

# DEMOGRAPHIC DIFFERENCES, OCCUPATIONAL STRESS AND ORGANISATIONAL COMMITMENT AMONG EMPLOYEES IN HIGHER EDUCATION INSTITUTION

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## Abstract

The objectives of this study was to determine the levels of occupational stress and organizational commitment of employees and to determine the differences of occupational stress and organisational commitment based on demographic information in a higher education institution. The sample consisted of 141 academic staff. The Organisational Stress Screening Tool (ASSET), and Allen and Meyer's Organisational Commitment Tool (OCT) were used. The results showed that different occupational stressors contributed significantly to low organisational commitment. Occupational stress levels about job characteristics, work relationships, job overload and job control contributed to low levels of organisational commitment. The results also showed that there is a significant difference in occupational stress and organisational commitment levels based on the demographic differences of employees.

**Keywords:** Occupational Stress, Organisational Commitment, Employees, Higher Education Institutions

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## 1 Introduction

In all organisations around the world, employees are the most valuable asset (Carrel & Wayar, 2008). It is their responsibility to fulfil the organisational objectives and goals, interact with customers and perform their duties. As a result, most organisations have become conscious of the significance of employees within the organisation hence maintaining an occupational stress free environment (Teller, Ayeni & Popoza, 2007). This supports a study by Swanger (2005) who reported that a healthy work environment result in increased organisational commitment. However, due to globalisation, restructuring and technological changes, occupational stress has become an inevitable feature of occupational life for employees (Barkhuizen and Rothmann, 2008).

The continuous effects of globalisation and technological changes have seen most companies undergoing constant restructuring to compete in the global capitalists market (Chinnamai, 2005). The higher educational institutions (HEI) as a public entity have been identified as amongst the victims of globalisation hence forced to transform its structure and systems (Chinnamai, 2005). In South Africa, the restructuring of universities for the past two decades has led to significant changes in the nature of work and therefore increasing job demands on academic

staff (Oosthuizen & Berndt 2008). According to Reddy and Poornima (2012), other factors resulting in increased occupational stress levels include increased domestic and international competition. HEI through the department of higher Education seek to achieve the international standard of education and compete globally. The change in its systems and quality of programmes offered are evidence of the competition with other international university.

Reddy and Poornima, (2012) stated that competition stimulate increase demands for producing high quality products (programme) thereby calling for higher educational institutions to restructure its system to meet these needs (i.e. producing high quality graduates). Consequently, this has resulted in most academic staff perceiving high levels of occupational stress and reduced organisational commitment levels (Reddy & Poornima, 2012).

Regardless of the effects of occupational stress on organisational commitment, occupational stress immensely affects the organisation in terms of poor performance, increased absenteeism, lack of creativity, poor decision making, lack of confidence and low morale (Schaufeli, Maslach & Marek, 1983). Therefore, this study is aimed at investigating the levels of occupational stress and organisational commitment of employees in higher education institution. Also, to determine differences of

occupational stress and organisational commitment of employees based on demographic information. It is important for higher educational institutions to investigate and identify stressors experienced by employees at different levels in life.

## 2 Literature review

The literature review section consists of three parts as follows, occupational stress, organisational commitment and the relationship between the variables.

### 2.1 Occupational stress

According to Ahgar (2008), occupational stress is defined as the imbalance between individual capabilities and the demands of the work environment. A study by Blix, Cruise, Mitchell and Blix, (1994) on university staff within higher education institution reported a continuous increase on occupational stress levels of employees. The findings showed that 74.1% of university academic staff was ascetically stressed and 10.4% severely stressed. Therefore, occupational stress has become a common phenomenon which if not managed well can result in a variety of illnesses (Ismail, Yao, Yeo, Lai-Kuan, & Soon Yew, 2010). In addition, Hanrahan, Kinman and Wissing (2002) states that high levels of occupational stress undermine the quality, creativity, morale and productivity of employees. This clearly indicates that occupational stress is associated with low organisational commitment (Barkhuizen & Rothmann (2008). Sources of stress include work relationship (Geese & Moss, 2001), work life balance (Voydanoff & Donnelly, 1999), job overload (Faragher & Cooper, 2004), job security (McDonough, 2000), job control (McKnight, 1996), resources and communication (industrial society, 2001), pay and benefits (Tepper, 2008) and job characteristics (Wevers & Steyn, 2002). Employees experiencing high levels of occupational stress are less committed to their organisation (Siu, 2004).

#### 2.1.1 Work relationships

It is important for employees to maintain a good working relationship by spending the whole day interacting with his or her colleagues. According to Industrial society (2001), a working environment that is characterised by good relationships assists individuals to cope with stress. Geese and Moss (2001) suggests that relationships are important for both individual and organisational success. Relationships can either be amongst colleagues, superiors, and subordinates and can either be positive thus helping individuals to cope with stress or negative thus creating stress.

A working environment characterised with poor working relationships and interpersonal conflict has seen employees being diagnosed with psychiatric illness, mental instability and stress (Johnson & Cooper, 2003). A relationship at work could be potentially stressful due to poor communication and mistrust which could result in poor psychological health (Rothmann and Essenko, 2007). Research findings have shown that one of the main causes of occupational stress in South African higher educational institutions is poor working relationships (Coetzee & *et al.*, 2005; Tytherleigh, Webb, Cooper & Ricketts, 2005).

#### 2.1.2 Work-life balance

According to Voydanoff and Donnelly (1999), family and work responsibilities are one of the complex research problems which researchers are trying to eliminate through balancing their everyday work-life situation. Duxury and Higgins (2004) describes work life balance as the increasing demands of many work and non-work life roles that are discordant in some respect so that participating in one role is made difficult by participating in the other role.

#### 2.1.3 Overload

Faragher and Cooper (2004) recognised the relationship between work overload and stress. The imbalance between the physical demands of the working environment and individual effort, psychological and emotional demand caused by role ambiguity and pace of work contribute to the relationship between work stress and work overload (Demerouti, Bakker, Nchreiner & Schaufeli, 2000). According to Bateman (2001), stressful overload is a consequence of many task responsibility and insufficient resources such that an individual is unable to complete his/her work.

Spurgeon, Harrington and Cooper (2000) posit that inconsistent work schedules and long working hours contribute to the ambivalent relationship. In addition, the study by the Industrial Society (2001) indicated that employees who were given unrealistic deadlines and continuous time pressures were found to be victims of occupational stress. The study by Coetzee *et al.*, (2005) indicates that one of the major causes of occupational stress for South African higher educational institution was work overload.

#### 2.1.4 Job security

The undergoing restructuring and technological advancement in organisations is widely recognised as two major issues affecting individuals' job security (Vakola & Nikolau, 2005). Individuals perceive changes as highly stressful especially to those without the qualifications, experience, and skills. McDonough (2000) postulates that the fear of one losing his or her

job is one of the main potential sources of the stress. According to Tytherleigh *et al.* (2005), research indicates that job insecurity was the major cause of occupational stress in the UK.

### **2.1.5 Control**

According to Coetzee *et al.* (2005) control is the amount of authority an individual has in making initiatives regarding the organisation of task and how to perform them. Individuals who are allowed to make initiatives or decisions regarding their work perceive high control on their work and they are less likely to suffer from stress than those who lack of control. Mc Knight (1996) claims that individuals who are not given the chance to exercise control in the workplace end up experiencing a negative psychological state, especially when they are in conflict between their career aspirations and occupational achievements. This lack of control is one of the main causes of occupational stress in South African higher educational institutions (Coetzee *et al.*, 2005, Rothmann *et al.* 2007) and the UK higher education institutions (Tytherleigh *et al.*, 2005).

### **2.1.6 Resources and communication**

According to Barker, Demerouti and Euwema (2005), job resources are those physical or psychological aspects that either have positive or negative impact on job demands and the associated physiological and psychological costs. Job resources are essential in achieving work goals and stimulating personal growth and development, and include adequate training, equipment and effective communication system in the organisation (Barker *et al.*, 2005).

Cartwright *et al.* (2002) suggest that constant and adequate training is needed for employees to perform their duties effectively. Cartwright *et al.* (2002) further indicate that the level of communication and resources determines the level of stress and performance of employees. Moreover, lower levels of communication and resources are associated with increased levels of occupational stress (Industrial Society, 2001). Coetzee *et al.*, (2005), add that resources and communication are major significant causes of occupational stress in South African higher educational institution and the UK (Tytherleigh *et al.*, 2005).

### **2.1.7 Pay and benefits**

According to DHET (2012), the issue of wages and salaries in South Africa is quite a controversial one. Tepper (2008) posits that the levels of stress experienced by academics and support staff are determined by their pay and benefits. Furthermore, Tepper (2008) accentuates that there is a strong connection between the amount of stress and performance pay. In South Africa, research has shown that one of the major stressors on educators of both

basic and higher education was pay and benefits (Rothmann, 2005). This led to a continuous production of unskilled graduates from different universities in the country due to lack of motivation and poor work performance (DHET 2012).

### **2.1.8 Job aspects**

According to Van Zyl and Buitendach (2008), job context and job content are very crucial to the performance of employees in a working environment. It is important for job designers or supervisors to identify significant stressors in the education job that may lead to job dissatisfaction and low organisational commitment. There are a number of extrinsic stressors found in the education profession which include time pressures, role ambiguity, role conflict, role overload, lack of decisiveness, supervision, incompatibility of an individual and the environment, straining relations between colleagues, supervisors and the senior management, retrenchments and discipline (Wevers & Steyn, 2002). Intrinsic factors found amongst educators include sense of achievement, recognition and praise, autonomy, salaries, promotion, job security, working hours and lack of community commitment (Wevers *et al.*, 2002). Kraak (2004) stated that job aspects are one of the most significant causes of occupational stress for higher education staff in South Africa.

## **3 Organisational commitment**

Organisational commitment is categorised into three types which includes a strong acceptance of the organisation's values and goals, a willingness to exert considerable effort on behalf of the organisation and a strong desire to maintain membership in the organisation (Paoline & Lambert, 2008). Therefore, it is determined by various individual and organisational factors such as personal characteristics, work experience and role characteristics (Paoline & Lambert, 2008). Employee organisational commitment can be measured during employment, especially in organisation that are dedicated in accomplishing the targeted organisational objectives (Taiwo, 2010). Hence a positive relationship develops between organisational commitment and attitudes to change (Paoline & Lambert 2010). This means that organisational commitment act as moderating effect of physical and psychological outcomes of stress and attitude towards change.

Lau and Woodman (2005) argued that moderating effects of organisational commitment protects employees from physical and psychological outcomes of stress and those possessing maladaptive behaviour. For that reason, the above findings show that organisational commitment may influence occupational stressors and attitudes towards organisational change (Paoline & Lambert, 2010). To give a clear description of organisational commitment,

the Allen and Meyer's three component model (affective, continuance, normative) was used.

### **3.1 Affective commitment**

According to Allen and Meyer (1990), affective commitment is whereby an individual identifies with, involved in and emotionally attached to the organisation. In addition to the above statement, Rashid *et al.* (2003) claims that an affective commitment is the emotional attachment to the goals and principles of the organisation, as well as to the employee's role in relation to those goals and principles. As such, employees with a strong affective commitment remain in the organisation because they want to. Therefore, Johari, Rashid, Sambasivan (2003) defines organisational commitment as the emotional attachment of an employee to their organisation.

### **3.2 Continuance commitment**

According to Benligiray and Sonmez (2012), continuance commitment involves an individual making his/her decisions based on opportunity costs thus choosing the best alternative for a situation. In this case, employees remain committed as they recognise the costs associated with leaving the organisation. Strong continuance commitment is either because of lack of options or because of high personal sacrifice associated with leaving the organisation. An employee possessing this form of commitment will continue with the organisation because they feel leaving the organisation would cost them dearly (Benligiray *et al.*, 2012).

### **3.3 Normative commitment**

This is the commitment whereby an individual feels obliged to stay in an organisation (Meyer & Allan, 1991). In this case, an employee who's having a strong normative commitment will stay in the organisation as long as they still feel so. Employees with a strong normative commitment tend to be adaptive and flexible to the changes occurring in the organisation (Benligiray *et al.*, 2012). An individual's experience towards his or her former or current organisation affects this form of organisational commitment (Rashid *et al.*, 2003). This is because of societal socialisation and organisational socialisation which shapes up the behaviour and perception of an individual towards the organisation. Therefore, societal principles can put pressure on an individual before they are socialised through the organisation (Benligiray *et al.*, 2012).

## **4 Relationship between occupational stress and organisational commitment**

Occupational stress and organisational commitment have become common and mutual subjects in organisational sciences and many researchers are keen to investigate the relationship between the two

variables. According to Viljoen and Rothmann (2009) occupational stress is associated with low organisational commitment. In a study by Greenhalgh and Rosenblatt (1984) it was revealed that stress about job insecurity can lead to reduced organisational commitment levels and therefore leading to high turnover. Furthermore, Rothmann (2005) showed that employees who perceived job aspects, work relationship and job control as a huge source of stress experienced low organisational commitment.

Educators in both high educational institutions and secondary schools were found experiencing more stress as a result of resources, workload and job characteristics, and therefore showed less commitment to the organisation (Jackson & Rothmann, 2006). Bakker, Demerouti, De Boer, and Schaufeli (as cited in Viljoen *et al.*, 2008) stated that insufficient resources and overload precludes goal accomplishment, which probably result in failure and frustration. Therefore, employees may have a negative attitude towards their job which possibly can be an outcome of organisational commitment.

The purpose of this study is to investigating the level of occupational stress and organisational commitment of employees and their differences based on demographic information. The study will examine the empirical analysis of the variables in higher education institution.

## **5 Research design**

### **5.1 Research approach**

This study used a cross-sectional survey targeting all academic staff members of the higher education institution.

### **5.2 Research method**

#### **5.2.1 Participants**

The study population consisted of academic staff members ( $N=800$ ) of a higher education institution in South Africa. A total of 298 questionnaires were distributed in the campus and a total of 141 questionnaires were completed and returned. The characteristics of the participants are shown in table1.

Table 1, describes the biographical variables of the participants. The table shows that a large number of participants are males (59%). A large number of participants are more than 50 years old (36%) and followed by 41 to 50 age bracket (24%). At the time when the research was conducted, a large number of participants (43%) had been working for the HEI for more than eight years and (26%) worked for less than five years. Furthermore, the table shows that a large number of participants (80%) had honour/Master's Degree and followed by participants with doctoral degree (20%). Lastly, participants speaking foreign language dominated this research (36%), followed by Tshivenda (21%), IsiZulu (15%), Sepedi (16%) and the least being Xitsonga (12%).

**Table 1.** Biographical variables of the participants

<i>Dimension</i>	<i>Category</i>	<i>Frequency</i>	<i>Percentage %</i>
Gender	Male	83	59
	Female	57	41
Age	Less than 30 years	22	16
	31-40 years	33	24
	41-50 years	34	24
	more than 50 years	51	36
Work experience	1-4years	36	26
	5-8years	43	31
	more than 8years	61	43
Qualification	Honours /Master's Degree	76	80
	Doctoral	57	20
Language	Tshivenda	30	21
	IsiZulu	21	15
	Sepedi	23	16
	Xitsonga	17	12
	Other	49	36

### 5.3 Measuring instrument

Biographical information was developed and attached to the questionnaire. The data was obtained with the use of an Organisational Stress Screening Tool (ASSET) and an Organisational Commitment Questionnaire (OCQ).

An Organisational Stress Screening Tool (ASSET) is a 37-item instrument used to measure the individual's perception towards his or her job and are scored on a six-point scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). The reliability of the scale is based on the Guttman split-half coefficient (Cartwright & Cooper, 2002). A reliability coefficient of the scales of 0.64 to 0.94 which shows good reliability was considered satisfactory within a population of 613 in a study of occupational stress of employees in an insurance company (Coetzee & Rothmann, 2006).

An Organisational Commitment Questionnaire (OCQ) was also used to assess the organisational commitment of the employees. This a 21-item instrument used to measure the individual attitude towards the organisation (i.e. affective, continuance and normative commitment and are scored on a five point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The reliability of this scale is indicated by Cronbach alpha coefficient for the total score which were found to be above 0, 70 (Allen & Meyer, 1990; Ramakau, 2006).

The data was analysed with the aid of IBM-SPSS programme (IBM-SPSS, 2013). The programme carried out statistical analysis regarding descriptive statistics and standard multiple regression analysis. The one-way analysis of variance was used to determine the levels of occupational stress and organisational commitment of employees based on biographical information.

### 6 Results

Table 2 shows that scores of the measuring instruments were normally distributed with low skewness and kurtosis except for the scores of Pay and Benefits. The Cronbach alpha coefficients, varying from 0.62 – 0.89, compare reasonably well with the guideline of 0.70 (0.55 in basic research), indicating that a large portion of the variance is explained by the dimensions (internal consistency of the dimensions) (Nunnally & Bernstein, 1994). The interim correlations of all dimensions are also acceptable compared to the standard one of  $0.15 \leq r \leq 0.50$  (Clark 1995).

The table shows that the sten scores of Job characteristics, job overload, and job control and work relationship were higher than the mean of 5.5 while work life balance, job insecurity, and pay were lower than the mean. Affective commitment and continuance commitment were also lower than the mean while normative commitment was to some extent higher than the mean.

#### 6.1 Multiple regression analyses

To determine which occupational stressors predict individual commitment towards the organisation (affective, normative and continuance commitment), multiple regression analyses using the enter method were performed. The multiple regression analyses enabled to assess the contribution of occupational stressors to both affective, normative and continuance commitment. The results are reported in table 3 which shows seven dimensions of occupational stress (i.e. work life balance, resources, work relationships, overload, job security, job characteristics and job control) and organisational commitment (i.e. affective commitment, normative commitment and continuance commitment). The table indicates that affective, normative and continuance commitment were

statistically significant (all medium effects) which are work relationship, overload, job characteristics and job control. Continuance commitment and normative

commitment were strongly significant showing a statistically significant value of 0.67 and 0.70 on the table, which is close to the guideline (1.00)

**Table 2.** Descriptive statistics, Alpha Coefficients and Inter-item Correlations of the Scales

<i>Dimension</i>	<i>Sten</i>	<i>Mean</i>	<i>SD</i>	<i>Skewness</i>	<i>Kurtosis</i>	<i>α</i>	<i>r(mean)</i>
Work life balance	3	13.98	6.39	0.72	-0.40	0.68	0.30
Resources and Communication	5	9.65	3.90	0.68	0.23	0.76	0.42
Work Relationships	6	13.98	4.64	0.69	0.45	0.79	0.36
Job Overload	6	12.13	5.00	0.58	-0.29	0.62	0.29
Job Insecurity	4	10.91	3.80	0.70	0.24	0.78	0.47
Job Characteristics	8	21.56	6.04	0.70	0.60	0.65	0.22
Pay and Benefits	1	3.65	1.69	-0.01	-1.33	-	-
Job control	7	10.60	4.97	0.57	0.31	0.75	0.44
Affective commitment	4	18.50	4.00	-1.33	1.86	0.83	0.51
Continuance commitment	4	19.80	3.33	0.40	0.34	0.89	0.39
Normative commitment	5	17.65	2.50	-1.37	2.40	0.70	0.43

Note. Pay and Benefits scale consists of only one item and therefore the alpha coefficient is not reported on this scale

**Table 3.** Standard Multiple Regression Analyses

<i>Variable</i>	<i>Unstandardised Coefficient</i>		<i>Standardised Coefficient</i>	<i>T</i>	<i>P</i>	<i>F</i>	<i>R<sup>2</sup></i>	<i>R</i>
	<i>B</i>	<i>SE</i>	<i>Beta</i>					
<i>Affective commitment</i>						6.47*	0.16	0.39
(Constant)	29.40	0.84		37.21	0.00			
Work life balance	0.07	0.12	0.04	0.65	0.56			
Resources	-0.16	0.16	-0.18	-2.00	0.02*			
Job overload	0.18	0.09	0.16	2.40	0.04*			
Job security	0.02s	0.06	0.04	0.48	0.54			
Job control	-0.25	0.07	-0.24	-3.00	0.73			
Work Relationship	-0.02	0.06	-0.05	-0.34	0.73			
<i>Continuance Commitment</i>						16.6*	0.24	0.48
(Constant)	29.40	0.82		36.75	0.00			
Work life Balance	0.09	0.12	0.04	0.65	0.56			
Job Resources	-0.14	0.13	-0.17	-2.00	0.02*			
Job Overload	0.12	0.08	0.16	2.40	0.40			
Job Security	0.04	0.06	0.08	0.48	0.54			
Job Control	-0.25	0.05	-0.29	-3.00	0.00*			
Work Relationship	-0.02	0.06	-0.04	-0.34	0.52			
<i>Normative Commitment</i>						10.29*	0.04	0.32
(Constant)	18.40	0.85		34.05	0.00			
Work life Balance	0.03	0.15	0.03	0.63	0.44			
Job Resources	-0.13	0.09	-0.32	-3.02	0.02*			
Job Overload	0.21	0.17	0.18	2.30	0.04*			
Job Security	0.00	0.05	0.04	0.58	0.54			
Job Control	-0.09	0.02	-0.26	-4.00	0.66			
Work Relationship	-0.03	0.05	-0.04	-0.34	0.73			

Note: \*p<0.05 statistically significant

One-way ANOVA was used to compare the demographic information on employee experience. As shown in Table 4, occupational stress and organisational commitment are compared with the level of experience for academic staff in higher education institution. Table 4 shows that participants

with 5 to 8years and more than 8 years of experience at the institution scored significantly higher (practically significant difference, medium effect) on job characteristics, work relationships and control than those with less than 5 years of experience. With regards to organisational commitment, participants

with 1 to 4 and 5 to, 8years years of experience at the institution scored significantly low on affective commitment and continuance commitment than individuals with more than 8 years of experience at the

institution (practically significant difference, medium effect). Lastly, both participants with 1 to 4 years, 5 to 8years and more than 8 years scored high on normative commitment.

**Table 4.** ANOVAS- Differences in ASSET and Allen and Meyer Scores of Years of Experience Categories

<i>Dimension</i>	<i>1-4years</i>	<i>5-8 years</i>	<i>More than 8 years</i>	<i>P</i>	<i>Root SME</i>
Work life balance	9.56	9.89	8.12	0.10	3.71
Resources and communication	8.39	9.13	9.79	0.05	3.86
Work Relationships	9.03	10.98 <sup>b</sup>	11.40 <sup>b</sup>	0.23	5.88
Overload	9.86	9.87	10.01	0.07	4.11
Job Security	10.78	10.12	11.42	0.36	3.98
Job control	10.27 <sup>b</sup>	11.19 <sup>b</sup>	14.18 <sup>b</sup>	0.00*	4.73
Job characteristics	11.63	12.63 <sup>b</sup>	13.21 <sup>b</sup>	0.00*	6.02
Affective commitment	18.91 <sup>b</sup>	19.73 <sup>b</sup>	21.84 <sup>b</sup>	0.00*	3.96
Normative commitment	21.66 <sup>b</sup>	22.66 <sup>b</sup>	20.02 <sup>b</sup>	0.00*	4.86
Continuance commitment	19.08	20.67	22.04	0.06	4.02

Note: Statistically significant difference:  $p = 0.01$ , a practically significant differences from category (in row) where b (medium effect,  $d = 0.5$ ) or c (large effect,  $d = 0.8$ ) are indicated.

According to Table 5, IsiZulu, Sepedi and other language (foreign) speaking group scored practically significantly higher on Work relationships (practically significant difference, medium effect) than Tshivenda and Xitsonga speaking language groups. The Tshivenda, Sepedi and Xitsonga speaking language groups scored practically significant higher on overload (practically significant difference, medium effect) as compared to IsiZulu speaking group. However, The IsiZulu speaking language group also scored significantly high on overload (practically significant difference, small effect) as compared to other language speaking group.

group scored practically significantly high on Affective commitment (practically significant difference, small and medium effect) than IsiZulu and other language speaking group. In terms of normative commitment, other language speaking scored practically significantly higher (practically significant difference, medium effect) as compared to Tshivenda, Sepedi, IsiZulu and Xitsonga language speaking group. Lastly, Tshivenda, Xitsonga and Sepedi speaking language groups scored practically significantly high on continuance commitment (practically significant difference, medium effect) than the IsiZulu, and other language speaking groups.

With regards to organisational commitment, Tshivenda, Sepedi and Xitsonga speaking language

**Table 5.** ANOVAS- Differences in ASSET and Allen and Meyer Scores of Different Language Groups

<i>Dimension</i>	<i>Tshivenda</i>	<i>IsiZulu</i>	<i>Sepedi</i>	<i>Xitsonga</i>	<i>Other</i>	<i>P</i>	<i>Root SME</i>
Work life balance	6.04	7.22	8.12	6.14	8.05	0.04	3.81
Resources and communication	9.14	7.55	9.79	9.12	9.21	0.08	3.66
Work Relationships	9.55 <sup>b</sup>	14.23 <sup>b</sup>	12.80 <sup>b</sup>	8.53 <sup>b</sup>	14.23 <sup>a</sup>	0.01*	6.88
Overload	14.62 <sup>a</sup>	10.17	13.01 <sup>a</sup>	12.09	9.55 <sup>b</sup>	0.09	4.11
Job Security	11.04	11.12	11.22	10.78	11.81	0.86	5.98
Job control	12.58	11.19	9.18	12.32	11.04	0.09	4.73
Job characteristics	14.28	15.45	12.21	13.22	14.08	0.67	4.02
Affective commitment	22.11 <sup>b</sup>	18.15	21.84	18.11	17.14 <sup>a</sup>	0.00*	5.56
Normative commitment	18.22 <sup>b</sup>	19.18 <sup>b</sup>	17.12 <sup>b</sup>	21.07	22.21 <sup>a</sup>	0.01*	4.86
Continuance commitment	23.23 <sup>b</sup>	20.01 <sup>a</sup>	22.28 <sup>b</sup>	22.09 <sup>b</sup>	19.18 <sup>a</sup>	0.00*	6.89

Statistically significant difference:  $p = 0, 01$ , a practically significant differences from category (in row) where b (medium effect,  $d = 0.5$ ) or c (large effect,  $d = 0.8$ ) are indicated.

## 5 Discussion and conclusion

The first objective of this study was to determine the levels of occupational stress and organisational commitment of employees. Secondly, the study was aimed to determine occupational stress and

organisational commitment levels of employees based on demographic differences of employees (experience and language).

In determining the level of occupational stress, standardised ten scores (sten) were used. The results showed that job characteristics and job control were

the most significant stressors in the whole organisation followed by work relationships and job overload. In addition, it was found that these occupational stressors led to lower levels of affective and continuance commitment.

In this study, the results should not be understood in isolation but also in full consideration of the present internal and external factors affecting higher education institutions in South Africa. The restructuring of higher education institution, fast changes in technology, financial predicaments, and growing number of student enrolment and increase in globalisation have radically changed many aspects of the teaching job creating emotional turmoil and stress for academic staff members (Sparks, Faragher & Cooper, 2001; Tennant, 2001). In addition, the broader transformation of the South African higher education system including the merger of universities and technikons has led to significant increase in stress (Oosthuizen & Berndt, 2008). According to Seldin (1991), this situation is likely to endure and there are prospects that current and future academic staff member of higher education institutions in South Africa might likely continue to experience increasing levels of occupational stress.

As far as organisational commitment, of academic staff members in the institution in concerned, all the occupational stressors excluding work life balance and pay contributed to low affective commitment and continuance commitment. According to Kahn and Byosere (1992), if occupational stress is left unmanaged, it may result to psychological and physical ill-health of employees hence negatively affecting their commitment towards the organisation. Occupational stressors about work relationships, job characteristics, overload, lack of control and lack of resources seem to be most significant stressors associated with low organisational commitment. The impact of the mentioned above stressors can be easily understood if one considers the background of the South African institutions and the transformation that it has gone through, the growth in student enrolments without a proportion increase in academic staff (Viljoen and Rothman, 2009).

As far as work relationship is concerned, the concept of diversity which reflects the difference of in cultures, values and principles of employees need to be considered. Diversity is also reflected in higher education institutions with women and young age groups increasing in the teaching job (Maingi & Makori, 2015) Conflict can easily arise between people when working together, especially when they are not like-minded, with different ideas, views, experiences and perspectives (Worman, 2005). Therefore diversity should be considered when investigating the existence of stress in individuals and the way they behave in order to deal with the stress.

With regards to job characteristics, increase in student enrolment, different values and principles, poor economic and educational backgrounds resulting

in low pass rates especially rural based universities is seen to be a contributing factor to stress Viljoen & Rothmann (2009). The need by university leaders to be amongst leading universities in research output in South Africa also increases pressure towards academic staff not to focus only on lecturing but also participate more in conducting research. In addition, the change from a teaching college to a university also brought subsequent pressure on staff to increase their level of qualification to PHD and professorship thus leading to high job and personal demands. However, according Viljoen and Rothmann (2009), the fact that the name has been changed from college to a university puts the institution in the sphere of traditional universities of which most of them have competitive advantage.

Stress about job control can be a result from a formal, rigid and bureaucratic management system in the university. Although it is important for the institution to ensure better employee performance and provision of quality services, employees might be negatively affected by this. A bureaucratic management system prevents employees to make their own decision regarding on what, how and when to perform their tasks. According to Coetzee and Rothmann (2006), employees who perceive lack of control towards many aspects of their jobs and also lack of individual influence towards their performance targets might likely experience stress and low organisational commitment.

To determine the best predictors of organisational commitment, standard multiple regression analysis was computed with occupational stressors included as predictors and organisational commitment as dependent variables. A statistically significant model was produced where the main predictors were resources and communication, job overload and job control. With regard to resources and communication, it appears that lack of proper equipment, lack of information and lack of training are major predictors of low affective commitment, continuance commitment and normative commitment. These results support the findings by Coetzee and Rothmann, (2006) that resource and communication was the main source of occupational stress resulting in low organisational commitment. Furthermore, the results support the findings of Bakker, Demerouti, De Boer and Schaufeli (2003) who found that lack of individual decision making, lack of information and lack of training impedes goal achievement which likely results in reduced job dissatisfaction. As such, according to the researcher, employees get detached to their job which feasibly is a sign of reduced organisational commitment.

Even though a statistically significant model was generated when occupational stressors were regressed upon affective commitment, normative and continuance commitment, almost all the occupational dimensions were insignificant. However, job overload nearly approached a statistical significance when regressed with normative commitment and if not dealt

with, could result in low normative commitment. In this case it means that participants perceive unmanageable workload as amongst the major causes of high levels of occupational stress and reduced organisational commitment. This supports the findings by Jackson and Rothmann (2006) that educators normally experienced high levels of occupational stress due to work overload and therefore resulting to reduced organisational commitment.

In determining the level of occupational stress and organisational commitment based on demographic differences, one-way ANOVA analysis was used. With regards to occupational stress and organisational commitment levels based on years of experience, it is confirmed that employees with 5 to 8 years and more than 8 years of experience at the institution are perceiving characteristics of their jobs, work relationship and job control as a big source of stress. Notably, it seems that participants with 5 to 8 years and more than 8 years of experience find it stress full that they will be doing their job for the next coming five to ten years hence becoming demotivated and less committed to the organisation. According to Coetzee and Rothmann (2006), lack of variety of tasks in the teaching job result in employees perceiving the teaching as dull and boring therefore experiencing high occupational stress levels. Lack of promotion and increase in pay and benefits might be seen as amongst the reason why employees are showing low affective and continuance commitment. Furthermore, constant low pass rate of student in the institution can put pressure on academic staff members leading to stress and low affective and continuance commitment

The analysis of the level of occupational stress and organisational commitment based language reveals that IsiZulu, Sepedi and other language (foreign) speaking group scored practically significantly higher on Work relationships (practically significant difference, medium effect) than Tshivenda and Xitsonga speaking language groups. Stress about work relationship can be due to an inexistence of a properly defined culture which will enable employees to share ideas and knowledge with less conflicts (Oosthuizen & Bendt, 2008). In addition the management style and communication breakdowns can lead to poor work relation between the management and employees resulting in stress (Robbins & Coulter 1999).

Tshivenda, Sepedi and Xitsonga speaking language group scored practically significantly high on Affective commitment (practically significant difference, small and medium effect) than IsiZulu and other language speaking group. In terms of normative commitment, other language speaking scored practically significantly higher (practically significant difference, medium effect) as compared to Tshivenda, Sepedi, IsiZulu and Xitsonga language speaking group. Lastly, Tshivenda, Xitsonga and Sepedi speaking language groups scored practically significantly high on continuance commitment

(practically significant difference, medium effect) than the IsiZulu, and other language speaking groups.

## **7 Conclusions**

The first objective was to determine the levels of occupational stress and organisational commitment of employees. In the past, working as an educator either in primary or secondary and higher educational institutes was regarded generally as stress free. However, due to the restructuring process, fast changes in technology and increase in globalisation have radically changed many aspects of the teaching job (Sparks, Faragher & Cooper, 2001). Therefore, educators have been experiencing high levels of occupational stress and low organisational commitment. In this study, individuals perceived work relationship, job overload, job control and job characteristics as major contributors to low organisational commitment (affective commitment and continuance commitment). With regards to organisational commitment, individuals experienced low organisational commitment levels on both affective commitment and continuance while normative commitment was high. The results shown by the multi regression analysis predict low organisational commitment levels due to job overload, job control, job characteristics and job resources.

The second objective was to determine the differences of occupational stress and organisational commitment based on demographic information of employees (experience and language). After completing the one-way analysis of variance (ANOVAs), results show that employees who have stayed in the institution for a long period of time at the institution perceive job characteristics, work relationships and control as their sources of stress as compared to employees with less experience. With regards to organisational commitment, participants with 1 to 4 and 5 to, 8years years of experience at the institution scored significantly low on affective commitment and continuance commitment than individuals with more than 8 years of experience at the institution (practically significant difference, medium effect). Lastly, both participants with 1 to 4 years, 5 to 8years and more than 8 years scored high on normative commitment.

## **8 Recommendations**

In the future, it is essential for research in South Africa to focus on the prevalence of occupational stress in various occupations. The levels of occupational stress found in different occupational groups may assist in ascertaining occupations that are most at risk of the adverse outcomes of stress. The questionnaire is an important matter that should be rectified. The questionnaires should be standardised to suit South African conditions. This will ensure that the results obtained are based on the multi-cultural context

and conditions of South Africa; therefore this will ensure reliability.

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