stress, but these traits are also related to achieving work success. Therefore, stress is commonly recognized as part of the work environment (Furnham, 2012: 32). To clarify and attempt to find some common ground, Barkhuizen and Rothmann (2008: 321), argue for the centrality of individual cognitions where the experience of stress is dependent upon an academic’s appraisal of potential stressors as either positive or negative.

Technology and organizational change also cause stress to university academic employees. More recently, researchers have found that more than a third of academic employees indicated that they felt stressed out by the number of emails that they received and attendant pressure to respond promptly. Some academic employees viewed their inbox up to forty times each hour, leaving them tired and frustrated. Only 38 per cent of academic employees were relaxed enough to wait a day or longer before replying to an email (Wilson, 2010: 358). The conclusion that can be drawn from the above is that job stress is defined as an unpleasant condition or feeling attributed to work-related factors. Job stress can also have a negative impact on academic employees which can lead to academic employees’ dissatisfaction with current jobs, ill-health, poor performance and physical withdrawal from the stressful situation.
2.3.1. Theories of stress

According to Mark and Smith (2012: 65), one of the most influential models within the occupational stress literature is Demand-Control Model, also known as the Job Strain Model. This model theorizes that work demands and job control interact to predict stress reactions or psychological strain, which are the detrimental result of excessive stressors threatening an individual’s ability to cope. The model posits that the most detrimental psychological and physical outcomes result from situations with high demand yet low controllability. These circumstances are appropriately referred to as high strain due to the harmful psychological reactions that purportedly result from demanding jobs when constraints of low control are placed on academics.

LePine, LePine and Jackson (2004: 885) suggest that the second expectation of the Job Strain Model is that the most positive health and work-related outcomes stem from high demand and high control situations. Jobs that are consistently demanding, yet afford academic employees the outlet of control to cope with the demands are known as active jobs. By fostering challenge appraisals of work stressors, high levels of work control are thought to buffer the strain and negative health consequences of high demands while resulting in constructive work-related outcomes such as increased motivation, performance, learning, adjustment, and satisfaction.

These two models have been found to be good predictors of physical and psychological health outcomes, including heart disease, mortality and depression in many occupational groups. These two models are, therefore, suitable for studying many of the stressors that academic employees are exposed to (Mark & Smith, 2012: 65). The majority of research on the Job Strain Model has focused on the high-strain and active jobs due to their potential impact on strain, health, and performance outcomes. Indeed, the negative effects of psychological strain have important implications for academic employee’s health and performance (Rafiq, Jan, Miriam, Hayat, Fayyaz, 2012: 367; Mikkelsen, Ogaard & Landsbergis, 2005: 156). Anxiety, tension, and exhaustion are common types of strain, yet this detrimental reaction to stress overload can also be manifested as physical symptoms or illness.
(Mark & Smith, 2012: 65). These negative emotions and stress reactions can lead to long-term physical and psychological health impairment.

Macklin et al. (2006: 132) therefore, points out that the theoretical concept of demand-control is also used to validate research findings in demanding work environments that frequently experience the promotion of stress. Demand-control concepts suggest that high work demands and low control with no support greatly influence and increase stress. However, when support from co-workers, family, and community is present, the probability of decreasing stress and increasing job satisfaction is great. The literature suggests that such positions and extreme working environments validate the concept of demand-control theory and its relation to stress.

The literature reviewed here demonstrates significant relationships between self-work demands and job strain (Diestel & Schmidt, 2009: 60). In addition, the study of stressful working conditions suggests that higher work demands reduce control resources. Therefore, self-control as a moderator is not demonstrated and the impact of stress and strain may increase. However, Diestel & Schmidt (2009: 65) also suggest that self-control processes associated with stress may differ depending on qualitative and quantitative workloads.

In person–environment theory, stress results neither from the person nor the environment but from the degree of fit between them. Three distinctions are made regarding fit:

- The first and most basic distinction is between the person and the environment, which is a prerequisite for the conceptualization of person–environment fit.
- The second distinction is between the objective and subjective representations of the person and the environment. It is the notion of subjective fit, where there is a mismatch between academic workers’ perception of the environment and perception of themselves that is seen as the major cause of work stress.
The third distinction in the person–environment model focuses on two further dimensions of fit. First, there is the needs-supplies dimension, where needs are described as the innate biological and psychological needs of the person, and supplies are an interaction between the person and the work environment. A mismatch between the person and the environment can lead to strain experienced through role overload, role ambiguity and role conflict (Devereux, Hastings & Noone, 2009: 562-563).

Another stress theory is the concept of type A behaviour, which is associated with some serious negative consequences that include time-related stress, generalised emotional tension, less life and job satisfaction, and more health-related problems. Recently, type A has also become associated with unresolved anger issues due to the trait of hyper-aggressiveness and free-floating hostility. In addition, the type A personality is caught up in a constant struggle to accomplish and produce results. Emotionally, this personality experiences a generalised anxiety orientation with no direct cause. In contrast to the type A personality pattern is the type B whose emotional, cognitive and behavioural life is characterised by a lack of type A qualities. Although the concept of type behaviour is based upon individual characteristics, it can be a valuable predictor of stress (Wemer, Bagrain, Cunningham, Pieterse-Landman, Potgieter & Viedge, 2011: 245-245).

Bhave, Kramer and Glomb (2013:698) believe that social exchange and justice theories provide a framework for understanding the relationship between pay and family work conflict. Higher pay is also associated with greater responsibility and additional work demands that may negatively affect work and family balance and increase work family conflict. Accordingly, compensation research has highlighted that actual pay is only weakly correlated with work attitudes and behaviours. These researchers further contribute that in response to other studies, academic employees tend to report that pay and its components are far less important than other aspects of their work. Employee perceptions of pay are reflected in the construct of pay satisfaction, which occurs when academic employees perceive their pay as commensurate with the pay they believe they should be receiving.
2.3.2. Stress among academics

University academics do complex work in an increasingly demanding environment. Universities are the only institutions focussed on dual core functions of knowledge creation and knowledge transmission through the processes of research, teaching and community engagement. The work life of university academic staff members is predominantly framed and shaped by commitments to and performance in these functions. The interdependence of teaching and research in the New Zealand University, for example, is asserted in legislation, viz that on-going tensions exist between the two particularly in terms of demands on time and variable recognition and rewards (Houston, Meyer & Paewai, 2006: 17). Usually, university academics are worried about the outcome of their work that can even affect the way they treat other people, and how they communicate with their peers. They feel frustrated or burnt out when they have problems with peers or co-workers. This leaves a negative impact on the institution itself (Bhatti, Hashmi, Raza, Shaikh & Shafiq, 2011: 34). Therefore, this might cause the university academic staff members to face plenty of stress, hence affecting their satisfaction and even their physical or mental health.

Research on stress among academics of universities from across the globe indicates that the phenomenon of occupational stress in universities is alarmingly widespread and increasing. Gillespie, Walsh, Winfield, Dua and Stough, 2001: 54) state that the academic environment of the 1980s imposed surprisingly high levels of job stress on academics, and that the level of stress would continue to increase in future decades. In a study on stress in seven New Zealand universities, these researchers have reported that half of the academics in their sample found their work to be stressful, and 80% believed that their workload had increased and become more stressful in recent years. In addition, 46% expected further increases in workload in the near future. Similarly, The United Kingdom Association of University Teachers study found that 49% of university employees reported that their jobs were stressful and 77% reported an increase in occupational stress over recent years.

Abbas et al. (2012: 3) emphasise that the most stressful aspects of the job perceived by academics include workload, time pressure and no guidance pertaining to various academic roles. In Australian universities, a national survey on occupational stress
revealed that academic staff was generally worse off than general staff, and staff in newer universities were worse off than those in older universities. Research shows that academics’ stress becomes problematic and potentially harmful when the challenges that academics face outpace their perceived ability to cope, or when they perceive that their important needs are not being met. Researchers usually consider that burnout represents instructors’ negative responses to the mismatch between job requirements and their perceived abilities.

In a study of New Zealand universities, Gillespie et al. (2001: 55) report that increasing workloads and work-related stress resulted in less academic time spent on research, decreased teaching standards and an absence of leisure activities in all academic staff. They further reported that stress is a major problem for academic staff reporting high levels of anxiety, absenteeism, doctors’ visits and illnesses. Moreover, stressful work can lead academic employees experiencing fatigue and exhaustion which can be mental and physical, hypertension, coronary heart disease or depression which can be fatal (Usman, Ahmed, Ahmed & Akbar, 2011: 202).

The evidence and arguments presented above demonstrate that academics’ work is becoming more complex and demanding. The roles of academics are not easily defined and the variables that come into play are growing more complex. Factors in the university environment that contribute to the experience of stress of academics include increasing changes in education and society, and academics burdened with having to make a variety of modifications in their personal and professional lives. Academics are exposed to high workloads, with a resultant increase in stress and strain. At least one third of academics in the UK are seen as suffering from a variety of stress (Jackson & Rothmann, 2006: 75).

In addition, academic staff shortages are a direct or indirect result of stress-related issues in the educational environment. Loss of academics due to early retirements and resignations may become a costly exercise to the university because of both direct and indirect costs incurred through advertisements, recruitment, selection, and induction, loss of experience and down-time because of inadequate training or a lack of experience.
There are several demographic variations among the workforce which influence the degrees of satisfaction, for example, age, gender, level of education, length of service and salaries of the academic employees which have widely been found critical in determining job satisfaction levels (Oshagbemi, 2000: 332). With that observation, it is highly important that the North-West University, understands the global context and specifically narrow this to the needs of academic employees by introducing a constant appraisal system. There is an urgent need to motivate the academic employees at the work place because motivation is a key factor which reduces job stress and results in high performance and productivity.

From the discussion above, it is noted that research indicates that both specific and general types of work-related stress are inversely proportional to job satisfaction. These findings demonstrate the relationship of work stress to job satisfaction, and related empirical research provides the foundation for the hypothesized pathway of work stress predicting job satisfaction.

2.3.3. DEMOGRAPHIC FACTORS

As previously discussed, stress and job satisfaction depend on multiple factors. However, interest in demographic variables such as gender, age, education level, salary and length of service apparently suggests that these have an effect on job satisfaction levels. According to Merriam-Webster (2011: 436), demographics are defined as a set of qualities or characteristics of a population or group of a population or group of individuals. Buitendach and Rothman (2009: 2) indicate that although focusing on employee demographics shifts the burden away from the institution to the academic employee per se, it has been important to study how demographic variables have affected job satisfaction so that a complete understanding of the concept is gained.

2.3.3.1. Job satisfaction and Age

To date, there appears to be extensive evidence of relationship between employee’s age and job satisfaction. Many studies report that job satisfaction is positively and linearly associated with age (Oshagbemi, 2003:1212; Frank & Venesa, 2008:64; Inceoglu, Segers, & Bartram, 2012:301). This age-satisfaction relationship is usually
explained in terms of changing needs, mellowing processes and changing cognitive structures associated with age (Oshagbemi, 2003:1212). However, Franek and Vecera (2008:4) found that the nature of the relationship between age and job satisfaction was curvilinear. According to Vecera (ibid), academic workers above the age of 40 become less satisfied with their jobs. An explanation for this may be lie in the process of accommodation and resignation to the current job that the academic holds. Older workers become increasingly disappointed, recognizing that their expectations are becoming more and more limited as the years wane.

Moreover, older employees may experience increased pressure from factors such as changing technologies. One of the most recent studies conducted by Paul and Phua (2011:142) reveals that the relationship between age and satisfaction is u-shaped. However, Oshagbemi (2003:1211) reports in his findings that the relationship between age, gender, level of education, and length of service shows a significant closeness with overall job satisfaction. However, he notes that a review of the relevant literature shows that most of the age-job satisfaction studies conclude that there is some association between academic employees’ age and job satisfaction.

2.3.3.2. Job Satisfaction and Salary

Salary is the basic and most fundamental to judge levels of job satisfaction among academic employees. It has a strong relation to satisfaction and dissatisfaction of any academic employee (Sohail & Delin, 2013: 127). A study on UK academics shows that there is a relation between job satisfaction, salary benefits and rank (Oshagbemi, 2000:333; Khalid, Irshad & Mahmood, 2012: 128). If offered better salary, most academic employees’ would choose to move to the new institution that offers more.

Remunerations are a significant factor in job satisfaction and help academic employees to attain their basic and upper level satisfaction needs. Salary is the first and primary determinant of satisfaction for almost every academic employee working in an institution. Policies which are fair regarding salary systems are linked to job satisfaction and in turn positively affect organizational productivity (Saif et al., 2012: 36).
Terpstra and Honoree (2004: 1) surveyed approximately 500 faculties across different disciplines from over 100 tertiary institutions in the United States and concluded that salary level was significantly related to job satisfaction. This notion is further supported by recent researchers (Chimanikire et al, 2007: 167; Noordin & Jusoff, 2009: 122; Santhapparaj & Syed, 2005: 158). Paul & Kheng (2012: 2) reveals that salary levels and other material benefits must be sufficient to meet basic human needs. However, overall job satisfaction among academics is also strongly determined by higher order emotional and social needs, most notably professional self-esteem, job security, interpersonal relations at work, opportunities for career progression, the working environment, workload and productivity or learning outcomes.

Another key issue is the level of accountability of academics to their senior managers, colleagues and wider community. If they feel they are being treated very well and are being paid equitably, they are likely to have positive attitudes towards the job. Female academics show a stronger correlation with salary and benefits than their male counterparts. Salary is important and so is satisfactory space for their improvement, performance and growth within their current institution (Rafiq, Jan, Hayat & Fayyaz, 2012: 367). This accounts for some organizations' resolution to introduce monthly and annual performance occasions for their academic employees (Sohail & Delin, 2013: 128).

2.3.3.3. Job satisfaction and Level of grades

In many studies, job satisfaction has been found to decrease with increasing educational levels (Franěk & Večeřa, 2008: 64: 53). It is assumed that education, which does not lead to extrinsic rewards, would lead to dissatisfaction with work by producing unfulfilled expectations and aspirations (Franěk & Večeřa, 2008: 64). Castillo and Cano (2004: 72) assert that academic qualifications have only negligible effect on the level of job satisfaction of academic staff. However, Schroder (2008: 230) and Eyupoglu and Saner (2009: 6) believe that university employees with doctorates display significantly higher levels of job satisfaction than their counterparts with a master's or bachelor's degree.
Albert and Davia (2005: 6) state that individuals with a higher level of education have generally higher expectations that are more difficult to fulfil. That is to say, academic staff members with more experience and higher levels of educational qualifications expect the employer to acknowledge their level of education and pay them better to enhance their job satisfaction. Albert and Davia further (2005: 7) point out that those better qualified academic employees feel relatively unsatisfied if they do not observe a noticeable difference between their salaries and those of other lower educated academic employees, whereas lower educated academic employees may be relatively favoured by collective bargaining processes.

2.3.3.4. Job satisfaction and gender

Various studies indicate that women reported significantly higher levels of stress on job satisfaction and gender (Mark & Smith 2012: 64). Women are often expected to meet domestic commitments and conflicting work and family demands may add to their stressful responses (Necșoi, 2011: 6). This is confirmed by study from Jacobs, Tytherleigh, Webb, & Cooper (2010: 22) which reports that female educators experience higher levels of stress, while male educators reported higher perceived social support from families and friends, explaining their lower levels of stress. In addition, Oshagbemi (2003: 1211) reports in his findings that there is a significant relationship between gender and overall job satisfaction.

Oshagbemi (2000: 333) shows that in a stratified random sample in South Africa, while both male and female academic employees expressed a considerable degree of job satisfaction, the general trend was for more male academic employees expressing job satisfaction than was generally the case with female academic employees. This finding on stress-coping strategies lends support to studies carried out in Japan and Germany in which it was shown that more men than women enjoyed teaching at tertiary institutions. According to Ghafoor (2012: 31), Hajiha, Jassabi and Ghaffari conducted research in four universities and 346 questionnaires were handed out to academic staff members. The usable questionnaires were 281 from respondents comprised of 128 males and 153 females. A cross-sectional study was conducted in six months. It was concluded that male academic staff were more satisfied than their female counterparts.
According to Sabharwal & Corley (2009: 543), male academics had significantly higher levels of overall job satisfaction than their female counterparts. On the other hand, Paul and Phua (2011: 142) conceded that both males and females displayed similar levels of overall job satisfaction but differed in specific areas (Van Daalen, Willemsen & Sanders, 2006: 463).-Apparently there is no consensus in the findings and therefore the impact of work-life stress on job satisfaction between males and females remains questionable.

2.3.3.5. Job Satisfaction and Length of Service

Length of service refers to the number of years an individual has spent working at the same task or portfolio. Research studies designed to investigate whether or not job satisfaction increases with length of service have been conducted. Oshagbemi (2003: 1210) examined the relationship between job satisfaction and length of employment in a particular job and confirmed the hypothesis that a change in job satisfaction with length of service resembles a U-shaped curve. Thus, according to this researcher, length of service is related to job satisfaction and dissatisfaction. A study by Castillo and Cano (2004: 72) reports that a positive relationship exists between years of experience in current position and level of job satisfaction, incidentally reflecting that job satisfaction increases with time because the individual comes to adjust to his work and life situation. Oshagbemi’s (2003: 1217) study revealed that overall job satisfaction of university academics was significantly correlated with length of service in present university. Schroder (2008: 230) found that academics with no previous experience displayed the highest level of job satisfaction.

2.4. SUMMARY OF THE LITERATURE REVIEW

This literature review discussed in depth areas of stress and job satisfaction as well as demographic factors. The concepts of job satisfaction, significance of job satisfaction, as well as intrinsic and extrinsic factors of job satisfaction have been interrogated. Theories of stress and job satisfaction have also been thoroughly discussed along with various other measures of control. Although, there is no single theory explaining the effects that demographics have on stress and job satisfaction, the literature on stress theories such as demand-control, work-life balance person-
environment and type A behaviour suggest some tenuous connections among the discrete variables. In addition, selected demographic factors such as age, salary, gender, level of education and length of service were scrutinised to establish connections between the key variables pertinent to this study.

Job satisfaction can be defined as an internal or external influence or force that causes a person to behave in a certain way when a particular task is to be performed. Job satisfaction is the willingness and readiness to contribute positively towards the achievement of the institutional goals. Furthermore, it is suggested that individual perception and job aspects may greatly determine job satisfaction. Literature indicates that when work inputs and outputs are not equal and unfair academics experience stress as well as job dissatisfaction. Literature examined in this segment suggests that practicing overall justice can significantly increase academics’ perceptions of fairness and influence their overall job satisfaction.
CHAPTER THREE
RESEARCH METHODS

3.1. INTRODUCTION

Research methods include the research approach, choice of research area, sample size and sample procedures. This chapter deals with aspects of design and methodology used in this research in order to seek connections between the variables discussed and how these ultimately influence job-satisfaction levels among academics of the North-West University at the Mafikeng Campus in the North West Province of South Africa.

3.2. RESEARCH DESIGN

A research design provides a framework for the collection and analysis of data. It is, therefore, a framework for the generation of evidence that is suited both to a certain set of criteria and to the research hypotheses in which the investigator is interested (Bryman, 2012: 45). To Blaikie (2010: 13), a research design is a technical template that is developed by one or more researchers and used by them as a guide or plan for carrying out the research project. Research design in this specific context can be regarded as a programme which guides the researcher in collecting, constructing, coding, analysing and interpreting observed facts of evidence (Perri & Bellamy, 2012: 20).

Quantitative research designs are either descriptive or experimental, that is, subjects usually measured once or subjects measured before and after a treatment, (Hopkins 2008:1). This empirical study used the descriptive quantitative method and in particular the Spearmans' rank correlation in order to determine the extent to which identified variables influence the academics’ determination of the levels of their satisfaction with the job they are currently doing (McMillan, 2012: 39). To explore the relationship between demographics, stress and job satisfaction among academic staff members, a descriptive quantitative research design was used for the present
study where a broader area of quantitative data could be analysed relatively quickly and the researcher could easily interrogate results (Denscombe, 2010:269).

### 3.3. QUALITATIVE AND QUANTITATIVE METHODS

Although this study uses only the quantitative method of analysis, a brief description of qualitative research is also provided to demonstrate the difference between the two.

A great deal of quantitative research is concerned with counting occurrences, volumes or the size of associations between entities, while qualitative research aims to provide rich and thick descriptive accounts of the phenomenon under investigation. Quantitative and qualitative research approaches clearly differ in terms of how data are collected and analysed. Quantitative research requires the reduction of phenomena to numerical values in order to carry out statistical analyses. By contrast, qualitative research involves the collection of data in a non-numerical form that is texts, pictures and videos. Quantitative and qualitative approaches also differ in terms of the aims of scientific investigation as well as the underlying paradigms and meta-theoretical assumptions (Gelo, Braakmann & Benetka, 2008:268).

According to quantitative approaches, psychological and social phenomena have an objective reality. In contrast, qualitative approaches consider reality as socially and psychologically constructed (Bryman, 2012:8). This author also states that quantitative research generally begins with pre-specified objectives focused on testing preconceived outcomes while qualitative research generally begins with open-ended observation and analysis. Qualitative research is defined in terms of the kind of data it produces and in terms of the form of analysis it employs while quantitative research is involved with data which often includes quantification, for example, statements such as more than, less than, most, as well as specific numbers (Remler & Van Ryzin, 2011: 57).

Qualitative research is collecting, analysing, and interpreting data by observing what people do and say, and quantitative research refers to counts and measures of things. Denscombe (2007:39) explains that qualitative research refers to the meanings, concepts, definitions, characteristics, metaphors, symbols, and
description of phenomena. Qualitative research is much more subjective than quantitative research which claims degrees of objectivity. Qualitative research uses varying methods of collecting information, mainly individual and focus groups.

While quantitative research seeks explanatory laws, qualitative research, on the other hand, aims at in-depth descriptions. Qualitative research also measures what it assumes to be a static reality in the hope of developing universal laws. Qualitative research is an exploration of what is assumed to be a dynamic reality. It does not claim that what is discovered in the process is universal, and thus, replicable (Hopkins, 2008: 1). However, qualitative method focuses on phenomena occurring in natural settings and aims to study the phenomena in their entirety (Denscombe, 2007: 280). Furthermore, quantitative research is a very objective type of scientific inquiry in which the researcher attempts to be detached from the actual subjects of the study (Tomal, 2010: 3).

Qualitative inquiry, on the other hand, provides the researcher with in-depth knowledge, although this is usually not generalizable. Qualitative research is more useful for exploring phenomena in specific contexts, articulating participants' understandings and perceptions and generating tentative concepts and theories that directly pertain to particular environments. Thus, policies and decisions based on qualitative information may be more directly suited to the specifics of the milieu from which they were derived (Schulze, 2003:12).

Qualitative research uses interviews and observations to probe deeper into the meanings and social contexts of the processes. Consequently, a qualitative interviewer is essentially a conversation in which the interviewer establishes a general direction for the conservation and pursues specific topics raised by the respondent. However, qualitative research is not concerned with the measurement and quantification of the phenomenon but with acquiring an understanding of the natural setting of the phenomenon through observation. Qualitative data can also be collected in a number of forms, with methods ranging from the collection of evidence through interviews to document analysis which may be recorded and later transcribed (Babbie & Mouton, 2003: 98).
3.3.1. Advantages of quantitative analysis

Denscombe (2010: 269) maintains that quantitative analysis is advantageous because of the reasons discussed below. However, the reasons given below also played a vital role in this study as it helped the researcher to clearly understand the importance of the quantitative method of analysing data. Spearman’s rank correlation was therefore used to analysis data for the study.

- Scientific: Quantitative research data lends itself to various forms of statistical techniques based on the principles of mathematics and probability. Statistics provide the analyses with an aura of scientific respectability. The analysis is based on objective laws rather than the values of the researcher.

- Confidence: Statistical tests of significance give researchers additional credibility in terms of the interpretations they make and the confidence they have in their findings.

- Measurement: The analysis of quantitative data provides a solid foundation for description and analysis. Interpretations and findings are based on measured quantities rather than impressions. Such interpretations can be checked by others for authenticity and replicated for confirmation purposes.

- Analysis: Large volumes of quantitative data can be analysed relatively quickly, provided adequate preparation and planning have occurred in advance. Once the procedures are ‘up and running’, researchers can interrogate their results relatively quickly.

- Presentation: Tables and charts provide a succinct and effective way of organising quantitative data and communicating the findings to others.
3.3.2. Disadvantages of quantitative analysis

Denscombe (2010:270) highlights the disadvantages of quantitative analysis to include the following:

- Quality of data: The quantitative data are only as good as the methods used to collect them and the research questions that are asked.
- Technicist: There is also the danger of researchers becoming obsessed with the techniques of analysis at the expense of broader issues of interpretation underlying the research.
- Data overload: Large volumes of data can be the strength of quantitative analysis but, without care, it can start to overload the researcher. Too many variables can drive towards too much complexity and the researcher can get swamped without clarifying the links between dependent and independent variables, or even establishing certainty in causality.
- Although the analysis of quantitative data might seem to be technical and scientific, in reality the researcher still has the ability to influence the findings in subtle ways, more especially by manipulating conditions and variables.

Quantitative research has introduced different classes of measurement tools, ranging between questionnaires, interviews and observation. All these tools can be classified as measurement tools since they contain a numerical format that represents a quantification of the dimension of measurement (De Vos, Strydom, Fouche & Delport, 2011: 206). Moreover, Maree (2010: 145) described quantitative research as systematic and objective in its ways of using numerical data from only a selected sub group of a universe or population to generalising the findings to the universe that is being studied. In general, quantitative research is concerned with systematic measurement, statistical analysis and methods of experimentation (Fox & Bayat, 2007: 7).

When a researcher seeks to discover the potential relationship between two or more variables, a quantitative design is best used to work with data. The researcher chose a quantitative research design to investigate the potential relationship between
multiple variables. This study also used a quantitative research design and included age, salary, education level and length of services as variables in this study.

In using the quantitative method in this study, quantitative data lends itself to various forms of statistical techniques based on the principles of mathematics and probability. This gives the analysis scientific respectability because the analyses were based on objective laws rather than the subjective and interpretive values of the researcher. Furthermore, large volumes of quantitative data could be analysed relatively quickly, providing adequate preparation and planning in advance. Once the procedures are ‘up and running’, researchers could interrogate their results relatively quickly (Denscombe, 2010: 269). Furthermore, quantitative research is a very objective type of scientific inquiry in which the researcher attempts to be detached from the actual subjects of the study (Tomal, 2010: 3).

### 3.4. POPULATION AND SAMPLE

The present study used a descriptive and inferential quantitative research design to examine the role of stress and demographic variables in determining job satisfaction and whether age, years of service, level of education and salary could be established as positive predicting factors of job satisfaction among academic staff of the Mafikeng Campus. The total population was 243 academics cutting a cross section that represented both males and females of Mafikeng campus academics. A simple-random sampling technique was used by the statistics department to generate a statistically significant and reliable sample of 25% from which generalizations could be made about the total population. When collecting data for this quantitative study the researcher was of the view that it was impossible or impractical to consult all the lecturers at NWU Mafikeng campus which was the population for this study. Following Struwig and Stead (2010:109) the researcher decided to select a sample as it was more appropriate, more practical and accurate than obtaining the same information from the entire population which would have been difficult.

A sample is a small number of elements drawn from a large number of elements (which is treated as population) and it is based on the estimation that the sample number of elements (which is treated as sample) represents the whole population.
Denscombe (2007: 11) defines sample as a small portion of the whole, a small group of individuals who participate in the study. A sample is important because a researcher can conduct research using a small number of participants, and if the sampling is accurate, those results can be confidently generalised to the population of participants (Salkind, 2012: 74).

In this study, a sample of 60 academics from the Mafikeng campus was randomly selected using the simple-random sampling technique. The computer was set to randomly pick 60 numbers from the initial numbers allocated to the subjects in the population. Only the 60 picked from this process were identified and given questionnaires to complete. The reason for using only academics from the Mafikeng campus was influenced by financial cost, research timelines and specific interest in the range. In this study, utilizing the simple random sampling design allowed the variables to be examined without changing or manipulation of any conditions. In addition, the use of a simple random sampling design allowed this study to generate quantitative data by subjecting them to statistical measures such as Spearman’s rank correlation coefficient and Likert-type scale to obtain significant relationships.

Details pertaining to population and sample are shown in Table 3.1 below:

**Table 1: Population and sample of research participants.**

<table>
<thead>
<tr>
<th>Population</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>243</td>
<td>25% = 60 research participants</td>
</tr>
</tbody>
</table>

The Table 1 above illustrates the relationship between the sample and the target population. Generally, in statistics, 25% is considered representative enough of the traits of an entire population (Gall, Borg & Gall: 1996).
3.4.1. Sampling technique

A sampling technique is the identification of the specific process by which the entities of the sample have been selected. For this study, the researcher chose the simple random sampling method, which provides an equal opportunity of selection for each element in a population.

3.5. DATA COLLECTION AND INSTRUMENTS

Upon confirmation of the respondents, the researcher personally distributed sixty questionnaires to the selected academics in the faculties by visiting them in their offices. The researcher contacted only the respondents that were electronically selected to answer the questionnaire. In this study, the respondents were requested to provide demographic information pertaining to gender, age, educational level, their income, length of service and stress in their working environment. In order to facilitate the completion of the questionnaire, questions were formulated in a simple way and this enabled the researcher to collect responses immediately. The researcher found that distributing questionnaires personally had the advantage that she could explain the purpose of the study clearly before the respondents' attempted to answer the questions.

According to Cohen, Manion and Morrison (2002:147), data collection processes involve organizing, accounting for and explaining the data. This assists the researcher in terms of having completeness, whereupon there ought to be an answer to every question and some uniformity in responding to questions. Leedy and Ormrod (2010: 94) indicate that data are those pieces of information given to an observer in any particular situation. Data are therefore used to discover the truth. In this study, data were collected from the sample. A 5-point Likert scale(questionnaire instrument) indicating 1 “strongly agree,” 2 “agree,” 3 “neutral” 4 “disagree” and 5 “strongly disagree” was used.
3.5.1. Questionnaires

Mouton (2008:104) explains that a questionnaire is an instrument that enables respondents to answer set questions that are framed to provide answers to a predetermined research question. The questions were set in basic language that was easily understood by the respondents; hence it was easy for the respondents to answer the questions quickly and the researcher was thus able to collect them on the spot. The researcher collected the questionnaires on the spot. The first part of the questionnaire consisted of demographic data about the respondents. The second part of the questionnaire asked respondents questions related to their level of satisfaction with regards to their teaching profession, including whether they were influenced in choice of profession, the extent of which they are satisfied with the institutional management and their current working conditions.

The questionnaire consisted of 41 questions which were divided into three sections, A, B and C. There were 5 questions in section A. The questions were used to measure the job satisfaction levels and demographic aspects of academic staff members of NWU of the Mafikeng Campus towards their jobs, their age, salary that they received, their length of service as well as the level of their education. The questions that were asked from section A were questions such as:

- Indicate your length of service.
- What is your highest level of education?

There are 28 questions in the section B. The questions in this part were used to measure job satisfaction and the age of respondents, their salaries, and their level of education as well as job satisfaction levels. One question asked how long the respondents had been in their current position. The questions that were asked from section B were questions such as:

- My salary adequately meets my level of needs satisfaction.
- The rate at which salary increases for an academic is satisfactory in my case.
- I do not feel any obligation to remain with the same institution because of my education.
There are 8 questions in section C. This last part seeks answers to stress levels and the questions helps the researcher to infer how the stress level in the institution impacts the academics in handling their jobs. The questions that were asked from section C were questions such as:

- As an academic, workload is my main cause of stress.
- I feel so stressed with the pay package I receive that I feel like leaving.

According to Maree (2010:161) respondents are required to choose one response from among several alternatives given in a question. Information which is reliable, necessary and valid is collected from the designed questionnaire. Personal self-administered questionnaire is the method commonly used by researchers to collect data. This method is easy for the respondents to answer and for the researcher to analyse the data as well. In addition there is the time efficiency factor: it takes lesser time to collate the data collected and to synthesise it into patterns and categories. In personal self-administered questionnaires the determinant-choice question and attitude rating scale which is Likert scale is used in the questions from section B and section C.

Therefore, for both section B and Section C, the researcher used a 5-point Likert scale questionnaire instrument indicating 1 “strongly” agree, “ 2 “agree,” 3 “neutral” 4 “disagree” and 5 “strongly disagree.

Questionnaires allowed for anonymity of the respondents and that gave them freedom to express their views freely, more especially on sensitive and controversial issues. This is one of the reasons why the researcher decided to use this instrument for data collection which according to Wilson (2009:122), is a simple tool for collecting and recording information about a particular issue of interest including clear instructions and administrative details.
3.6. DATA ANALYSIS PROCEDURES

Data collected from the questionnaires were analysed and interpreted using the Spearman’s rank correlation test. According to Mouton (2008:108) analysis involves breaking up the data into manageable themes, patterns, trends and relationships. Additionally, Mouton (2006:161) describes analysis in empirical research as referring to the stage where the researcher, through the use of different statistical and mathematical techniques, focuses separately on specific variables in the data set. SPSS version 22 software package was used to perform the correlation analysis.

The reason for using the quantitative method is that large bodies of data can be summarised and one can make predictions about future trends (Creswell, 2012: 131). Therefore, statistics provides a means through which numerical data can be interpreted more meaningfully. Maree (2010:145) describes quantitative research as research that is systematic and objective in its ways of using numerical data from only a selected sub group of a universe or population to generalise the findings to the universe that is being studied. Quantitative data can also be analysed relatively quickly. Moreover, using the quantitative method and more specifically the Spearman’s rank correlation test to analyse data provided a solid foundation for description and analysis. These were all generated using SPSS version 22.

3.7. RELIABILITY AND VALIDITY

Oluwatayo (2012: 395) views reliability in quantitative research as synonymous to dependability, consistency, reproducibility or explicable over time, over instruments and over groups of respondents. Indeed, for a research to be reliable, it must demonstrate that if it were to be carried out on a similar group of respondents in a similar context, similar results would be obtained. Reliability indicates that if the same variable is measured under similar conditions, a reliable measurement would produce the same or nearly the same results at different time of administration of the instrument (Creswell, 2012: 159).
The questionnaires were structured and have the same format and sequence of questions for each respondent. All respondents were given the same time to answer questionnaires. The researcher ensured that all respondents understood the questionnaires. Instructions were clearly outlined and the respondents were ensured of anonymity. When using Likert-type scales, it is imperative to calculate and report for internal consistency and reliability for any scales or subscales used. Cronbach’s Alpha is thus a measure of internal consistency that indicates the level to which all items in a test measure the same attribute (Huysaman, 2004:125). Reliability analysis seeks to give convenience and helps the researcher to check whether the data collected could be trusted or not. Cronbach’s alpha (α) reliability coefficient, whose numerical value ranges from 0 to 1, measures the reliability (or internal consistency) of the items in the Likert scale. A high value (close to 1) for Cronbach’s alpha reliability coefficient indicates good internal consistency of the items in the scale.

The Cronbach’s alpha for this study were close to 1, suggesting that the items in the scale had a relatively high internal consistency. Cronbach’s alpha is a reliability coefficient that indicates how well the items in a set are positively correlated to one another.

3.8. Ethical considerations

The researcher took into account that the respondents were individual human beings and that they needed to be treated with due respect, hence the ethical guidelines postulated by De Vos, Strydom, Fouche and Delport (2005: 57) were followed in the course of the study. These considerations included guaranteeing confidentiality and anonymity. Subjects were also informed that they could withdraw from the study at any time. In this study, this was achieved by asking the respondents not to write their names or particulars on the completed questionnaires. In addition, the respondents were also assured of confidentiality by not requiring them to write their names on the questionnaire. The NWU ethical committee approved the study. In keeping with the university’s ethical code, the researcher was given a letter by the NWU ethical committee in the School of Educational Leadership granting permission to conduct the research at the selected university departments.
3.9. SUMMARY OF METHODOLOGY

A descriptive quantitative research design was used. The questionnaire used in this study included a 5 point Likert scale that was collated to generate Spearman’s rank correlation test from the data. For the research design, utilizing the simple random sampling design allowed the variables to be examined without changing any conditions. Demographic factors that were measured were the dependent variable of stress against the independent ones including, stress, job satisfaction, age, grades level, salary and years of service.
CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.1. INTRODUCTION

This chapter presents data gathered in the research process, analyses and offers an interpretation of the results. Descriptive statistics were gathered and the data presented below discusses sample characteristics. The purpose of this descriptive quantitative data analysis was to meet the objectives presented in Chapter One (1.6). The data also includes some demographic factors such as gender, age, level of education, length of service and salary as well as stress and job satisfaction.

In this chapter, data collected from the sixty questionnaires were analysed and interpreted using the Spearman’s rank correlation. According to Mouton (2008:108) analysis involves breaking up the data into manageable themes, patterns, trends and relationships. Interpretation means relating one’s results and findings to existing theoretical frameworks and showing whether or not these are supported by the new interpretation. There are few common ways of summarizing data: calculating averages, frequency distributions and percentages. In this study, the descriptive statistics are presented through frequencies and percentages and also by means of tables and graphs. With descriptive statistics, researchers are simply describing what the data is or what it shows.

Statistical analyses were performed with the data collected using the Likert-type scale for level of satisfaction/dissatisfaction with each of five factors of job satisfaction and dissatisfaction compared with each demographic variable. The data were subjected to correlation tests to determine whether there was a relationship between the different groups.
4.2. DESCRIPTION OF THE SAMPLE

The target audience were participants drawn specifically from amongst members of the academic staff of the NWU Mafikeng Campus. For this study, 60 questionnaires were distributed to the academic staff component who were randomly selected using a computer and all 60 questionnaires were used in the study. The researcher chose the simple random sampling method using Spearman's rank correlation and Likert-type scale to obtain and analyse the data.

For ease of interpretation, the responses for “Strongly Agree (5)” and “Agree (4)” were combined to give a single response “Agree (4).” Similarly, the responses of “Strongly Disagree (1)” and “Disagree (2)” were combined to give a single response of disagree(2). The responses for “Neutral (3)" were not changed.

In this section, the researcher analysed respondents’ demographic information by using frequency analysis and percentages. This information includes gender, age, education level, respondents’ salary in institution and the respondents’ service length in current institution. In order to present this data, the researcher has included the demographic profile on page 93 under Section A of the questionnaire which the respondents had to fill. Below are the results of the frequency analysis which are shown in Tables 4.1, 4.2, 4.3, 4.4 and 4.5.
4.3. DEMOGRAPHIC PROFILE AND BIOGRAPHIC DATA

Figure 4.1:

Gender of respondents

Based on Figure 4.1 above, there are 60% female respondents and 40% male respondents from the questionnaires which were distributed. These respondents were used in the compilation and later analysis of data. The demography reflects the distribution of gender on the campus at the time of the study as there were more female academics employed compared to males.
As shown in Figure 4.2, the sample for this study was divided into six different age groups of academics. The majority of the respondents were older academics aged between 46 and 50 years of age and represented 21 (35%) of the respondents, while the minority of the respondents was aged between 31 years and below and 31 to 35 years, and represented (10%) of the respondents. The respondents from the age group 41 to 45 years contributed (18.3%) which were 11 respondents. The respondents from the age group 50 years and above contributed (11.7%) which were 7 respondents and the last respondents were between 36 and 40 years of age and contributed (15%) which were 9 respondents.
Relative to the variable years of experience, there were 8 (13.3%) academics with 6 years or less experience, and 9 (15%), with between 6 to 10 years. In comparison, 19 (31.7 %) had 11 to 15 years of experience and 17 (28.3 %) 16 to 20 years of experience. Most of the lecturers who responded to the questionnaire had 11 to 15 years of service at the university. This shows that most respondents are experienced academics.
In terms of the level of education, there were 5 categories of academic staff which were Junior Lecturer, Lecturer, Senior Lecturer, Associate Professor and Full Professors. Figure 4.4 shows that there were 33.3% of the respondents (20 respondents) who were senior lecturers. This was followed by 36.7% of the respondents who were lecturers (22 respondents). The remaining qualifications (Junior lecturer, Associate Professor and Full Professors, tallied 10% of the respondents which means 6 respondents for each category.
The variable salary was categorized by means of five subgroups. In this variable, respondents were requested to disclose their monthly salaries that they received in order to complete the questionnaire. There were 7 (11.7%) academics who indicated their salary as R19 000 or below, 12 (20%) were paid between R20 000 and R29 000 and 10 (16.7%) reported salary of R50 000 or more. Most of the respondents 17 (28.3) were in the salary bracket R40 000 to R49 000. This could be as a result of the years of service that the academics had been employed and the pre-determined salary ranges offered by the university.

**4.3.1. Questionnaire Results**

The respondents were requested to respond to 28 statements. In this section, the researcher used the 5 point Likert scale ranging from strongly disagree (SD) to strongly agree (SA). The following questions are used to measure job satisfaction and their age, job satisfaction and their salaries, job satisfaction and their grades of education and job satisfaction and the length of services rendered.
Table 2
Descriptive Statistics of Job satisfaction and age

<table>
<thead>
<tr>
<th></th>
<th>Job satisfaction and age</th>
<th>SD (%)</th>
<th>D (%)</th>
<th>N (%)</th>
<th>A (%)</th>
<th>SA (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>As an academic above 40, I am becoming less satisfied with my job.</td>
<td>16.7</td>
<td>16.7</td>
<td>15</td>
<td>38.3</td>
<td>13.3</td>
</tr>
<tr>
<td>1.2</td>
<td>I become increasingly disappointed since my expectations are becoming more and more limited as I become older.</td>
<td>15</td>
<td>15</td>
<td>20</td>
<td>40</td>
<td>10</td>
</tr>
<tr>
<td>1.3</td>
<td>I experience pressure from learning technology because of my age.</td>
<td>8.3</td>
<td>20</td>
<td>15</td>
<td>30</td>
<td>26.7</td>
</tr>
<tr>
<td>1.4</td>
<td>I am satisfied because I occupy senior post.</td>
<td>5</td>
<td>31.7</td>
<td>30</td>
<td>30</td>
<td>3.3</td>
</tr>
<tr>
<td>1.5</td>
<td>I see myself still working as an academic in 5 years’ time.</td>
<td>0</td>
<td>13.33</td>
<td>10</td>
<td>58.3</td>
<td>18.3</td>
</tr>
<tr>
<td>1.6</td>
<td>As I am not satisfied with my working conditions, I would prefer to change my institution very soon.</td>
<td>3.3</td>
<td>21.7</td>
<td>23.3</td>
<td>43.3</td>
<td>8.3</td>
</tr>
</tbody>
</table>

Table 2 above comprised of six statements and provided the percentage of participants who responded to the questionnaires regarding job satisfaction and age. The result shows that the largest group of respondents 51.6 % (38.3% + 13.3%) agreed that as academics above the age of 40, they became less satisfied with their jobs and 33.4 % (16.7% + 16.7%) disagreed that they were less satisfied with their jobs. The minority of the respondents from the age group contributed 15% which were neutral about the statement.

The analysis showed that 50% (10% + 40%) of the respondents agreed that they become increasingly disappointed and their expectations are becoming limited as they become older. Furthermore, 30% (15% + 15%) of the respondents disagreed that they did not become disappointed since their expectations are not becoming
limited as they become older and 20% were neutral about the statement. However, most of the respondents 56.7% (30% + 26.7%) believe that they experience pressure from learning technology because of their age; 28.3% (20% + 8.3%) of the respondents disagreed that they experience pressure from learning technology because of their age and 15% of the respondents were neutral with the statement.

Accordingly, 33.3 (30% + 3.3%) agreed that they are satisfied because they occupy senior posts; 36.7%( 31.7% + 5%) of the respondents disagreed that they are not satisfied because they do not occupy senior posts and 30% of the respondents were neutral with the statement; 76.6% (58.3% + 18.3% ) of the respondents agreed that they see themselves still working as academics in 5 years’ time; 33.3% indicated that they see themselves still working as academics in 5 years’ time. While only (10%) of the respondents were neutral with the statement; 51.6% (43.3% + 8.3%) of the respondents indicated that they prefer to change their institution because they are not satisfied with their working conditions; 25% (21.7% + 3.3%) indicated that they did not want to change their institution because they are not satisfied with their working conditions and 23.3% of the respondents were neutral.

**Table 3**
**Descriptive Statistics of Job Satisfaction and salary**

<table>
<thead>
<tr>
<th>2. Job satisfaction and Salary</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 My salary is reasonable as compared with my work expectations.</td>
<td>SD (%)</td>
<td>D (%)</td>
<td>N (%)</td>
<td>A (%)</td>
<td>SA (%)</td>
</tr>
<tr>
<td>2.2 The rate at which salary increases for an academic is satisfactory in my case.</td>
<td>15</td>
<td>23.3</td>
<td>25</td>
<td>35</td>
<td>1.7</td>
</tr>
<tr>
<td>2.3 If I am offered better salary by another institution, I would choose to move to that institution.</td>
<td>1.7</td>
<td>10</td>
<td>21.7</td>
<td>38.3</td>
<td>28.3</td>
</tr>
<tr>
<td>2.4 I entered the teaching profession because of its</td>
<td>10</td>
<td>23.3</td>
<td>46.7</td>
<td>11.7</td>
<td>8.3</td>
</tr>
</tbody>
</table>
good salary

2.5 In my institution I have a monthly and annual performance bonus.

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

2.7 My salary adequately meets my level of needs satisfaction.

2.8 My division provides a lucrative retirement package.

2.9 As a high-ranking academic, I possess more work experience, which enables me to be paid more.

Table 3 above, for statement 2.1, the study found that 21.7 % (15% + 6.7%) of the respondents agreed that their salaries are reasonable when compared with their work expectations, while (41.7%) of the respondents were neutral; 36.6 % (23.3% + 13.3%) of the respondents disagreed that their salaries were not reasonable with their work expectations; 36.7% (35% + 1.7%) of the respondents agreed that the rate at which salary increases for academics is satisfactory in their case, whereas 25% of the respondents were neutral and 38.3% (15+ 23.3%) of the respondents disagreed that the rate at which salary increases for academics is not satisfactory in their case.

The data from question 2.3 indicate that 66.6% (38.3% + 28.3%) of the respondents agreed that if they were offered better salaries by another institution, they would choose to move to that institution compared to only 11.7% (10% + 1.7%) of the respondents who disagreed that they would not move to another institution if they were offered better salaries by another institution and 21.7% of the respondents were neutral on the same statement.

Most of the respondents (46.7%) decided to be neutral regarding entering the teaching profession because of its good salary compared to 33.3% (10% + 23.3%) of the respondents who disagreed that they did not enter the teaching profession because of its good salary and 20% (8.3% + 11.7%) of the respondents agreed that they entered the teaching profession because of its good salary.
Data in statement 2.5 show that 40% (8.3% + 31.7%) of the respondents agreed that in their institution they have a monthly and annual performance bonus; 35% (23.3% + 11.7%) disagreed that they do not have a monthly and annual performance bonus and 25% of the respondents were neutral on the statement. The results from 2.6 revealed that 45% (15% + 30%) disagreed that they are being paid a fair amount for the work they do, 26.7% (21.7% + 5%) of the respondents feel that they are being paid a fair amount for the work they do, 28.3% of the respondents decided to be neutral. Analysis of statement 2.7 shows that 25% (21.7% + 3.3%) of the respondents agreed that their salary meets the level of needs satisfaction, while 41.7% (21.7% + 20%) indicated that their salary is inadequate. 33.3% decided not to comment, this showed neutrality.

38.4% (31.7% + 6.7%) of the respondents agreed that their division provides a lucrative retirement package; 28.3% (15% + 13.3%) of the respondents disagreed that their division does not provide a lucrative retirement package while 33.3% of respondents chose to be neutral. 60% (18.3% + 41.7%) of the respondents agreed that as a high-ranking academic, they possess more work experience, which enables them to be paid more; 28.4% (6.7% + 21.7%) of the respondents did not agree that academics with high qualifications, possess more work experience, which enabled them to be paid more and 11.7% of the respondents were neutral.
Table 4
Descriptive Statistics of Job Satisfaction and Level of Grades

<table>
<thead>
<tr>
<th>3</th>
<th>Job satisfaction and level of grades</th>
<th>SD (%)</th>
<th>D (%)</th>
<th>N (%)</th>
<th>A (%)</th>
<th>SA (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Overall, the education I received in training is applicable to my job.</td>
<td>3.3</td>
<td>8.3</td>
<td>3.3</td>
<td>50</td>
<td>35</td>
</tr>
<tr>
<td>3.2</td>
<td>I am satisfied with my students’ academic performance</td>
<td>0</td>
<td>26.7</td>
<td>11.7</td>
<td>50</td>
<td>11.7</td>
</tr>
<tr>
<td>3.3</td>
<td>I expect the employer to acknowledge my level of education and pay me better to enhance my job satisfaction.</td>
<td>0</td>
<td>3.3</td>
<td>16.7</td>
<td>48.3</td>
<td>31.7</td>
</tr>
<tr>
<td>3.4</td>
<td>I really enjoy working with my academic colleagues with higher levels of educational qualifications because they are very helpful.</td>
<td>1.7</td>
<td>10</td>
<td>18.3</td>
<td>46.7</td>
<td>23.3</td>
</tr>
<tr>
<td>3.5</td>
<td>I do not feel any obligation to remain with the same institution because of my education.</td>
<td>3.3</td>
<td>10</td>
<td>11.7</td>
<td>43.3</td>
<td>31.7</td>
</tr>
</tbody>
</table>

Table 4 above comprised of five statements. 85% (35% + 50%) of the respondents agreed that the education they received in training is applicable to their jobs; 11.6% (3.3% + 8.3%) of the respondents disagreed that the education they received in training is not applicable to their jobs and 3.3% of the respondents were neutral on this statement; 61.7% (11.7% + 50%) of the respondents agreed that they are satisfied with their students’ academic performance; 26.7% of the respondents were dissatisfied while 11.7% of the respondents were neutral with the statement. As shown in statement 3.3, 80% (31.7% + 48.3%) of the respondents agreed that they expected the employer to acknowledge their level of education and pay them better to enhance their job satisfaction. Whereas 3.3% of the respondents disagreed that the employer is expected to acknowledge their rank and pay them better to enhance their job satisfaction and 16.7% of the respondents were neutral.
70% (46.7% + 23.3%) of the respondents strongly agreed that they enjoyed working with their academic colleagues with higher qualifications, 18.3% of the respondents were neutral and 11.7% (10% + 1.7%) of the respondents did not enjoy working with academic colleagues that held a higher qualification. Data in the last statement shows that 75% (31.7% + 43.3%) of the respondents agreed that they were obliged to remain in the institution because of their qualifications; 11.7% (1.7% + 10%) disagreed that they feel obliged to remain in the same institution because of their qualifications and 11.7% of the respondents did not commit themselves.

Table 5
Descriptive Statistics of Job Satisfaction and length of service

<table>
<thead>
<tr>
<th>4.</th>
<th>Job satisfaction and length of service</th>
<th>SD (%)</th>
<th>D (%)</th>
<th>N (%)</th>
<th>A (%)</th>
<th>SA (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1</td>
<td>The length of time I have been employed by my current institution is more than 5 years.</td>
<td>21.6</td>
<td>11.7</td>
<td>0</td>
<td>41.7</td>
<td>25</td>
</tr>
<tr>
<td>4.2</td>
<td>I am satisfied with my yearly increments.</td>
<td>8.3</td>
<td>26.7</td>
<td>26.7</td>
<td>36.7</td>
<td>1.7</td>
</tr>
<tr>
<td>4.3</td>
<td>I see myself still working as an academic employee in 5 years from NWU.</td>
<td>8.3</td>
<td>21.7</td>
<td>23.3</td>
<td>30</td>
<td>16.7</td>
</tr>
<tr>
<td>4.4</td>
<td>I would be very happy to spend the rest of my life at this institution.</td>
<td>11.7</td>
<td>18.3</td>
<td>35</td>
<td>26.7</td>
<td>8.3</td>
</tr>
<tr>
<td>4.5</td>
<td>I do not intend looking for another better paid academic job in the near future.</td>
<td>16.7</td>
<td>25</td>
<td>31.7</td>
<td>20</td>
<td>6.7</td>
</tr>
<tr>
<td>4.6</td>
<td>I have to continually refer to even small matters to a senior academic for a final answer despite my years of service.</td>
<td>18.3</td>
<td>16.7</td>
<td>36.7</td>
<td>23.3</td>
<td>5</td>
</tr>
<tr>
<td>4.7</td>
<td>My income is based on the total number of years I have serviced the institution.</td>
<td>3.3</td>
<td>16.7</td>
<td>30</td>
<td>43.3</td>
<td>6.7</td>
</tr>
<tr>
<td>4.8</td>
<td>As an academic, I am rewarded on the length of service I have rendered to the institution.</td>
<td>6.7</td>
<td>13.3</td>
<td>28.3</td>
<td>45</td>
<td>6.7</td>
</tr>
</tbody>
</table>
The respondents were requested to respond to eight statements. 66.7% (41.7% + 25%) of the respondents indicated that they had been employed by their current institution for more than 5 years, 33.3% (21.6% + 11.7%) of the respondents disagreed that they had not been employed for more than 5 years in the institution. 38.4% (1.7% + 36.7%) of academics were satisfied with their yearly increments, 35% (8.3% + 26.7%) of academics, found yearly increments dissatisfying and 26.7% were neutral. 30% (21.7% + 8.3%) of academics are dissatisfied and they do not believe that they will stay for more than 5 years' at NWU, 46.7% (16.7% + 30%) of academics agreed that they are satisfied and they intended to work for more than 5 years at NWU and 23.3% of academics chose to be neutral.

35% (8.3% + 26.7%) of the respondents agreed that they would prefer to spend the rest of their lives at the institution; 30% (11.7% + 18.3%) disagreed that they would not spend the rest of their lives at that institution and 35% of the respondents were neutral. Statement 4.5 establishes that 41.7% (16.7% + 25%) of the respondents did not intend looking for better paid jobs in the near future whereas 26.7% (6.7% + 20%) of the respondents agreed and 31.7% of the respondents showed neutrality.

35% (18.3% + 16.7%) of the respondents disagreed that they had to continually refer even minor matters to a senior academic for a final decision despite their years of service; 28.3% (5% + 23.3%) of the respondents agreed that they had to continually refer to minor matters to a senior academic for a final choice despite their years of service and 36.7% of the respondents decided not to commit themselves.

20% (3.3% + 16.7%) of respondents did not accept that their income was based on the total number of years served at the institution. 30% were neutral and 50% (6.7% + 43.3%) of the respondents agreed that their income was based on the total number of years they had served at the institution. 51.7% (6.7% + 45%) agreed that as academics, they were rewarded on the length of service they have rendered; 28.3% of the respondents were neutral and 20% (6.7% + 13.3%) disagreed that they had not been rewarded for the length of service they had rendered.

The above analysis addressed hypothesis one (1.5, page 9, bullet one) regarding job satisfaction, years of experience, their age levels, salaries they received and their
level of education as academics and a significant relationship was found between the dependent and independent variables (See table 4.15, page 75).

4.3.2. Questionnaire results

The respondents were requested to respond to eight statements. The following questionnaire deals with hypothesis two which states that there is no significant difference between job satisfaction and stress level of the academics. The result was subjected to statistical analysis which tested hypothesis two regarding the relationship between stress level and job satisfaction and the questions helped the researcher to identify how the stress level in the institution impacts the academics in handling their jobs.

Table 6
Descriptive Statistics of Job Satisfaction and stress levels of academics.

<table>
<thead>
<tr>
<th>Job satisfaction and stress levels among academic staff.</th>
<th>SD (%)</th>
<th>D (%)</th>
<th>N (%)</th>
<th>A (%)</th>
<th>SA (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1 As an academic, workload is the main cause of my stress</td>
<td>3.3</td>
<td>3.3</td>
<td>13.3</td>
<td>33.3</td>
<td>46.7</td>
</tr>
<tr>
<td>5.2 I get stressed almost every day on my job</td>
<td>5</td>
<td>25</td>
<td>43.3</td>
<td>16.7</td>
<td>10</td>
</tr>
<tr>
<td>5.3 I feel so stressed with the pay package I receive that I feel like leaving.</td>
<td>1.7</td>
<td>16.7</td>
<td>30</td>
<td>35</td>
<td>16.7</td>
</tr>
<tr>
<td>5.4 The stress on my job reduces my confidence level as an academic</td>
<td>0</td>
<td>11.7</td>
<td>26.7</td>
<td>46.7</td>
<td>15</td>
</tr>
<tr>
<td>5.5 I have enough time to get everything done in my job.</td>
<td>0</td>
<td>8.3</td>
<td>33.3</td>
<td>41.7</td>
<td>16.7</td>
</tr>
<tr>
<td>5.6 I find my work is easy due to working with a competent academic workforce.</td>
<td>1.7</td>
<td>15</td>
<td>26.7</td>
<td>46.7</td>
<td>10</td>
</tr>
<tr>
<td>5.7 As an academic, I am satisfied with how my job affects other people.</td>
<td>0</td>
<td>3.3</td>
<td>25</td>
<td>60</td>
<td>11.7</td>
</tr>
<tr>
<td>5.8 I am stressed because the compensation I get does not match my responsibilities at this campus.</td>
<td>6.7</td>
<td>8.3</td>
<td>40</td>
<td>21.7</td>
<td>23.3</td>
</tr>
</tbody>
</table>
Table 6 above comprised of eight statements which represent stress levels of the respondents who responded to the questionnaires according to job satisfaction and stress levels among academic staff members. (See hypothesis 1.5, bullet two, page 9). According to the respondents, 80% (33.3% + 46.7%) agreed that as academics, workload is the main cause of their stress; 6.6% (3.3% + 3.3%) of the respondents disagreed that as academics, workload is not the main cause of their stress and 13.3% of the respondents were neutral; 26.7% (10% + 16.7%) of the respondents agreed that they get stressed almost every day with their jobs; 30% (5% + 25%) of respondents did not agree that they get stressed almost every day with their jobs and 43.3% of the respondents decided to be neutral. 51.7% (16.7% + 35%) of the respondents agreed that they feel so stressed with the pay package they received, that they feel like leaving; 18.4% (1.7% + 16.7%) of the respondents disagreed.

61.7% (15% + 46.7%) of the respondents agreed that the stress of the job reduced their levels of self-esteem as academics; 26.7% of respondents were neutral and 11.7% disagreed with the statement; 58.4% (16.7% + 41.7%) of the respondents agreed that they have enough time to get everything done in their jobs; 8.3% of the respondents disagreed and 33.3% were neutral. 56.7% (46.7% + 10%) of the respondents agreed that they found their work manageable due to working with competent academics. In addition, 16.7% (1.7% + 15%) of the respondents disagreed that they found their work not manageable due to working with incompetent academics and 26.7% of the respondents were neutral.

With regards to the statement of being satisfied with how their job affected others, 3.3% of respondents disagreed that they were not satisfied with how their jobs affected others, 71.7% (60% + 11.7%) of the respondents agreed that they were satisfied and 25% of the respondents were neutral. 15% (6.7% + 8.3%) of the respondents disagreed that they were stressed because of the compensation they received which did not match their responsibilities at that campus, (40%) of the respondents were neutral and 45% (23.3% + 21.7%) of the respondents agreed that they are not stressed for the reason that the compensation they received does match their responsibilities. The above analysis was addressing hypothesis two (1.5, page 9, bullet two) regarding job satisfaction and level of stress among academic staff.
4.4. TEST FOR SIGNIFICANCE (SPEARMAN'S RANK CORRELATION)

Spearman’s rank correlation coefficient is known as a method of measuring the correlation between dependent and independent variables and it is based on the factor of covariance. Spearman’s rank correlation coefficient indicates the direction, strength and significance of the bivariate relationship among all the variables that were measured at ratio level (i.e. job satisfaction, stress, age, length of service, level of grades and salary). The number representing the Spearman’s rank correlation is referred to as a correlation coefficient. This test is concerned with the relationship between two ranked variables. The relationship is statistically significant if the p-value is less than the 0.05 level of significance.

The coefficient of Spearman’s rank correlation is given by

\[ r = 1 - \frac{6 \sum D^2}{N(N^2 - 1)} \]

where

\[ D = \text{differences of ranks of corresponding values of two ranked variables.} \]

\[ N = \text{number of paired values in the data} \]

\[-1 \leq r \leq 1\]

To test H1, the data collected from Tables 4.1 – 4.9 were subjected to a Spearman’s rank correlation test and the results are given below.

Table 7

Spearman’s rank correlation between age and perception of academics about job satisfaction.

<table>
<thead>
<tr>
<th>Perception</th>
<th>Correlation coefficient(r)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I become increasingly disappointed since my expectations are becoming more and more limited as I become older. ((V7))</td>
<td>0.283</td>
<td>0.028</td>
</tr>
</tbody>
</table>
As a high-ranking academic, I possess more work experience, which enables me to be paid more. (V20) Correlation coefficient (r ) 0.293

I get stressed almost every day on my job (V35) Correlation coefficient (r )-0.269

SPSS version 22 software package was used to perform the correlation analysis and the results are shown in Table 7. Since the p-values (0.028, 0.023 and 0.037) are less than the 0.05 level of significance, the correlation between age category and perception of academics about job satisfaction is significant. Negative correlation coefficient (r = -0.269) implies that old academics tend to disagree with the items listed in Table 7 whereas young academics tend to agree. Positive correlation coefficients (r = 0.283 and 0.293) imply that old academics tend to agree with the items listed in Table 7 whereas young academics tend to disagree. See Figures 4.1(a) and 4.1(b) below.

Figure 4.2 (a)

Age versus Perception (r < 0)
Figure 4.1 (b)

Age versus Perception ($r > 0$)

![Graph showing age versus perception with Old on the y-axis and Young on the y-axis, r > 0 indicated with a line through the graph.]

Table 8

Spearman’s rank correlation between salary level and perception of academics about job satisfaction.

<table>
<thead>
<tr>
<th>Perception</th>
<th>Correlation coefficient($r$)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would be very happy to spend the rest of my life at this Institution. (V29)</td>
<td>0.259</td>
<td>0.046</td>
</tr>
<tr>
<td>My income is based on the total number of years I have serviced the institution. (V32)</td>
<td>0.339</td>
<td>0.008</td>
</tr>
<tr>
<td>I get stressed almost every day on my job (V35)</td>
<td>-0.260</td>
<td>0.045</td>
</tr>
</tbody>
</table>

SPSS version 22 software package was used to perform the correlation analysis and the results are shown in Table 8. Since the p-values (0.046, 0.008 and 0.045) are less than the 0.05 level of significance, the correlation between income level and perception of academics about job satisfaction is significant. Negative correlation coefficient ($r = -0.260$) implies that high income earners tend to disagree with the
items listed in Table 8 whereas low income earners tend to agree. Positive correlation coefficients \((r = 0.259\) and \(0.339\)) imply that high income earners tend to agree with the items listed in Table 8 whereas low income earners tend to disagree. See Figures 4.3 (a) and 4.3 (b) below.

**Figure 4.3 (a) Salary level versus Perception \((r < 0)\)**

[Diagram showing decreasing relationship between salary level and perception with high salary level leading to disagree and low salary level leading to agree.]

**Figure 4.3 (b) Salary level versus Perception \((r > 0)\)**

[Diagram showing increasing relationship between salary level and perception with high salary level leading to agree and low salary level leading to disagree.]

Table 9

Spearman’s rank correlation between length of service and perception of academics about job satisfaction.

<table>
<thead>
<tr>
<th>Perception</th>
<th>Correlation coefficient(r )</th>
<th>p - value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have become increasingly disappointed since my expectations are becoming more limited as I become older. (V7)</td>
<td>0.282</td>
<td>0.029</td>
</tr>
<tr>
<td>I experience pressure from having to learn and apply new technology because of my age. (V8)</td>
<td>0.278</td>
<td>0.032</td>
</tr>
<tr>
<td>The length of time I have been employed by my current institution is more than 5 years. (V26)</td>
<td>0.269</td>
<td>0.038</td>
</tr>
</tbody>
</table>

SPSS version 22 software package was used to perform the correlation analysis and the results are shown in Table 9. Since the p-values (0.029, 0.032 and 0.038) are less than the 0.05 level of significance, it means that the correlation between length of service and perception of academics about job satisfaction is significant. Positive correlation coefficients (r = 0.282, 0.278 and 0.269) imply that more experienced academics tend to agree with the items listed in Table 9, whereas less experienced academics disagree with the premise. See Figures 4.4 below.

Figure 4.4

Length of service versus Perception (r > 0)
### Table 10

**Spearman’s rank correlation between level of grades and perception of academics about job satisfaction.**

<table>
<thead>
<tr>
<th>Perception</th>
<th>Correlation coefficient(r )</th>
<th>p - value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I become increasingly disappointed since my expectations are becoming more and more limited as I become older. <em>(V7)</em></td>
<td>0.293</td>
<td>0.023</td>
</tr>
<tr>
<td>I experience pressure from learning technology because of my age. <em>(V8)</em></td>
<td>0.370</td>
<td></td>
</tr>
<tr>
<td>I entered the teaching profession because of its good salary <em>(V15)</em></td>
<td>0.269</td>
<td>0.038</td>
</tr>
<tr>
<td>In my institution I have a monthly and annual performance bonus. <em>(V16)</em></td>
<td>0.279</td>
<td>0.031</td>
</tr>
<tr>
<td>Overall, the education I received in training is applicable to my job. <em>(V21)</em></td>
<td>0.279</td>
<td></td>
</tr>
<tr>
<td>The length of time I have been employed by my current institution is more than 5 years. <em>(V26)</em></td>
<td>0.317</td>
<td>0.014</td>
</tr>
<tr>
<td>I would be very happy to spend the rest of my life at this institution. <em>(V29)</em></td>
<td>0.294</td>
<td>0.023</td>
</tr>
<tr>
<td>I do not intend looking for another better paid academic job in the near future. <em>(V30)</em></td>
<td>0.285</td>
<td>0.027</td>
</tr>
<tr>
<td>My income is based on the total number of years I have served the institution. <em>(V32)</em></td>
<td>0.438</td>
<td>0.000</td>
</tr>
</tbody>
</table>
SPSS version 22 software package was used to perform the correlation analysis and the results are shown in Table 10. Since the p-values are less than the 0.05 level of significance, the correlation between level of grades (qualifications) and perception of academics about job satisfaction is significant. Positive correlation coefficients imply that more educated academics (high qualifications) tend to agree with the items listed in Table 10 whereas less educated academics (low qualifications) tend to disagree. See Figures 4.5 below.

**Figure 4.5**

**Level of grades versus Perception ($r > 0$)**

```


```

The above data was subjected to a Spearman’s rank correlation test and the results indicate that there was a significant correlation between job satisfaction experienced by academic staff and their age, salary, level of grades and years of service, hence this study rejects hypothesis one and concludes that there is a significant correlation between job satisfaction and the variables of age, salary, level of grades and years of service.

Cronbach’s alpha is a reliability coefficient that indicates how well the items in a set are positively correlated to one another. In order to determine the validity and reliability of the questionnaire, factor analyses were conducted and Cronbach’s alpha coefficients were calculated. Table 12 displays the calculated alpha coefficients.
Table 12: Questionnaire reliability

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Cronbach Alpha (α)</th>
<th>N of Items</th>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job satisfaction and age</td>
<td>0.722</td>
<td>6</td>
<td>V6 – V11</td>
</tr>
<tr>
<td>Job satisfaction and salary</td>
<td>0.614</td>
<td>9</td>
<td>V12 – V20</td>
</tr>
<tr>
<td>Job satisfaction and education</td>
<td>0.670</td>
<td>5</td>
<td>V21 – V25</td>
</tr>
<tr>
<td>Job satisfaction and length of service</td>
<td>0.686</td>
<td>8</td>
<td>V26 – V33</td>
</tr>
<tr>
<td>Job satisfaction and stress level</td>
<td>0.753</td>
<td>8</td>
<td>V34 – V41</td>
</tr>
</tbody>
</table>

The values of the alpha coefficients in Table 12 above indicate that all these factors can be accepted as reliable. The construct validity of the questionnaire was confirmed by the factor analysis because it identified the same factors related to the job satisfaction of academics. Cronbach’s alpha coefficients in Table 12 above, confirms the reliability of the questionnaire.

Table 13: Spearman’s rank correlation between job satisfaction and stress level

<table>
<thead>
<tr>
<th>Correlation coefficient (r)</th>
<th>p – value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.365</td>
<td>0.004</td>
</tr>
</tbody>
</table>

SPSS version 22 software package was used to perform the correlation analysis and the results are shown in Table 13. Since the p-value (0.004) is less than the 0.05 level of significance, then the correlation between job satisfaction and stress level is significant. Positive correlation coefficient (r = 0.365) indicates that there is a positive correlation between job satisfaction and stress level. See Figure 4.6 below.

Figure 4.6

Job satisfaction versus stress level (r > 0)
Job Satisfaction  

\[ r > 0 \]

<table>
<thead>
<tr>
<th>Disagree</th>
<th>Agre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>Agree</td>
</tr>
</tbody>
</table>

Stress Level

Hypothesis 2 was also subjected to a correlation test and the results show that there was a significant correlation between job satisfaction and stress levels, hence this study rejects Hypothesis 2 and concludes that stress levels affect job satisfaction.

4.4.1. Reliability Analysis

Reliability measurement is to ascertain whether the data which has been collected is reliable to produce accurate results. The reliability of a measure is established by testing for both consistency and stability. Reliability analysis seeks to give convenience and help researcher to check whether the data that collected can be trusted or not. Cronbach’s alpha (\( \alpha \)) reliability coefficient, whose numerical value ranges from 0 to 1, measures the reliability (or internal consistency) of the items in the Likert scale. A high value (close to 1) for Cronbach’s alpha reliability coefficient indicates good internal consistency of the items in the scale.

Table 14

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Cronbach’s Alpha (( \alpha ))</th>
<th>N of Items</th>
<th>Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job satisfaction and age</td>
<td>0.722</td>
<td>6</td>
<td>V6 – V11</td>
</tr>
<tr>
<td>Job satisfaction and salary</td>
<td>0.614</td>
<td>9</td>
<td>V12 – V20</td>
</tr>
<tr>
<td>Job satisfaction and grades</td>
<td>0.670</td>
<td>5</td>
<td>V21 – V25</td>
</tr>
<tr>
<td>Job satisfaction and length of service</td>
<td>0.686</td>
<td>8</td>
<td>V26 – V33</td>
</tr>
<tr>
<td>Job satisfaction and stress level</td>
<td>0.753</td>
<td>8</td>
<td>V34 – V41</td>
</tr>
</tbody>
</table>

The Cronbach’s alpha coefficients in Table 14 above are close to 1, suggesting that the items in the scale have relatively high internal consistency. Cronbach's alpha is a reliability coefficient that indicates how well the items in a set are positively correlated to one another.
4.5. STATISTICAL ANALYSIS OF RESEARCH HYPOTHESES

This section deals with the analysis and interpretation of the hypotheses formulated in section 1.5. The hypotheses were tested using the Spearman’s rank correlation test and the results are shown in tables 1-13.

4.5.1. Hypothesis 1: There is no significant difference between job satisfaction experienced by academic staff and their age, salaries, level of grades and years of service.

The Spearman’s rank correlation test applied to the findings shows a significant relationship between age and job satisfaction, the correlation between age and perception of academics about job satisfaction is significant. Hence, this study rejects the null hypothesis. As the Spearman’s rank correlation, P-value of 0.028 is less than the 0.05 level of significance, the correlation between age and perception of academics about job satisfaction is significant. See Figure 4.1 (a).

If the P-value is less than the 0.05 cut off point, the possibility of rejection is there. Negative correlation coefficient (-0.269) implies that old academics tend to disagree with the items listed in Table 4.11 whereas young academics tend to agree and these opinions are represented in Figure 4.1(a). Table 4.11 indicates that academics do not get stressed on a daily basis with their jobs.

4.5.2. There is no significant difference between job satisfaction experienced by academic staff and their salaries

- Since the P-value of (0.046) is less than the 0.05 level of significance, the correlation between income level and perception of academics about job satisfaction is significant. Positive correlation coefficients (0.339) imply that high income earners tend to agree with the items listed in Table 4.12 whereas low income earners tend to disagree. These perceptions are represented in Figures 4.7(a) and (b).
4.5.3. There is no significant difference between job satisfaction experienced by academic staff and their length of service and job satisfaction.

- It was found from the data that 66.7% of the respondents indicated that they had been employed by their current institution for more than 5 years. The data revealed that 38.4% of academics are satisfied with their yearly salary increments. At the same time, the study found that 35% of the respondents agreed that they would prefer to spend the rest of their lives at the institution. The majority of respondents (51.7%) agreed that as academics, they were rewarded according to the length of service they have rendered and most of the lecturers who responded to the questionnaire had 11 to 15 years of service at the North-West University.

4.5.4. There is no significant difference between job satisfaction experienced by academic staff and their level of grades

- In summarizing the data, it was evident that 85% of the respondents agreed that the education they received in training is applicable to their jobs and 61.7% of the respondents agreed that they were satisfied with their students’ academic performance. 80% of the respondents agreed that they expected the employer to acknowledge their level of grades and pay them better to enhance their job satisfaction. The data shows that there were 33.3 percent of the respondents at the rank of senior lecturer.

4.5.5. Hypotheses 2: There is no significant difference between job satisfaction and stress levels among academic staff members.

The Spearman’s rank correlation text applied to Hypothesis 2, shows that there is a significant relationship between job satisfaction and stress levels among academic staff. This means that Hypothesis 2 is also rejected since the P-value of 0.004 is less than the 0.05 level of significance, hence, this study concludes that stress levels have an impact in job satisfaction.

- Based on the findings of the study, it is evident that 80% of the respondents agreed that workload is the main cause of their stress while 26.7% of the
respondents agreed that they get stressed almost every day with their jobs. 51.7% of the respondents agreed that they feel so stressed with the pay package they received that they feel like leaving. The analysis also showed a high percentage (61.7%) of the respondents who emphasized that the job reduced their level of self-fulfilment as academics and 58.4% of the respondents indicated that they have enough time to get everything done in their jobs. The majority (56.7%) of the respondents stated that they found their work manageable due to working with competent academics. In addition, 45% of the respondents agreed that they are not stressed because the compensation they receive matches their responsibilities.

4.6. CONCLUSION

All of the independent variables (age, level of grades, salary, stress and length of service) for this research are found to have a significant relationship with the independent variable (job satisfaction). Results of the analysis and supporting reasons for the results are discussed in the final chapter of this study which sums up the findings and submits some recommendations.
CHAPTER FIVE

DISCUSSION OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1. INTRODUCTION

Chapter 5 makes a conclusion based on the results reported in Chapter 4 and the entire research project’s problematized topic. As observed, there are a few factors involved in determining an academic’s job satisfaction levels. It is important to understand and allow academic staff members to feel satisfied and content when working with management as well as their colleagues. This chapter focuses on a discussion of the research results and findings and their implications for the North-West University as the focus. It also seeks to understand and determine the achievement of the overall research objectives. Based on the discussions, a conclusion is reached and recommendations are made.

5.2. SUMMARY OF THE FINDINGS

5.2.1. Objective 1: To investigate the correlation between gender, age, salary, level of grades, length of service and job satisfaction among academic staff.

The main objective of this research was to investigate the correlation between age, gender, level of grades, respondents’ service length in current institution, monthly salary and job satisfaction among academic staff.

In this research, 60% of the respondents were female while 40% of respondents were male. For the age range of respondents, 21 respondents (35%) are aged between 46 and 50 years, 11 respondents (18.3%) are between 41 to 45 years old and 9 respondents (15%) are between 36 and 40 years old, 7 respondents (11.7%) are 50 years old and above. For the age range of respondents, 6 respondents (10%) are aged between 31 to 35 years old and below 30 years.

Some of the respondents are recent employees who have just started and have worked for not more than 6 years in this tertiary institution. There are 8 respondents
in this category and make up 13.3% of the respondents. Those are 28.3% of respondents who have working experience ranging between 16 to 20 years which totals 17 respondents. Besides, there are 31.7% of the respondents who have been working for 11 to 15 years in the university and add up to 19 respondents. 11.7% of respondents have worked as academics for more than 20 years and these add up to 7 of respondents, while only 9 respondents have worked for 6 to 10 years in the education field which equates to 15%.

The grades level is stratified across 5 levels of qualification which are Junior Lecturer, Lecturer, Senior Lecturer, Associate Professor and Full Professors. Table 4.4 shows that there are 33.3% of the respondents who are Senior Lecturers. This is followed by 36.7% of the respondents who are lecturers and these add to 22 respondents. The remaining qualifications (Junior Lecturer, Associate Professor and Full Professors), contributes 10% of the respondents which translates to 6 respondents each.

The variable salary was categorized by means of five subgroups. In this term, respondents were requested to disclose their monthly salaries in order to complete the questionnaire. There were 11.7% of the respondents who indicated that their salary is below R19 000, and made up 7 respondents. 20% of the respondents who were 12 were paid between R20 000 and R29 000, and 16.7% of the respondents (10) had a salary of R50 000 or more. 28.3% of respondents had their monthly income in the salary bracket R40 000 to R49 000 which consists of 17 respondents. In addition, 23.3% of the respondents (14) had a salary between R30 000 – R39 000. This could be as a result of the years of service that the academics have been employed.

Based on the results computed in chapter 4, using Spearman’s rank correlation test, with its analysis showing a correlation of 0.283, the correlation between age and perception of academics about job satisfaction is significant.

To date, there appears to be extensive evidence of a relationship between academic employee’s age and job satisfaction. Many studies reported that job satisfaction was positively and linearly associated with age (Oshagbemi, 2003:1212; Franek & Vecera, 2008:64). However, Franek and Vecera (2008:4) also found that the nature
of the relationship between age and job satisfaction was curvilinear. Moreover, older workers experience increased pressure from factors such as the increasingly changing technologies. One of the recent studies conducted by Paul and Phua (2011:142) reveals that the relationship between age and satisfaction is u-shaped.

5.2.2. Objective 2: Establishing if academics experience a great deal of stress working at the NWU

This objective investigated whether academics experienced a great deal of stress working at the NWU.

Based on the results of the statistical test using Spearman’s rank correlation test, with its analysis showing a correlation of 0.365(table 4.16), the correlation between job satisfaction and stress level is significant.

The results obtained from this study show that respondents (females and males) agreed that research on stress among academics of the universities from across the globe indicates that the phenomenon of occupational stress in universities is alarmingly widespread and increasing. Gillespie, Walsh, Winfield, Dua and Stough (2001: 54) support the findings of the present study that the level of stress continues to increase. For example, the United Kingdom Association of University Teachers study found that 49% of academic employees reported that their jobs were stressful and 77% reported an increase in occupational stress over recent years.

In addition, job satisfaction has been related in a broader sense to quality of life and life satisfaction. The link between work stress and job satisfaction also has been well established in empirical research, with work stress being one of the most commonly cited predictors of job satisfaction (McAlister, Dolbier, Webster, Mallon & Steinhardt, 2006:183). Furthermore, Mark & Smith (2012:64) state that stress levels in academic institutions are high compared to many other work populations and that stress has increased significantly over the last 15 years.

Whatever the theoretical approach used to study job satisfaction, most of the researchers have generally agreed that job satisfaction involve the attitudes, emotions and feelings about a job, and how these attitudes, emotions and feelings
affect the job and the academic employee’s personal life (Saif, Nawaz & Jan, 2012: 1383).

From the literature review in chapter 2, research on stress and job satisfaction of academic staff is prioritised because understanding of the factors influencing academic staff job satisfaction in an institution of higher learning could help the institution’s management to put in place measures that may lead to improvement in the quality of academic employee work and improvement of the institution’s performance (Muindi, 2011: 3). Palmer, Cooper and Thomas (2004: 2) define stress as the adverse reaction a person has to excessive pressure and they maintain that stress affects academic employees in different ways at different times and is often the result of a combination of factors in personal and working lives, and that stress is not a weakness, but if unnoticed, it can lead progressively to a decrease in performance, poor health and long term absence from work.

Stress is a multi-dimensional concept and it often occurs when individuals physical and emotional condition do not meet or cannot handle their job demands, constraints or opportunities. This study established that there are two types of stress, eustress (good stress) and distress (bad stress) as mentioned in chapter 2. The source of stress such as workload and personal responsibility differs between cultures and education as well as working experience. High stress levels eventually decrease all semblances to job satisfaction. So, universities in general, and the North-West University in particular, need to emphasise eustress (good stress) and minimize distress (bad stress) in order to increase academics’ job satisfaction.

5.3. CONCLUSION

It is hoped that this research provides useful information towards the management of academics at the Mafikeng campus. This study also charts directions for future researchers, especially for those who are doing research relevant to defining the factors that influence job satisfaction. Through this study, it is hoped that the university managers understand how to avoid unnecessary problems and satisfy the needs of academic employees. It should also help them to understand better their academic employees’ needs and try to meet their expectations. Indirectly, it can help to reduce the problem of the bad attitude of the academic employees towards their
jobs. Besides, the university employers are enabled insight into factors that are significantly affecting the academic employees’ job satisfaction and what they should pay more attention to. Job satisfaction is usually associated with increased productivity and improving the institutional effectiveness. In order to enhance the motivation and job satisfaction of the academics, the employers and researchers can create awareness towards intrinsic and extrinsic rewards because both rewards are crucial in influencing job satisfaction. A positive relationship exists between income, age, length of service, grades and job satisfaction of academic members, thus age is independently related to the job satisfaction of academic members, with older members being more satisfied than their younger colleagues.

5.4. RECOMMENDATIONS

In considering the overall findings and conclusions of this study, recommendations to enhance and improve future research are listed as follows:

- Management who are responsible for hiring and retaining quality academic staff members should be aware of the influence of educational factors, especially those relating to the job of academic staff members. Knowledge of the above factors can assist management in their efforts to improve the working conditions of academic staff members.

- The study indicates that the levels of job satisfaction are affected by some demographic variables. Thus, managers have to recognise that as different academic staff members have different levels of job satisfaction, their management styles and motivational strategies need to cater for these individual differences.

- Policy makers and management of the institution need to re-examine their current institutional policies and with regards to the areas identified they are obliged to make the necessary changes in the policies and practices to enhance job satisfaction.
• Research on stress and job satisfaction of academic staff is important because understanding of factors influencing academic staff job satisfaction in an institution could help the institution’s management to put in place measures that may lead to improvement in the quality of academic employee work and improvement of the institutions.

• There is need for target-specific research to be undertaken that focuses on interventions that can be implemented to reduce stress amongst academics. The current literature does not include best practices of how stress amongst academics can be best addressed.

• This research is an initial start for future studies on factors that affect the academics’ job satisfaction in institutions and it is hoped there will be more nuanced findings based on this preliminary work.
REFERENCES


- Aggarwal, N. & Medury, Y. (2012). Job satisfaction among Faculty: An approach to study the intention to leave or stay in the University, Voice of Research, 1(3): 38-41.


• Muindi, F. K. (2011). The Relationship between Participation in Decision Making and Job Satisfaction among Academic Staff in the School of Business, University of Nairobi, IBIMA. *Journal of Human Resources Management Research:* 1-34.


• Rafiq, A., Jan, F., Hayat, Y. & Fayyaz, M. (2012). An analysis of technical, vocational and commercial education contribution towards faculty satisfaction in


- Usman, A. Ahmed Z. Ahmed, I. & Akbar Z. (2011). Work Stress Experienced by the Teaching Staff of University of the Punjab, Pakistan: Antecedents and

APPENDIX A: REQUESTING LETTER

Canadia Musi  
Faculty of Education  
E-mail: Canadia.Musi@nwu.ac.za  
Mmabatho  
Tel: 0183892355

To: School Dean  
NWU Mafikeng Campus  
26/ 02/ 2014

Re-Request to conduct empirical investigation at your Faculty.

I, Canadia Musi, staff member at the North-West University, Mafikeng Campus, have registered for Master in Educational Psychology in the Faculty of Education and Training. In order to complete my studies I have to conduct fieldwork. I therefore kindly request your permission to conduct empirical investigation in your Faculty with your academic staff. My research topic is “The effects of demographics on job satisfaction among academic staff of a South African University.

Thanking you in advance.

____________________

P.C. Musi (16416007)

Study leader: Dr. Noorullah Shaiknag

Signature : ________________
Re: Request to conduct empirical investigation at your Faculty.

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Thanking you in advance.

P.C. Muis (16416007)

Study leader: Dr. Noorullah Shalknag

Signature: [signature]
Canadia Musi  
Faculty of Education  
E-mail: Canadia.Musi@nwu.ac.za 
Tel: 0183892355 
Internet: http://www.nwu.ac.za 

To: School Dean  
NWU Mafikeng Campus  
26/02/2014

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Thanking you in advance.

P.C. Musi (16416007)  
Study leader: Dr. Noorullah Shaiknag  
Signature: [Signature]

[Stamp: Office of the Executive Dean, Faculty of Law, Mafikeng Campus, North West University, Private Bag X2046, Mmabatho, 2735]
To: School Dean

NWU Mafikeng Campus

26/02/2014

Re-Request to conduct empirical investigation at your Faculty.

I Canada Musi, staff member at the North West University, Mafikeng Campus, have registered for Master in Educational Psychology in the Faculty of Education and Training. In order to complete my studies I have to conduct fieldwork. I therefore kindly request your permission to conduct empirical investigation in your Faculty with your academic staff. My research topic is “the effects of demographics on job satisfaction among academic Staff of a South African University.

Thanking you in advance.

P.C. Musi (16416007)

Study leader: Dr. Noorullah Shalknag

Signature: [signature]

P/Bag x2104
Mmabatho
2715
Rep of South Africa
Canadia Musi
Faculty of Education

E-mail: Canadia.Musi@nwu.ac.za

Tel: 0183892355
Internet http://www.nwu.ac.za

To: School Dean
NWU Mafikeng Campus
26/02/2014

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Thanking you in advance.

P.C. Musi (16416007)
Study leader: Dr. Noorullah Shaiknag

Signature: [Signature]

FACULTY OF EDUCATION & TRAINING
DEAN’S OFFICE
2 8/02- 2014

Private Bag X 2046, Mmabatho 2735
Tel: (018) 392191 Fax: (018) 3892038
ETHICS APPROVAL CERTIFICATE OF PROJECT
Based on approval by the Human Resource Research Ethics Committee, Mafikeng Campus, the North-West University Institutional Research Ethics Regulatory Committee (NWU-IRERC) hereby approves your project as indicated below. This implies that the NWU-IRERC grants its permission that, provided the special conditions specified below are met and pending any other authorisation that may be necessary, the project may be initiated, using the ethics number below.

Project title: Stress and demographic factors affecting job satisfaction among academics in one of South African Universities.
Project Leader: Dr N Shaikhnag
Student: PC Musi
Ethics number: N W U - 0 0 2 2 8 - 1 5 - A 9

Approval date: 2015-06-01 Expiry date: 2020-05-31 Category N/A
APPENDIX C: CERTIFICATE OF EDITING

TO WHOM IT MAY CONCERN

CERTIFICATE OF EDITING

I, Muchativugwa Liberty Hove, confirm and certify that I have read and edited the entire Masters dissertation in Educational Psychology entitled: Stress and demographic factors affecting job satisfaction among academics in one South African University

Popi Canadia Musi 16416007

submitted in fulfilment of the requirements for the degree of Master of Educational Psychology at the North-West University, Mafikeng Campus.

Popi Canadia Musi was supervised by Dr. Norullah Shaikhnag and co-supervised by Dr. Washington Dudu of the School for Teacher Education and Training, North-West University.

I hold a PhD in English Language and Literature in English and am qualified to edit academic work of such nature for cohesion and coherence.

The views and research procedures detailed and expressed in the thesis remain those of the student.

Yours Sincerely

Dr M. L. Hove

Do not type here

Original details: Dr M.L.Hove(22055215) C:\Users\22055215\Desktop\CERTIFICATE OF EDITING.docm

7 May 2015
APPENDIX D: RECEIPT ACKNOWLEDGES THAT TURNTIN THAT RECEIVE THIS PAPER

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by WASHINGTON DUDU

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Submitted to Vrije Universiteit Amsterdam

Franěk, Marek. "PERSONAL CHARACTERISTICS AND JOB
Nazari, Kamran and Emami, Mostafa. "The Investigation Of The Relation Between Job Stress And Job Satisfaction (Case Study In Faculty Members Of Recognized Public And Private Universities In The Province Of Kermanshah)", Advances in Natural & Applied Sciences, 2012.


Submitted to University of KwaZulu-Natal

Publicat ion

Nazari, Kamran and Emami, Mostafa. "The Investigation Of The Relation Between Job Stress And Job Satisfaction (Case Study In Faculty Members Of Recognized Public And Private Universities In The Province Of Kermanshah)", Advances in Natural & Applied Sciences, 2012.

Publicat ion
APPENDIX E: Questionnaire

THE PURPOSE OF THE QUESTIONNAIRES

The purpose of this questionnaire is to examine the role of stress and demographic variables in determining job satisfaction and whether age, salary, education and years of service are positive predicting factors of job satisfaction among academic staff members.

Instructions:

1) There are three (3) sections in this questionnaire. Please answer ALL questions in ALL sections). Please do not record your name on this document. The contents of this questionnaire will be kept strictly confidential.

Demographics Data of participants

Instructions: Please answer the following items by making an X in the block which is the most appropriate to you:

1. Your Gender (V1)

<table>
<thead>
<tr>
<th>Male</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td></td>
</tr>
</tbody>
</table>

2. Your Age (V2)

<table>
<thead>
<tr>
<th></th>
<th>Less than 30 years and below</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>31-35yrs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36-40yrs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>41-45yrs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>46-50 yrs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>51 and above</td>
<td></td>
<td></td>
</tr>
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</table>

3. Length of your service (V3)

<table>
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<tr>
<th></th>
<th>Less than 6 years</th>
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<tbody>
<tr>
<td>6-10 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-15years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16-20 years</td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than 20 years</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. Your academic rank (V4)

<table>
<thead>
<tr>
<th>Rank</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior Lecturer</td>
<td></td>
</tr>
<tr>
<td>Lecturer</td>
<td></td>
</tr>
<tr>
<td>Senior Lecturer</td>
<td></td>
</tr>
<tr>
<td>Associate Professor</td>
<td></td>
</tr>
<tr>
<td>Full Professor</td>
<td></td>
</tr>
</tbody>
</table>

5. Your monthly income (V5)

<table>
<thead>
<tr>
<th>Income Range</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Below R19,000</td>
<td></td>
</tr>
<tr>
<td>R20,000 - R29,000</td>
<td></td>
</tr>
<tr>
<td>R30,000 - R39,000</td>
<td></td>
</tr>
<tr>
<td>R40,000 - R49,000</td>
<td></td>
</tr>
<tr>
<td>R50,000 or more</td>
<td></td>
</tr>
</tbody>
</table>

The questions below answer hypothesis 1. Read each statement carefully. Please tick your answer to each statement using 5 Likert scale: (1) = strongly disagree (SD); (2) = disagree (D); (3) = neutral (N); (4) = agree (A) and (5) = strongly agree (SA)

1. Job satisfaction and age

<table>
<thead>
<tr>
<th></th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 As an academic above 40, I am becoming less satisfied with my job. (V6)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>1.2 I become increasingly disappointed since my expectations are becoming more and more limited as I become older. (V7)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>1.3 I experience pressure from learning technology because of my age. (V8)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>1.4 I am satisfied because I occupy senior post (V9)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>1.5 I see myself still working as an academic in 5 years’ time. (V10)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>1.6 As I am not satisfied with my working conditions, I would prefer to change my institution very soon. (V11)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

2. Job satisfaction and Salary

<table>
<thead>
<tr>
<th></th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
</table>
2.1 My salary is reasonable as compared with my work expectations. (V12) | 1 | 2 | 3 | 4 | 5
2.2 The rate at which salary increases for an academic is satisfactory in my case. (V13) | 1 | 2 | 3 | 4 | 5
2.3 If I am offered better salary by another institution, I would choose to move to that institution. (V14) | 1 | 2 | 3 | 4 | 5
2.4 I entered the teaching profession because of its good salary (V15) | 1 | 2 | 3 | 4 | 5
2.5 In my institution I have a monthly and annual performance bonus. (V16) | 1 | 2 | 3 | 4 | 5
2.6 I feel I am being paid a fair amount for the work I do. (V17) | 1 | 2 | 3 | 4 | 5
2.7 My salary adequately meets my level of needs satisfaction (V18) | 1 | 2 | 3 | 4 | 5
2.8 My division provides a lucrative retirement package. (V19) | 1 | 2 | 3 | 4 | 5
2.9 As a high-ranking academic, I possess more work experience, which enables me to be paid more. (V20) | 1 | 2 | 3 | 4 | 5

3 | Job satisfaction and education | SD | D | N | A | SA
3.1 Overall, the education I received in training is applicable to my job. (V21) | 1 | 2 | 3 | 4 | 5
3.2 I am satisfied with my students’ academic performance (V22) | 1 | 2 | 3 | 4 | 5
3.3 I expect the employer to acknowledge my level of education and pay me better to enhance my job satisfaction. (V23) | 1 | 2 | 3 | 4 | 5
3.4 I really enjoy working with my academic colleagues with higher levels of educational qualifications because they are very helpful. (V24) | 1 | 2 | 3 | 4 | 5
3.5 I do not feel any obligation to remain with the same institution because of my education. (V25) | 1 | 2 | 3 | 4 | 5

4. | Job satisfaction and length of service | SD | D | N | A | SA
4.1 The length of time I am employed by my current institution is more than 5 years. (V26) | 1 | 2 | 3 | 4 | 5
4.2 I am satisfied with my yearly increments. (V27) | 1 | 2 | 3 | 4 | 5
I see myself still working as an academic employee in 5 years from NWU. *(V28)*

I would be very happy to spend the rest of my life at this Institution. *(V29)*

I do not intend looking for another better paid academic job in the near future. *(V30)*

I have to continually refer to even small matters to a senior academic for a final answer despite my years of service. *(V31)*

My income is based on the total number of years I have serviced the institution. *(V32)*

As an academic, I am rewarded on the length of service I have rendered. *(V33)*

The next few questions are concerned with hypotheses 2.

Please indicate whether you strongly agree, (SA), agree, (A), neutral (N), disagree, (D), strongly disagree, (SD) with the following statements:

<table>
<thead>
<tr>
<th>5.</th>
<th>Job satisfaction and stress levels among academic staff.</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>As an academic, workload is my main cause of my stress <em>(V34)</em></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5.2</td>
<td>I get stressed almost every day on my job <em>(V35)</em></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5.3</td>
<td>I feel so stressed with the pay package I receive, that I feel like leaving. <em>(V36)</em></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5.4</td>
<td>The stress on my job reduces my confidence level as an academic <em>(V37)</em></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5.5</td>
<td>I have enough time to get everything done in my job. <em>(V38)</em></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td>5.6</td>
<td>I find my work is easy due to working with a competent academic workforce. <em>(V39)</em></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5.7</td>
<td>As an academic, I am satisfied with how my job affects</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5.8</td>
<td>I am stressed because the compensation I get does not match my responsibilities at this campus. (V41)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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THANK YOU
APPENDIX F: Nonparametric Correlation Analysis: Spearman’s rho test (SPSS output)

Nonparametric Correlations

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* a. Based on availability of workspace memory

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<td>N</td>
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<td>V7</td>
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<tr>
<td>Sig. (2-tailed)</td>
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<tr>
<td>N</td>
</tr>
</tbody>
</table>
V20 Correlation Coefficient

\[ .293^{*} \quad .331^{**} \quad 1.000 \quad -.173 \]

Sig. (2-tailed)

\[ .023 \quad .010 \quad . \quad .186 \]

N

60 60 60 60

V35 Correlation Coefficient

\[ -.269^{*} \quad .271^{*} \quad -.173 \quad 1.000 \]

Sig. (2-tailed)

\[ .037 \quad .036 \quad .186 \quad . \]

N

60 60 60 60

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

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

NONPAR CORR
/VARIABLES=V3 V7 V8 V26
/PRINT=SPEARMAN TWOTAIL NOSIG
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Nonparametric Correlations

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<td>Definition of Missing</td>
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<td>Statistics for each pair of variables are based on all the cases with valid data for that pair.</td>
</tr>
<tr>
<td>Syntax</td>
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a. Based on availability of workspace memory

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* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

NONPAR CORR
/VARIABLES=V4 V7 V8 V15 V16 V21 V26 V29 V30 V32
/PRINT=SPEARMAN TWOTAIL NOSIG
/MISSING=PAIRWISE.
# Nonparametric Correlations

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### Missing Value Handling

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### Syntax

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/VARIABLES=V4 V7 V8 V15 V16 V21 V26 V29 V30 V32
/PRINT=SPEARMAN TWOTAIL NOSIG
/MISSING=PAIRWISE.
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\(^a\) Based on availability of workspace memory
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* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

NONPAR CORR
/VARIABLES=V5 V29 V32 V35
/PRINT=SPEARMAN TWOTAIL NOSIG
/MISSING=PAIRWISE.
Nonparametric Correlations

Notes

Output Created
02-MAR-2015 10:48:23

Comments

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Missing Value Handling
Definition of Missing
User-defined missing values are treated as missing.

Cases Used
Statistics for each pair of variables are based on all the cases with valid data for that pair.

Syntax
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Resources
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Elapsed Time
00:00:00.00
Number of Cases Allowed
112347 cases

a. Based on availability of workspace memory

Correlations

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<td>.491**</td>
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* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
APPENDIX G: Reliability Results (SPSS output)

RELIABILITY
/VARIABLES=V6 V7 V8 V9 V10 V11
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA.

Reliability

Notes

Output Created 02-MAR-2015 10:58:09
Comments

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Split File <none>
N of Rows in Working Data File 60
Matrix Input

Missing Value Handling
Definition of Missing User-defined missing values are treated as missing.
Cases Used Statistics are based on all cases with valid data for all variables in the procedure.

Syntax
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/MODEL=ALPHA.

Resources
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Scale: ALL VARIABLES

Case Processing Summary

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a. Listwise deletion based on all variables in the procedure.

Reliability Statistics
Cronbach's Alpha  N of Items
.722       6

RELIABILITY
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/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA.

Reliability

Notes
Output Created          02-MAR-2015 11:00:32
Comments
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               Split File        <none>
               N of Rows in Working Data File 60
               Matrix Input
Missing Value Handling  Definition of Missing User-defined missing values are treated as missing.
               Cases Used     Statistics are based on all cases with valid data for all variables in the procedure.
Syntax          RELIABILITY
               /VARIABLES=V12 V13 V14 V15 V16 V17 V18 V19 V20
               /SCALE('ALL VARIABLES') ALL
               /MODEL=ALPHA.
Resources       Processor Time       00:00:00.00
               Elapsed Time        00:00:00.00
Scale: ALL VARIABLES

Case Processing Summary

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\(^a\) Listwise deletion based on all variables in the procedure.

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RELIABILITY
/VARIABLES=V21 V22 V23 V24 V25
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA.

Reliability

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<td>User-defined missing values are treated as missing.</td>
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<td>Statistics are based on all cases with valid data for all variables in the procedure.</td>
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Case Processing Summary

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a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

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RELIABILITY
/VARIABLES=V26 V27 V28 V29 V30 V31 V32 V33
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Reliability

Notes

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Scale: ALL VARIABLES
Case Processing Summary

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a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

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RELIABILITY
/VARIABLES=V34 V35 V36 V37 V38 V39 V40 V41
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Reliability

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User-defined missing values are treated as missing. Statistics are based on all cases with valid data for all variables in the procedure.

Syntax

RELIABILITY
/VARIABLES=V34 V35 V36 V37 V38 V39 V40 V41
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA.

Resources

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Scale: ALL VARIABLES

Case Processing Summary
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\(^a\) Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

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