

**Psychosocial factors determining mental health of employees in a South African  
University**

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Psychosocial factors determining mental health of employees in a South African University

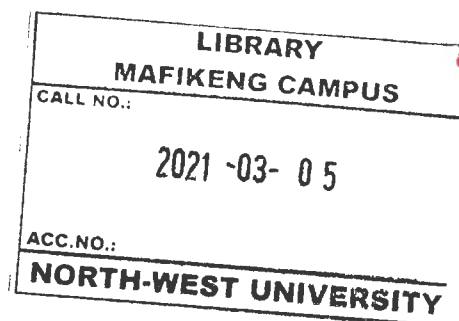
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Mini-dissertation (article format) submitted in partial fulfilment of the requirements for the degree of Master of Social Science (Clinical Psychology) at the North-West University, Mafikeng Campus

Supervisor: Professor E.S. Idemudia

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## DECLARATION

I, Mogale Koketjo Kgomotlokoa Christinah, declare that the mini-dissertation entitled **“Psychosocial factors determining mental health of employees in a South African university”**, hereby submitted for the degree of Master of Social Science in Clinical Psychology, has not previously been submitted by me for a degree at this or any other university. I further declare that this is my own work in design and execution and that all materials contained herein have been duly acknowledged.

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Mogale Koketjo

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Date

## **DEDICATIONS**

This study is dedicated to my family, especially my parents

Sarah and Andries Mogale

And

My best friend

Pontsho Makofane

## ACKNOWLEDGEMENTS

I would like to thank God Almighty for giving me strength till thus far, for His unconditional love and mercies and for never giving up on me. When I did not have any strength to continue, you still carried me through. I am very grateful

- My deepest gratitude goes to Prof E.S. Idemudia for his patience and intervening in the study when I needed him the most. Without your support and guidance, this would have not been possible. I really do appreciate your effort and time
- Dr M.A. Matamela, thank you for never giving up on me and being patient with me. I appreciate your kindness, support and am grateful that you have been with me through this journey since day one till now. May God grant you growth in all spheres of your life.
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- To my beloved parents Sarah Mogale and Andries Mogale, you believed in me since day one, supported me through thick and thin. When I wanted to give up you were always there to encourage me to stand tall. Your unconditional love and financial support made me who I am today. Thank you and may God continue to bless you
- My siblings: Katlego, Molala, Jacky and beloved nephew Disego, thank you for your patience, love and support.
- I wish to thank my friends Pontsho Makofane and Motiang Dimakatso for your support, advice and the unconditional love you gave me
- To the Monamodi family, thank you for your love and support throughout my stay in Mafikeng.
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## SUMMARY

The aim of the study was to examine employment status, duration of employment and work stress as psychosocial factors determining mental health of employees in a South African university. The study focused on four hypotheses: (1) Employment status will influence mental health of employees; (2) Employees with long and short term working duration will be different in mental health; (3) Work stress will influence mental health of university employees and lastly (4) There will be an interaction between status of employment, duration of employment and work stress on mental health of university employees.

The research was conducted with North-West University (Mafikeng campus) employees. A questionnaire with three sections –A, B, and C was used to collect data. Section A comprised the demographic characteristics of participants, the second section (B) encompassed the Work Stress Inventory (WSI) used to measure work stress, and lastly section C comprised the General Health Questionnaire Scale (GHQ-28) used to measure mental health. Psychometric properties of all the scales used are valid and reliable and questionnaires were analysed using SPSS 23. Two hundred and fourteen (214) participants were selected using convenience sampling and snowball sampling. Of the 214 participants, one hundred and three (103) were male and one hundred and eleven (111) were female. Age of participants ranged from 20 to over 50 years with a mean age ( $M = 40.8$ ,  $SD = 10.8$ ). The years of employment ranged from 1 to over 10 years, with the mean years at ( $M = 8.7$ ,  $SD = 8.5$ ). The study included support and academic staff, temporary and permanent employees and different employment ranks.

All the four hypotheses were tested using a 2x2x2 Analysis of Variance (ANOVA).

The first hypothesis examined the influence of employment status on mental health of employees. As shown in Table 1, results were not significant;  $F(1, 206) = 1.714$ ,  $p = .192$ .

Although, the result did not reach an acceptable level of significance, a look at the mean shows that temporary staff members had higher scores ( $M= 30.546$ ) on psychological dysfunctions than permanent staff members ( $M=26.321$ ).

Results from the second hypothesis (Table 1) revealed that there was a significant difference;  $F(1, 206) = 7.855, p = .006$  for duration of employment on mental health; whereby employees with a short term duration of employment ( $M=23.911$ ) reported better mental health than those with long a duration of employment ( $M=32.956$ ). The third hypothesis which examined the effect of work stress on mental health of university employees revealed that employees with low work stress ( $M=22.765$ ) reported better mental health than those with high work stress ( $M=34.102$ );  $F(1, 206) = 12.340, p = .001$ . This implies that work stress has an influence on the mental health of university employees. The fourth hypothesis examined whether there would be an interaction of three independent variables (status of employment, duration of employment and work stress) on mental health. This hypothesis was however rejected as the results showed no interaction effect of the independent variables on mental health;  $F(1, 206) = 3.156, p = .077$ . The fourth hypothesis did not show any interaction of employment status, duration of employment and work stress on mental health with .05 level;  $F(1, 206) = 3.156, p = .077$ ; but almost near significance at the .05 level

In conclusion, the study contributed to the growing body of research about mental health in the workplace by providing a link between psychosocial factors (employment status, duration of employment, work-stress) and mental health of university employees in a South African university. It was noted that work stress and duration of employment are linked with poor mental health of university employees. Therefore employee wellness practitioners need to develop intervention strategies to assist in improving the mental health of employees.

## PREFACE

### **Article format**

For the purpose of this study and as part of the requirements for a Professional Master's Degree, the article format as described by General Regulation A.7.5.1.b of the North West University was chosen and followed.

### **Selected Journal**

The target journal for submission of the current manuscript is the South African Journal of Psychology (SAJP). For the purpose of examination, tables are included in the text.

### **Letter of consent**

The letter of consent from the authors granting permission that the manuscript entitled "PSYCHOSOCIAL FACTORS DETERMINING MENTAL HEALTH OF UNIVERSITY EMPLOYEES IN A SOUTH AFRICAN UNIVERSITY" be submitted for purposes of this study is attached.

### **Page numbering**

In this study, page numbering starts from the first page and run to the last. For submission to the above-mentioned journal, the manuscript will be numbered according to the requirements of SAJP. Hence, all pages will be numbered consecutively. *The references section will also follow the requirements of SAJP.*

## LETTER OF CONSENT

We, the undersigned, hereby give consent that Mogale Koketjo Kgomotlokoa Christinah may submit the manuscript entitled “PSYCHOSOCIAL FACTORS DETERMINING MENTAL HEALTH OF EMPLOYEES IN A SOUTH AFRICAN UNIVERSITY” for the purpose of a dissertation in partial fulfilment for the degree of Master of Social Science in Clinical Psychology.

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Prof E.S. Idemudia

Supervisor

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Dr N.A. Matamela

Co-supervisor

# INSTRUCTIONS TO AUTHORS

## South African Journal of Psychology

### Information for Contributors

#### Submission of a manuscript

SAJP is a peer-reviewed journal publishing empirical, theoretical, and review articles on all aspects of psychology. Articles may focus on South African, African, or international issues. Manuscripts to be considered for publication should be e-mailed to [sajp@up.ac.za](mailto:sajp@up.ac.za). A covering letter with postal address, e-mail address, and telephone number should be included. The covering letter should indicate that the manuscript has not been published elsewhere and is not under consideration for publication in another journal. An acknowledgement of receipt will be e-mailed to the author (within seven days, if possible) and the manuscript will be sent for review by three independent reviewers.

The manuscript number must always be quoted in ALL correspondence to the editor.

Only one article per author will be published per calendar year. Exceptions to this rule will be at the sole discretion of the editor (with the associate editors) in the case of an exceptional article that needs to be published, a special issue where the specific article will make a significant contribution, or a written response to a *riposte*, etc.

Where authors are invited to revise their manuscripts for re-submission, the editor must be notified (by e-mail) of the author's intention to resubmit and the revised manuscript re-submitted within six weeks. After a longer period, it will be treated as a completely new submission.

#### Manuscript structure

Manuscripts (including references and tables) should be no longer than 20 pages (5 000 words), and must include the full title of the manuscript, the name(s) of the author(s) and their affiliations, and the name, postal address, and e-mail address of the corresponding author.

An abstract, no longer than 300 words, and an alphabetical list of at least six keywords should be provided. The introduction to the article does not require a heading. Tables and figures, with suitable headings/captions and numbered consecutively, should follow the reference list, with their approximate positions in the text indicated.

The manuscript should be an MS Word document in 12-point Times Roman font with 1.5 line spacing. The American Psychological Association (APA, ver. 5) style guidelines and referencing format should be adhered to.

#### Short submissions

*SAJP* invites short reports on any aspect of theory and practice in psychology. We encourage manuscripts which either showcase preliminary findings of research in progress or focus on larger studies. Reports (of no more than 2 500 words) should be presented in a manner that will make the research accessible to our readership.

**Language**

Manuscripts should be written in English. It is compulsory that manuscripts be accompanied by a declaration that the language has been properly edited, together with the name and address of the person who undertook the language editing.

**Ethics**

Authors should take great care to spell out the steps taken to facilitate ethical clearance, i.e. how they went about complying with all the ethical issues alluded to in their study, either directly or indirectly, including informed consent and permission to report the findings. If, for example, permission was not obtained from all respondents or participants, the authors should carefully explain why this was not done.

**MANUSCRIPT**

**PSYCHOSOCIAL FACTORS DETERMINING MENTAL HEALTH OF UNIVERSITY  
EMPLOYEES IN A SOUTH AFRICAN UNIVERSITY**

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## Abstract

**Objectives:** The specific objectives of the study are identified as follows: (1) to examine the influence of employment status on mental health of employees (2) to investigate if employees with long and short term working duration will be different in mental health (3) to examine if work stress will influence mental health of employees and (4) to investigate if there will be an interaction between status of employment, duration of employment and work stress on mental health of university employees

**Method:** Using a cross sectional research design, data was collected by means of convenience sampling and snowball sampling from two hundred and fourteen (214) North-West university (Mafikeng Campus) employees. The study consisted of one hundred and three (103) males and one hundred and eleven (111) females. Their ages ranged from 20 to over 50 years with a mean age ( $M = 40.8$ ,  $SD = 10.8$ ). Hypotheses were tested with a 2x2x2 Analysis of Variance (ANOVA).

**Results:** Results for hypothesis one revealed that there was no influence of employment status on mental health. For hypothesis two, the results showed that the duration of employment significantly predicted poor mental health of employees. For hypothesis three, the results showed that work stress significantly influenced mental health of employees. The result of hypothesis four showed that status of employment, duration of employment and work stress have no interactive influence on mental health of university employees.

**Recommendations:** It is of utmost importance that employee wellness practitioners within universities develop work place programmes and intervention strategies that will alleviate psychosocial factors affecting mental health of employees. Interventions can include awareness campaigns, workshops and team building activities.

Keywords: mental health/psychosocial factors /university employees/North-West Province/South Africa

## **Introduction and problem statement**

The phrase 'mental health' has an interesting history within the universal area of employment (Banks, Clegg, Jackson, Kemp, Stafford & Wall, 1980). According to LaMontagne, Martin, Page, Reavley, Noblet, Milner and Smith (2014), mental health problems such as depression, distress and anxiety disorders are common in the working environment. The World Health Organization (2003) defines mental health as a complete satisfactory level of emotional and behavioral functioning, WHO (2003) further defines mental health as the absence of mental disorders where individuals recognize their abilities, are able to cope with the normal stresses of life, work productively and make a contribution to their communities.

According to Harnois and Gabriel (2000) as cited in Hausser, Mojzisch, Niesel and Hardt (2010), the World Health Organization (2000) reported that impaired mental health is one of the most well-known causes of reduced job involvement, burnout, high absenteeism and work stress. In agreement with the above authors, Sturgeon (2007) postulated that poor memory, impaired attention and fatigue are often consequences of mental health challenges. Poor mental health signifies a huge obstacle for employers in South Africa due to the high amount of absenteeism and sick leave reported by employees.

Institutions such as the Departments of Education, Social Development, Health and the South African Police Service have been identified by Butler and Sachs, (2014); Lelliot and Tulloch, (2008); Matsela, (2009) as organizations with high levels of psychological distress leading to mental health problems of employees. According to WHO (2015), by the year 2020 the leading cause of death is predicted to be heart attack followed by mental health problems. There are a variety of factors such as work stress, personality traits, family problems and genetic vulnerability that predispose employees to mental health problems

(WHO, 2015). Although these factors directly affect the employees' functioning they also affect the organizations, making mental health not only an important consideration for the employees but for the employers (organizations) as well (Hardy, 2013).

Most studies that were conducted using university employees mainly focused on variables such as burnout, gender, work load, job demand and consequences of work stress therefore excluding other psychosocial factors (Bell, Rajendran & Theiler, 2012; Mark & Smith, 2012; Lokanadha & Poornima; 2012). For the purpose of this study, the following psychosocial factors (employment status, duration of employment and work stress, and their impact on mental health) are explored. Employment status is simply conceptualized as whether someone is employed on a temporary or permanent basis. Duration of employment refers to the number of years someone has been employed thus far. Work stress is the adverse reaction people have to excessive work pressure or other type of work demand places on them.

Given the scarcity of literature that explores the above named variables' effect on mental health, there is a need for current and future researchers to examine the above mentioned variables further. Only a few studies about university employees were conducted in South Africa; therefore this study hopes to fill the gaps that were left by previous researchers and contribute to the existing body of knowledge. It is this gap in previous studies that makes this study warranted. Although there is scarcity of literature regarding this study's variables there are however ample studies that have been published about work stress within universities, government departments, etc.

According to Coetzee, Jansen and Muller (2008), work stress has been researched widely both nationally and internationally since it has been recognized as a widespread problem among employees. Due to its rapid prevalence it has received a considerable amount

of attention from researchers. A substantial body of empirical research demonstrates that there is a relationship between work stress and mental health of employees (Pugliesi, 1999). Correspondingly, Babatunde (2013) reported that work stress is a universal phenomenon that has been found to raise adverse health, performance and general well-being concerns among employees. Evidence from existing literature similarly points out that work stress is the leading cause of poor mental health, affects daily functioning of employees and is consistently responsible for employees' reduced motivation and job dissatisfaction (Jain, Giga & Cooper, 2013). This adversely brings forth considerable pressure on the university since employees who are distressed are not able to perform at their optimal level and that will result in poor services rendered by the university.

Recently, work-related stress among employees within higher institutions of learning has become the most important topic for researchers (Bickford, 2005; Mark & Smith, 2012; Jain, Giga & Cooper, 2013). The prominent explanation for work stress being an important topic for researchers was attributed to the fact that the amount of work in institutions has increased rapidly (Sliškovic & Maslić, 2011). This increase according to Panatik, Rajab, Shaari, Shah, Rahman, and Badri, (2012); Archibong, Bassey and Effiom, (2010) can be attributed to factors such as the huge responsibility given to universities to contribute to the development of the country, providing people with answers to life's problems, technological advancement, changes in organizational structures, an increased number of registered students and intense work load. In South Africa, tertiary institutions have undergone huge transformations within the last five years such as merging and demerging of institutions, which might have contributed to the high level of stress for many employees.

Stress in the work environment emanates from an array of factors (Coetzee & De Villiers, 2010). According to Gillespie, Walsh, Winefield, Dua and Stough, (2001); Tytherleigh, Webb, Cooper and Ricketts, (2005); Coetzee and De Villiers, (2010); Panatik et

al., (2012), numerous university employees encounter an array of work stress factors ranging from restructuring, increased workload, termination of contracts, government funding cut, having to meet certain deadlines, pressure to publish research, challenges with safety, or lack of promotion, to lack of support from colleagues/ management and these can negatively impact on their mental health and their performance at work, which will also negatively affect the university. In agreement with the above mentioned authors, Nelson (2003), as cited in Coetzee and De Villiers (2010), conducted a survey about occupational stress which postulated that 41% of people declared workload issues as the biggest source of stress followed by 31% reporting relationship with colleagues as stressful and 28% reported juggling work and personal life as a major source of stress.

According to Campbell, Dunnette, Lawler and Weick (2012) it is normal to experience stress or pressure at work however excessive pressure at work and duties that are more than what employees can cope with is not normal as it leads to poor mental health for all employees. The reality is that work stress may negatively influence employees' sense of wellbeing and commitment in their work activities (Plattner & Mberengwa, 2010; Jain, Giga & Cooper, 2013). As a consequence of work stress, employees (those employed on a permanent or temporary basis) are experiencing work differently with a new array of rules and expectations which has resulted in job insecurity being one of the stressors at work (Coetzee & De Villiers, 2010).

It is clearly indicated by Olivier (2005) that university employees experience a variety of stressors within the work place which negatively affect their mental health and may result in burnout. Burnout is however seen as a leading cause of high absenteeism, anxiety and poor job performance resulting in the unwillingness to produce good services at work (Lokanadha & Poornima, 2012). Stress in the workplace is a major concern for both the employer and employee as it has been estimated that approximately 13.4 million working days are lost per

year due to work stress, depression and anxiety that employees experiences (Gyllensten & Palmer, 2005). In addition, work stress has significant economic implications for the universities or organizations through employee dissatisfaction and lowered productivity which has led to poor mental health of employees (Dua, 1994; Bickford, 2005). Therefore one can clearly notice through the existing body of knowledge that there is a relationship between work stress, employment status and mental health which not only affects employees but also has a negative impact on the university as a whole however one should question whether there is a relationship between duration of employment and mental health given the scarcity of literature that explored this variable.

## **Literature Review**

### **Understanding mental health**

Mental health problems are common in the working population and represent a growing concern with potential impact on employees and the organizations (LaMontagne et al., 2014). Similarly it has been reported by Baumann and Muijen (2010) and the World Health Organization (2010) that mental health difficulties in the work place not only have major consequences for the employees but also have consequences for the organizations. The workplace is one of the key environments with a variety of stressors that affect the mental health and wellbeing of employees but on the contrary Crawshaw (2009) reported that poor mental health in the work place is usually not taken seriously and is easily attributed to life stressors outside the work environment. Life stressors outside work such as family problems, divorce, major illness and the death of a loved one are some of the factors that are considered contributing to poor mental health of employees. However workload, meeting deadlines, low wages, restructuring, termination of contracts and lack of career advancement are stressors in

the workplace which might result in manifestation of poor mental health for employees (Coetzee & Villiers, 2010; Panatik, et al., 2012)

Banwell (2008) pointed out that mental health difficulties may possibly be unrecognized within individuals for an extended period of time because its symptoms take time to be noticeable, some employees may even opt not to report any mental health difficulties to their employers. This might be attributed to lack of understanding and knowledge about mental health conditions which has resulted in mental health difficulties being stigmatised. This is not surprising due to the fact that available literature indicates that mental health is considered as one of the least spoken-about conditions leaving individuals being unable to express their feelings and resulting in the manifestation poor mental health for many employees (South African Federation of Mental Health, 2011). The longer employees experience mental health difficulties without reporting them or getting help the greater the escalation in poor mental health.

Poor manifestation of mental health problems can affect work performance in terms of increase in error rates, poor decision-making, loss of motivation and commitment, tension, conflicts between colleagues and can result in employees seeking early retirement (Baumann & Muijen, 2010). It is also reported by Lelliot and Tulloch (2008) that mental health problems often cause fatigue, lack of concentration, poor memory, absenteeism, depression and physical health difficulties. Therefore one can say that employees' performance, rate of illness, absenteeism and staff turnover is highly affected by employees' mental health status.

Mabunda and Idemudia (2012) reported that the workplace environment demands overall wellness of individuals to enable them to function to their fullest capacity this however illustrates that employees who are in optimal physical and psychological health are more likely to come to work and perform to their highest ability. It is of utmost importance

that the mental health of employees is taken care of to reduce the likelihood of psychological distress and burnout in the work place. According to WHO (2010) good mental health is significant not only for the organisation through economic growth and productivity but it is important for the employees as well because it allows them to develop mentally, socially, emotionally and intellectually. In South Africa the occupational health and safety legislation is responsible for ensuring safety, mental health and physical health of employees (Sieberhagen, Rothmann & Pienaar, 2009). Although there is legislation in place, most employees continue to experience mental and physical health challenges in South African universities.

### **The relationship between work stress and mental health**

Van der Vaart, Linde and Cokeran, (2013) and Brand (2007) hypothesized that the ability to handle and deal with work stress is a basic requirement of the working class, because job roles are less defined, more demanding and individuals are faced with numerous challenges with often little direction from managers about what is expected of them (Coetzee & De Villiers, 2010). There is ample evidence that occupational stress has an impact on the physical and mental wellbeing of employees (Viljoen & Rothmann, 2009). Organizational changes in universities along with the rising work stress have resulted in increased significance of research into the impact of stress among employees (Bell, Rajendran & Theiler, 2012). Lack of clear instructions, unrealistic deadlines and not having control over daily activities are some of the challenges in the workplace that pose a danger to the mental health of employees (Gasto & Phyllis, 2000). Stress is however expressed differently by employees, for some stress is expressed in the form of devastating exhaustion, detachment from work, lack of accomplishment and a sense of ineffectiveness, thus resulting in negative effect on the employees' health and psychological wellbeing (Jain, Giga & Cooper, 2013).

Lelliot and Tulloch (2008) pointed out that mental health problems are a major cause of presenteeism, which is a situation where an employee is unwell and remains at work but is less productive and leads to depression. A study about work stress was conducted by Blix et al., (1994) as cited in Mark (2008) among 400 university employees and the results indicated that 84% of the participants reported that their productivity at work had been negatively affected by stress. Work stress is associated with poor job performance, ill health, poor mental health, absenteeism and burnout, which has been reported to have serious consequences for the employer and the employees (Ganster & Schaubroeck, 1991; Pugliesi 1999; Baumann & Muijen, 2010; Shukieri & Musa, 2011).

The effects of work stress on employees are vast and may range from psychological distress and behavioural effects to physiological illnesses (Panatik et al., 2012). Psychological distress including factors such as depression, sadness, hopelessness, mood swings, boredom, loss of self-confidence and lack of concentration may arise as a result of work stress and leads to lower productivity, low staff morale, increased absenteeism, job dissatisfaction and burnout (Dua, 1994; Bickford, 2005; French, Caplan & Harrison, 2010; Plattner & Mberengwa, 2010; Breeden, 2011). It is indicated by Bickford (2005) that work stress does not only have psychological effects on employees but also has physiological effects such as increased blood pressure, insomnia, headaches, constipation, chest pains, shortness of breath and skin problems. Lastly according to Lokanadha and Poornima (2012) employees may experience behavioural manifestation such as poor appetite, anger, excessive smoking, and drug and alcohol abuse as a result of work stress.

Although work stress is a major challenge for the employees and the employer, not everyone who has undergone negative experience of work stress is susceptible to poor mental health. What may be perceived as stressful for one employee may be seen as normal for another employee. However when faced with difficult work conditions individuals differ in

how they respond to the difficult conditions making others more susceptible to poor mental health. Therefore it is imperative for companies to invest money in identifying employees who suffer from work stress and offer them professional help, by doing so in return companies get a 100% of their investment back because employees will show up for work and be more competent and productive on their job (Jain, Giga & cooper,2013). It is important that work place stressors are alleviated because employees who are not affected by stress contribute positively to organizational growth since they become physically involved in their duties and emotionally connected to others when performing their tasks (Akintayo, 2012).

### **Interaction of employment status, duration of employment and work stress on mental health.**

There is a scarcity of literature that indicates the interaction of employment status, duration of employment and work stress on mental health. There were no published studies that explored these variables together. However authors such as Mark (2008) studied the relationship between workplace stress, job characteristics, individual differences and mental health of employees and found that employees who reportedly experiencing work stress indicated poor mental health and there was no significant difference in levels of mental health outcomes for both males and females (individual difference).

### **Influence of employment status on mental health**

Employment status in this study is conceptualised as whether an employee is temporarily or permanently employed. There is scarcity of literature regarding employment status and mental health of university employees, however according to Coetzee and de Villiers (2010), there has been an increasing pressure on South African organizations to improve their performance and sustain their competitiveness which has currently led to the

growth of non-permanent employment, also called temporary employment. Shutao, Enchuan and Pedro (2011) reported that temporary employees experience job-to job-transition while searching for better opportunities. Employees might experience the hardship of adjusting to a new working environment because of the job-to-job transition due to the temporary nature of their employment contract. As soon as they are well adjusted to the working environment their contract expires and they move to other working environment and the whole transition process might be seen as stressful for some employees and results in poor mental health. What may be perceived as stressful for one employee may not be necessary perceived as stressful for another employee. Individuals vary in response to situations making some employees more susceptible to poor mental health while others are more resilient.

Shakir and Zia (2014) further point out that one of the major challenges associated with temporary employment is job insecurity. Job insecurity is located between unemployment and employment because it refers to employees who feel threatened by unemployment (Dachapali & Parumasur, 2012). Employees who are persistently concerned about losing their jobs are likely to experience poor mental health and other health challenges. Job insecurity is however a strong predictor for poor health. When employees start to feel insecure about their jobs it affects their mental health and thus results in stress and lack of work commitment (Van der Vaart, Linde & Cokeran, 2013). An empirical study that was conducted by Song (2000) revealed that temporary employees are significantly less satisfied with their jobs than permanent employees. Dawson, Veliziotis, Pacheco and Webber (2015) reported that temporary employees experience more physical health conditions, such as higher fatigue and stress levels, backache and muscular pains and more mental health issues.

Coetzee and De Villiers (2010) explained that individuals employed temporarily and permanently are experiencing work differently with increasing new array of rules,

expectations and duties. Giles and Lead (2016) reported that there are many advantages for permanent employees as compared to temporary employees. Permanent employment has advantages such as medical aid, pension fund, bonus, retirement plan and car allowance which temporary employees do not get. They further indicated that permanent employees do not have the challenge of job insecurity which results in permanent employees having good mental health. According to Shutao, Enchuan and Pedro (2011) permanent employees enjoy stability at work and get higher salaries.

Research by Galhena (2011) has indicated that permanent academics are more committed and satisfied with their jobs. However other studies have reported that work stress is a challenge for both permanent and temporary employees leading to poor mental health for both employment statuses.

#### **Duration of employment (long and short term) and mental health**

There is a scarcity of literature that indicates the relationship between duration of employment and mental health of employees. There were no published studies that explored these variables.

#### **Interaction between type of job (academic and support staff) and mental health**

According to Bell, Rajendran and Theiler (2012) the rising work stress and organizational changes in universities has led to increased interest among researchers in the area of work related stress, work-life balance and work-life conflict amongst university employees. Employees are constantly juggling and trying to maintain a balance between their personal lives and work life and the struggle to strike a balance between the two, hence work life normally spills into the personal life of employees (Schmidt, 2011). Gillespie et al., (2001) made a review of work stress and indicated that most academic staff reported a lack of

research funding, funding to attend conferences and travel for research purposes as their main sources of stress at work. Similarly Ahsan, Abdullah, Yong Gun Fie and Alam (2009) identified stress- inducing factors in academic staff to include work overload, deadline, home-work interface, role ambiguity and performance pressure. Academics are expected to fulfill multiple demands within the work setting making them more susceptible to poor mental health. Lecturers experience a great deal of work stress leading to job dissatisfaction, poor mental health, burnout out, absenteeism due to being sick and this affects the universities negatively (Archibong, Bassey & Effiom, 2010; Lokanadha & Poornima, 2012; Panatik et al., 2012).

On the other hand, stressors such as lack of job clarity, performing work outside one's job description, reduced competencies and lack of recognition were reported by support staff members in a research that was done by Plattner and Mberengwa (2010). There is an alarming scarcity of literature that explored stress experienced by university support staff. Most of the studies that were conducted about university employees mostly focused on academic staff as compared to support staff.

However according to Ofoegbu and Nwandiani (2006) as cited in Essiam, Mensah, Kudu and Gyamfi (2015) both support and academic employees may experience the same stressors such as high workload, isolation, extensive hours worked, toxic work environment, difficult relationships among co-workers and role ambiguity, harassment and lack of promotion opportunities. Plattner and Mberengwa (2010) indicated that occupational stress decreases productivity and has a negative outcome on job satisfaction and commitment to the organization.

## **Theoretical frame work**

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

The person environment fit theory was formulated to explain the relationship that exists between a person and her or his environment. This theory is defined as the degree to which an individual and environmental characteristic match (French, Caplan & Harrison, 1982). Stress arises as a result of misfit between an individual and the environment characteristics (Brown, Zimmerman & Johnson, 2005; Annelies, Van Vianen & Stoelhorst, 2007; Yih-teen, Sebastian & Dongmei, 2010). According to Velez and Moradi (2012), this theory emphasizes the basic environmental demand and the ability of an individual to meet such demands. The environmental demands include the demands of the job, organizational culture and values while the individuals' ability to meet such demands is determined by the individual's values, goals and abilities (Edward, 2008). An individual also needs certain training and skills to meet those environmental demands and be able to cope in the working environment.

The relevance of this theory is that if university employees do not have the necessary characteristics or abilities to fit in the workplace or to cope with the demands of the workplace their mental health becomes affected poorly and thus leading to impairment in daily functioning. Okeke and Dlamini (2013) identified that a fit between an individual and environmental demands results in positive reaction and good mental health. According to Yih-teen, Sebastian and Dongmei (2010) incorrect person environment fit can lead to serious conflicts in any business environment. Stress and lack of productivity are natural conflicts associated with a problem in the way a person fits into his or her workplace environment.

Campbell et al., (2012) proposed that the P-E fit theory offers a framework for assessing and predicting how the characteristics of an employee and work environment jointly determine

workers' mental health. Edwards, Caplan and Harrison (2008) maintain that the Person Environment fit theory argues that people have a fundamental need to fit in their environment and that the degree of fit between people and their work environment is positively related to important individual outcomes. The idea is that the larger the inconsistency between a person and the job environment, the greater the likelihood that strain will arise which will lead to burn out (Breedon, 2011). Due to the theory's implications in the work environment, person environment fit has maintained its prominent position in industrial and organizational psychology.

## **Theoretical Perspectives**

### **The Job Characteristics Model**

The job characteristics model was coined by Hackman and Oldham in 1976. According to Hackman and Oldham (1980) the job characteristics model focuses on significant job characteristics such as skill variety (the degree to which a job requires various activities and skills), task identity (how employees identify tasks and work to achieve goal) task significance (how important the job is to employees) autonomy (individuals' ability or freedom to make decisions about their work) and lastly feedback (knowledge of results, rewards and encouragement). This theory explains the association between job characteristics and individual response to work (Mukul, Rayhan, Hoque & Islam, 2013).

It is proposed that positive characteristics give rise to positive mental health which leads to behavioural and cognitive results such as growth, motivation, satisfaction and low absenteeism while negative characteristics results in poor mental health and leads to absenteeism, burnout and job dissatisfaction (Mark & Smith, 2012)

### **The job demand and control model**

Robert Karasek developed an organizational stress model in 1979 that has been highly influential called the job demand and the decision or control latitude (Karasek, 1979). A

hypothesis derived from this theory is that strain will occur in jobs that are characterized by a combination of high job demand and low job control (Bakker, van Veldhoven & Xanthopoulou, 2010). This model emphasizes the role of work content as the major source of workplace stress (Hausser et al, 2010). Edwards, Caplan and Harrison (2008) indicate that work content according to this theory is divided into two aspects, namely the job demand and job control.

According to Bickford (2005) job demand entails workers' perceptions regarding the tasks that need to be completed in performing their jobs and job control includes workers' perceptions about the degree of control or discretion they have in performing the job. Job control also involves workers' authority to make job related decisions (Bickford, 2005; Ibrahim & Ohtsuka, 2012). The two constructs (job demand and job control) interact with each other and if there is no balance between them an individual will experience strain. According to Campbell et al., (2012) the highest levels of work stress are expected to occur in situations where there are extremely high job demands, and very low control. Therefore high job demand and low job control will lead to increased levels of depression, burnout, absenteeism, fatigue, cardiovascular disease and poor mental health for employees. The relevance of using this theory for this study is that mental health of university employees will be affected if they perceive that their jobs have high job demand and low job control. It is important that the job demand and the control latitude in the work place be on the same level.

### **Differential Susceptibility Hypothesis**

The differential susceptibility hypothesis was proposed by Jay Belsky in 1997 (Belsky, 1997). According to the differential susceptibility hypothesis people's development and emotional affect are differentially susceptible to experiences of the environment which may imply that individuals differ in their susceptibility to environmental influences. What may be perceived or seen as stressful by one employee may not necessarily be perceived as

stressful by another employee. The fact that individuals differ in their response to environmental influences might be as a result of one individual's temperament, demographic characteristic, biological reasoning and genetic structures which are more susceptible to effects of negative experiences such as work stress or certain challenges experienced at work while on the other hand some individuals become more resilient in response to certain environmental influences (Belsky, 2005). Employees working for a long duration might be more susceptible to work stress due to their temperament and genetic predisposition resulting in manifestation of mental problems such as depression and other psychological distress while on the other hand, employees with short term duration might be more resilient or less susceptible.

Typically employees are thought to possess particular gene variation or temperament which makes them more susceptible than others to develop psychological conditions such as depression when they are faced with certain conditions of life. This implies that some brains are more plastic than others and are therefore more susceptible to both positive and negative effects of supportive and unsupportive environments (Belsky & Pluess, 2009). However employees with a different allele may go through the same conditions of life or environmental influences and still not become depressed (Belsky, 2005). This theory provides an explanation of which group between the short-term employees or long-term employees are more susceptible to environmental influence.

### **Aim of the study**

The aim of this study was to examine employment status, duration of employment and work stress as psychosocial factors determining mental health of employees in a South African university.

## **Objectives of the study**

The objectives of the study were:

- To examine the influence of employment status on mental health of employees.
- To investigate if employees with long and short term working duration will be different in mental health.
- To examine if work stress will influence mental health of employees.
- To investigate if there will be an interaction between status of employment, duration of employment and work stress on mental health of university employees.

## **Significance of the study**

The significance of the study is both practical and theoretical. Theoretically, it will add more knowledge to existing theories related to this study. There is a scarcity of literature that explores the above indicated hypothesis therefore this study will contribute to the existing literature and also open up avenues for future researchers to explore this hypothesis. Practically, the results from this study will provide understanding and information about psychosocial factors in the work place affecting employees' mental health. The findings will also assist employers to know how to identify and deal with mental health challenges and work-related stress in the university. It will serve as an awareness tool that can be used to guide policy makers, employees and employers to develop or upgrade policies and workplace programmes that can assist to alleviate work stress and improve mental health of employees. Although stress is an inevitable part of organizational life, efforts can be made to reduce its negative effect on the health and well-being of employees.

## **Statement of Hypotheses**

The study hypothesizes that:

H1: Employment status will influence mental health of employees.

H2: Employees with long and short term working duration will be different in mental health.

H3: Work stress will influence mental health of university employees.

H4: There will be an interaction between status of employment, duration of employment and work stress on mental health of university employees.

## **Methodology**

The process of how this study was conducted is discussed below. The process included the following; study design, sampled participants of the study, instruments used to collect data, the procedure that was followed in the study, statistical methods to be used and lastly ethical considerations.

### **Study design**

This is a quantitative study that utilized a cross sectional design. A cross-sectional research design involves different groups of people who differ in the variable of interest, but share other characteristics such as educational background, ethnicity and socioeconomic status. The independent variables are employee status (permanent and temporary), work stress (high and low) and duration of employment (long and short). The dependent variable is mental health. Statistical package for social science (SPSS) version 23 was used for data capturing and analysis. A 2x2x2 ANOVA was conducted to test all the hypotheses. ANOVA was used to determine if there is an interaction effect of three independent variables on a continuous dependent variable. Mean scores were also used to justify differences in analyses.

### **Sample**

The participants were selected using convenience sampling and snowball sampling. Convenience sampling is a non-probability sampling technique where subjects are selected because of their convenient accessibility/ availability and proximity to the researcher

(Castillo, 2009). Snowball sampling is a non-probability sampling method where existing study participants recruit future participants. The study consisted of two hundred and fourteen (n = 214) North-West University (Mafikeng Campus) employees. Out of the 214 participants 51.9% were females and 58.1% were males. The age of all participants ranged between 20 to 50 years and above with ( $M = 40.8$ ,  $SD = 10.8$ ). The study consisted of 16.4% participants who were temporary employed and 83.6% of the participants were permanently employed. The years of employment for all participants ranged between 1 to 10 years and above with ( $M = 8.7$ ,  $SD = 8.5$ ). A questionnaire divided into three sections- A, B and C was used to collect data. Section A contained demographic variables, section B contained Work Stress Inventory (WSI) and lastly section C contains General Health Questionnaire (GHQ-28).

### **Instruments and psychometric properties**

The primary instruments used to collect data were the Work Stress Inventory (WSI) (Barone, Katell, Caddy & Roselione, 1984) and General Health Questionnaire (GHQ-28) (Goldberg, 1978). The description of each instrument follows.

#### **Work Stress Inventory**

This questionnaire was introduced by Barone, Katell, Caddy and Roselione in 1984. Work Stress inventory has been reported to have two scales (scale 1 and scale 2) but however for the purpose of this study only scale 2 is applicable. The Work Stress inventory is a 58 item self-report questionnaire used to assess two sources of work stress namely job risk and organizational stressors. Job risk and organizational stressors include sources of work stress such as work load, role confusion, autonomy, work-home interference, dealing with work conflict, career advancement, and relationship with superiors and communication (Barone, Katell, Caddy & Roselione, 1984). The inventory includes items such as *“Current career and promotion prospects, Continuing working when at home, Time pressures and deadlines,*

*Being unclear about what is expected of me*”, etc and participants respond by indicating which number best describes their work stress over the last two months.

This scale uses a 5 point Likert-type scale with responses ranging from 1- Very Little, 2-Some, 3-Quite a Lot, 4-Very Much and 5-Extremely. It takes 20 to 30 minutes to complete the questionnaire. The scale is reliable and valid for use in an African context; it was used in the Western Cape in 2002 among middle level managers and they found Cronbachs alpha coefficient of 0.92 (Strydom & Meyer, 2002). However the Cronbachs alpha for this study has been found to be acceptable at 0.963.

### **Section C: General Health Questionnaire (GHQ 28)**

GHQ-28 was developed by David Goldberg in the United Kingdom in 1972 to detect a wide range of psychological disorders, mainly depression and anxiety (Goldberg, 1978). The GHQ-28 consists of 28 items that have been divided into four subscales namely: somatic symptoms (item 1-7), anxiety/ insomnia (8-14), social dysfunction (15-21) and severe depression (22-28). The items on each subscale are on a 4 point Likert scale and answered by selecting “not at all”, “no more than usual”, “rather more than usual” and “much more than usual”. Results obtained from assessments of psychological wellbeing can be useful in understanding various sources of distress for workers, as well as any predisposing factors (Spector, 2006).

Test retest reliability has been reported to be high (0.78-0.09) and inter-rater and intra-rater reliability have both been shown to be excellent (Cronbachs  $\alpha$  0.9-0.95); high internal consistency has also been reported (Jackson, 2007). This study has been reported to have Cronbach alpha-reliability of 0,845. For the purpose of this article only the global total GHQ scores are reported.

## **Procedure**

Ethical approval for the study was obtained from the North-West University, Mafikeng Campus. The rules of research in the University of North-West Mafikeng Campus were adhered to before and during the research project. All participants were guaranteed anonymity, confidentiality and were also informed about the voluntary nature of their participation.

The participants were given an informed consent before participating in the project. Gravetter and Forzano (2006) state that the informed consent form is a document that consists of information about research and participants sign it to show that they are willing to participate in the study. Explanation of what the study is all about was provided by the researcher to the participants before they filled in the questionnaires and the instructions were also clarified. The participants were also told and reminded that there were no right or wrong answers but their views were needed to complete the study. The questionnaires were collected a day after completion, some were retrieved after one or two weeks after depending on employees. The completed questionnaires were scored, processed and analysed. The data provided by participants were used for research purposes only.

## RESULTS

The study was guided by the following four hypothesis: (1) Employment status will influence mental health of employees; (2) Employees with long and short term working duration will be different in mental health; (3) Work stress will influence mental health of university employees and lastly (4) There will be an interaction between status of employment, duration of employment and work stress on mental health of university employees. All the hypotheses were tested using 2x2x2 analysis of variance to determine the main and interaction effects.

### Hypothesis One

In order to test for main effect of employment status on mental health of employees, a 2x2x2 Analysis of Variance (ANOVA) was conducted. Employment status has two levels (temporary & permanent). The result is presented in Table 1.

**Table 1: 2x2x2 ANOVA of employment status, duration of employment and work stress on mental health.**

Source	Sum of Square	Df	Mean Square	F	P
Employment status (A)	165.712	1	165.712	1.714	ns
Duration of Employment (B)	759.563	1	759.563	7.855	.02
Work Stress (C)	1193.210	1	1193.210	12.340	.00
A&B	319.176	1	319.176	3.301	ns
A & C	314.655	1	314.655	3.254	ns
B & C	242.292	1	242.292	2.506	ns
A, B & C	305.159	1	305.159	3.156	ns
Error	19919.730	206	100.112		
<b>Total</b>	<b>23219.497</b>	<b>213</b>			

*Note: A = Employment status, B = Duration of Employment, C = Work stress*

Examining the main effect of employment status on mental health of employees, results in Table 1 show that employees with permanent employment status ( $M = 26.321$ ) were not significantly different in mental health from those with temporary employment status ( $M = 30.546$ );  $F(1, 206) = 1.714, p = .192$ . The results indicate that employment status has no influence on mental health of employees. Therefore, hypothesis one was not confirmed in the study. However, mean scores show that temporary staff had higher mean scores ( $M = 30.546$ ) than permanent staff ( $M = 26.321$ ).

### **Hypothesis Two**

In order to test for the main effect of duration of employment on mental health of employees, a 2x2x2 Analysis of Variance (ANOVA) was conducted. Duration of employment has two levels (long & short). The result is presented in Table 1. The results show that employees with short duration of employment ( $M = 23.911$ ) significantly reported better mental than those with long duration of employment ( $M = 32.956$ );  $F(1, 206) = 7.855, p = .006$ . The results indicate that duration of employment has a significant influence on mental health of employees. Therefore, hypothesis two was confirmed in the study.

### **Hypothesis Three**

Investigating the main effect of work stress on mental health of employees, a 2x2x2 ANOVA was conducted. Results in Table 1 show that employees with low work stress ( $M = 22.765$ ) reported better mental health than those with high work stress ( $M = 34.102$ );  $F(1, 206) = 12.340, p = .001$ . The result implies that work stress has a significant influence on mental health of employees. Therefore, hypothesis three was confirmed in the study.

### **Hypothesis Four**

Hypothesis four expected an interaction of three variables (status of employment, duration of employment and work stress) on mental health. Looking at interaction effect of employment status, duration of employment and work stress on mental health, results in Table 1 did not

show any interaction effect at the .05 level  $F(1, 206) = 3.156, p = .077$ ; but almost near significance at the .05 level. However, a perusal of means show that temporary staff members on long duration of work had higher work stress ( $M = 52.00$ ) than other categories, while permanent staff with long duration of work had the next highest mean score ( $M = 30.357$ ).

## **Discussion and conclusion**

In summary, the study was centred on four hypotheses: (1) there will be a main significant effect of employment status on mental health of employees; (2) there will be a significant difference between short and long term staffers of the university on mental health; (3) there will be a significant main effect of work stress on mental health of employees and lastly (4) there will be a significant interaction of status of employment, duration of employment and work stress on mental health of employees.

Findings for hypothesis one indicated that there is no significant difference in mental health between temporary and permanent employees, therefore hypothesis one was rejected by the study. There is however a scarcity of literature that supports the findings. The results were however contrary to Coetzee and De Villiers (2010) who explained that individuals employed temporarily and permanently are experiencing work differently with an increasing new array of rules, expectations and duties. It is clearly stated by Shakir and Zia (2014) that there is a clear link between temporary employment and psychological distress leading to poor mental health. Temporary employees are more susceptible to experience poor mental health as compared to permanent employees (Dawsonb, Veliziotis, Pacheco & Webber, 2015). A study that was conducted by Mazaheri (2014) indicated that temporary employees have little control over their work and experience less autonomy as compared to permanent

employees. The study further indicated that temporary employees have more work stress as compared to permanent employees.

This was however consistent with the job demand and control model which stipulates that work stress will arise in jobs that have a high job demand and a low work control (Bakker, van Veldhoven & Xanthopoulou, 2010). Therefore stress is likely to occur among temporary employees since it has been reported by Mazaheri (2014) that temporary employees do not have control over their jobs. A job with low control leads to burnout, dissatisfaction, depression and this in turn affects employees' productivity.

Results for hypothesis two showed that employees on a long duration reported poor mental health as compared to those on short employment duration. Hypothesis two was accepted by the study as it showed a significant difference between long duration and short duration, however there were no published articles that explored the variable. Given the scarcity of literature that examined the effect of duration of employment on mental health, it indicates that there is a need to fill the gaps in knowledge by examining the interactive effect of the above mentioned variables.

The results for hypothesis three indicated that employees with high work stress reported poorer mental health than employees with low work stress. The findings are consistent with the results of LaMontagne et al., (2014) who reported that work stress has shown to result in poor mental health for many employees. Plattner and Mberengwa (2010) indicated that work stress decreases productivity and has a negative outcome on job satisfaction and commitment to the organization. Experiencing high levels of stress may lead to feelings of anger, burnout, inability to concentrate, depression, tension, emotional exhaustion, hypersensitivity to criticism, anxiety, psychological distress, nervousness, substance abuse and irritability which results in poor mental health (Botha, 2011; Breeden,

2011;Ganster & Rosen, 2013). Hence work stress is a concern for both the employer (universities) and the employees.

Universities play a huge role in the development of South Africa and providing people with an opportunity to better their future. Therefore universities are expected to train and produce individuals who will contribute socially, economically, politically and culturally to the development of the nation (Akpan, 2013). Panatik et al., (2012) suggested that in order to produce future leaders, universities need to attract and retain high quality employees. However universities no longer provide a warm, supportive environment and this result in stress for many employees. Due to stressors experienced by university employees affecting their mental health negatively, it becomes a challenge at time for employees to be committed to their work and produce future leaders.

The results for hypothesis four indicated that there was no significant interaction effect of status of employment, duration of employment and work stress on mental health of employees. There were no published studies that explored the interactive effect of the independent variables on the dependent variable. Mark (2008) however studied the interaction between work stress, job characteristics and individual characteristics on mental health and indicated that employees with high work stress reported poorer mental health while there was no significant difference with individual differences on mental health.

Theoretically, the findings of this study concur with the Person Environment fit theory (French, Caplan & Harrison, 1982), the Job Characteristics Model (Hackman & Oldham, 1976), the Job Demand and Control Model (Karasek, 1979) and Differential Susceptibility Hypothesis (Belsky, 1997) where the theories stipulate that high job demand and low job control will results in stress for employees. The presence of work place stressors does not automatically result in negative impact on all employees. For instance, aspects like

personality characteristics and various coping mechanisms could be the reason for some employees to be more susceptible to poor mental health when faced with stressors at work (Brand, 2007; Belsky, 1997). However, to avoid work stress there must be an accurate fit between an employee and the workplace, which is achieved through having certain job characteristics and skills.

## **Conclusions**

Based on the findings of the study, the following conclusions are made:

- Employment status does not influence mental health of employees.
- Employment duration significantly influences mental health of university employees with short duration employees reporting better mental health than those with long duration of employment.
- High work stress predicted poorer mental health as compared to low work stress.
- It is also concluded that there is no significant interaction of status of employment, duration of employment and work stress on mental health of employees.

## **Limitations to the study**

Limitations of the study included being unable to generalize the finding to a larger population. The sample of the study was taken from employees at the North-West University (Mafikeng campus) therefore the results only represent a small group of people in a larger population. This implies that the results cannot be generalized to a larger population since the sample was from one university. When interpreting the results it was important to note that the respondents were not recruited in a systematic way but that a sample of convenience and snowballing was used which limits the generalization of these findings. The study had more permanent employees which can suggest that there was not an equal representation of employment status.

## Recommendations of the study

Based on the above limitations, the following recommendations are made for future studies:

- The gap in literature shows that mental health and factors such as duration of employment and the interaction of status of employment, duration of employment and work stress on mental health of employees in South African workplaces are still unexplored therefore researchers should explore such variables in order to fill the gaps in knowledge.
- A qualitative research approach should be used to obtain depth of information about employees' perceptions and their individual experience.
- A different sampling method should be employed that can capture all categories of employees and increase the sample size so that the results can be easy to generalize to a larger population.
- This study only focused on factors determining mental health of university employees therefore future researchers should explore coping mechanisms that employees have adopted to cope with challenges in the workplace.
- Policy makers should work with employee wellness practitioners to develop and upgrade workplace programmes that can assist to alleviate work stress and improve mental health of employees.
- Awareness of workplace mental health and factors affecting mental health in the work place should be addressed through workshops, university newspapers and other awareness campaigns.

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## Appendix A: consent form



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### For enquiries contact

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Topic: psychosocial factors determining mental health of university employees in a South African university

I understand the aim and objectives of the proposed study and was provided an opportunity to ask questions and adequate time to answer the questionnaires. I have not been pressurized to take part in the study and understand that participating in the study is completely voluntary. I am aware that the results of the study will be used for research purposes and may be published.

This study has been approved by the university of North West Research Ethics Committee (clearance number will be available at a later stage).

I hereby give consent to participate in the study

Signature : \_\_\_\_\_

## Appendix B

### Section A

#### Biographical information

This Data Form will provide information about yourself and your work setting. Please read each item and respond as indicated.

1. Your age: \_\_\_\_\_
2. Gender: 1 female \_\_\_\_\_ 2 Male \_\_\_\_\_
3. Your ethnicity: 1) Tswana \_\_\_ 2) Sotho \_\_\_ 3) Venda \_\_\_ 4) Afrikaans \_\_\_ 5) other \_\_\_\_\_
4. What is your employment level in the university? 1) Junior \_\_\_ 2) Senior \_\_\_ 3) professor \_\_\_ 4) Other (please specify): \_\_\_\_\_
5. What is your status of employment? 1) Temporary \_\_\_ 2) permanent \_\_\_ 3) casual \_\_\_
6. What type of job do you do? \_\_\_\_\_
7. How many years have you been employed in the university? \_\_\_\_\_
8. How many hours do you work per day? 1) 8hours \_\_\_ 2) 5hours \_\_\_ 3) 3 hours or less \_\_\_\_\_

## Appendix C

### Section B

#### WORK STRESS INVENTORY

#### SOURCES OF WORK STRESS

1=none at All

2=Very Little

3=Some,

4=Quite a Lot

5=Very Much.

Please place a tick around the number which best describes your work stress over the last 2 months	1	2	3	4	4
1 Working long or unsociable hours					
2 Having too many different parts or roles to play					
3 Managing and supervising the work of others					
4 Clashes and conflicts with others at work					
5 Current career and promotion prospects					
6 Poor training and guidance					
7 My partner's attitude towards my work					
8 Having far too great a quantity of work to do					
9 Being unclear about what is expected of me					
10 Being responsible for managing other people					
11 My relationship with my superior/manager					
12 The job demands skills which I do not possess					
13 Poor communication and consultation in the organisation					
14 Continuing working when at home					
15 Changes and innovations in working practice					

16 Work situations creating ethical problems					
17 Having to make decisions					
18 Little encouragement and support from management					
19 Job insecurity of threat of redundancy/retirement					
20 Restricted resources and finance to work with					
21 Difficulty 'switching off' at home					
22 Having too little work to do					
23 Inadequate information about my work role					
24 Dealing with conflict and negative situations					
25 Lack of social contact with other people					
26 Wages/salary					
27 The general morale of the workforce					
28 The demands work makes on my home/personal life					
29 Amount of time spent travelling					
30 Having few clear objectives and goals to work towards					
31 Going to meetings/giving presentations					
32 My relationship with others at work					
33 Doing a job that does not stretch me					
34 Instability and high staff turnover					
35 Changes outside work – moving house, illness, financial, family etc					
36 Time pressures and deadlines					
37 Lack of variety and stimulation at work work					
38 Being responsible for managing property/money with					
39 Lack of people to talk to and share					
40 Feeling undervalued					

41 Not having sufficient control, influence and power					
42 Prioritizing between work and family/home life					
43 Fear of making a mistake					
44 Changes in the way I have been asked to					
45 Work politics					
46 Rivalry and competition from colleagues					
47 Lack of job satisfaction and feelings of achievement					
48 An unpleasant physical environment to work in					
49 Changes in my personal relationships outside work					
50 Doing work that is potentially dangerous or distressing					
51 Little feedback about my performance					
52 Too many different demands on my time					
53 Socializing at informal work settings					
54 Lack of feelings of personal development and growth					
55 Rules and restrictions on my behavior					
56 Little encouragement and support from others outside work					
<i>Add any other sources of your job stress that are not covered:</i>					
57					
58					

## Appendix D

### Section c

#### THE GENERAL HEALTH QUESTIONNAIRE (GHQ-28) SCALE

Four point likert type:

3- Much more than usual

2- More than usual

1 - No more than usual

0 - Not at all

HAVE YOU:	Not at all	No more than usual	More than usual	Much more than usual
1. been feeling perfectly well and in good health				
2. been feeling in need for a good tonic				
3. been feeling run down and out of sorts				
4. felt that you are ill				
5. been getting pain in your head				
6. been getting a feeling of tiredness or pressure in your head				
7. been having cold or hot spells				

8. lost much sleep over worry				
9. having difficulty staying asleep once you are in bed?				
10. felt constantly under strain				
11. been getting edgy and bad tempered				
12. been getting scared or panicky for no good reason				
13. found everything getting on top of you				
14. been feeling nervous and strung-up all the time				
15. been managing to keep yourself busy and occupied				
16. been taking longer over the things you do				
17. felt on the whole you were doing things well				
18. Been satisfied with the way you've carried out your task.				
19. Felt that you are playing a useful part of things				

20. Felt capable of making decisions about things				
21. Been able to enjoy your normal day to day activities.				
22. Been thinking of yourself as a worthless person				
23. Felt that life is entirely hopeless				
24. Felt that life isn't worth living				
25. Thought of the possibility that you might make away with yourself				
26. Found at times you couldn't do anything because your nerves were too bad				
27. Found yourself wishing you were dead and away from it all				
28. Found out that the idea of taking your own life kept coming into your own mind				