OCCUPATIONAL STRESS AND ORGANISATIONAL COMMITMENT OF EMPLOYEES AT HIGHER EDUCATIONAL INSTITUTION

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Abstract

The objective of this study was to determine the relationship between occupational stress and organisational commitment of employees at a higher education institution. A random sample (N=30) was chosen from academic staff within the university. The study used a quantitative design. The Organisational Stress Screening Tool (ASSET) and Allen and Meyer's Organisational Commitment Tool (OCT) were administered. The study revealed that a statistical significant relationship exists between occupational stress and organizational commitment of employees. The study also showed that academic staff overall experienced average levels of occupational stress and organisational commitment. Job characteristics and work relationship were found to be the major sources of occupation stress. It is recommended that higher education institutions should improve employee participation in decision making to reduce employees' stress as a result of unmanageable workloads and overload.

Keywords: Occupational Stress, Organizational Commitment, Education, Employees

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1 Introduction

The South African higher education sector consists of universities, Universities of Technology and colleges (e.g. Technical and Vocational Education and Training colleges (DHET, 2013). This Higher Education Institutions (HEI) provides training and education that contributes positively to the growth of the national economy (Florida, 2002). After the 1994 general elections, the new democratic government has embarked on a journey to expand the system and build new institutes of higher education. The primary aim of this is to ensure access to higher education to the people who were previously excluded, including the people Mpumalanga and Northern Cape Province (DHET, 2013).

Although these academic institutions are key to the economy, occupational stress seems to be a feature of occupational life for university employees, not in South Africa only but as well as in other countries (Kinman & Jones, 2007). The possible explanation of occupational stress is due to the restructuring process of the education system which has radically changed the structure and system of higher education (Barkhuizen & Rothmann, 2008).

Hanrahan, Kinman and Wissing (2002) stated that the negative effect of occupational stress undermines the quality, creativity, morale and productivity of employees. Furthermore, Barkhuizen and Rothmann (2008) in their study on occupational stress reported that occupational stress is associated with low organisational commitment. This supports a study by Siu (2004) who found that those individuals experiencing high levels of occupational stress were less committed to their organisations.

2 Occupational stress

According to Ahghar (2008) occupational stress is defined as the harmful physical and emotional responses that occur due to the incapability of an individual to cope effectively with the work demands/environment. Occupational stress has been a major subject of interest for both researchers and practitioners for the past six decades and it has progressively evolved over centuries (Doublet, 2000). Occupational stress has been demonstrated by other studies as a temporal association among daily stressors for example emotional exhaustion and negative mood (Fuller, Stanton, Fisher, Spitzmuller, Russell & Smith, 2003).

In consideration of the aspects mentioned above, employees must manage and control these conditions with the available resources. The inability of employees to strike a balance between available resources with job related demands often result in occupational stress especially when employees apply more effort in trying to meet these demands

(Anderson, Litzernberg & Placas, 2004). Topper (2008) stated that the incompatibility of the job requirements and employees' capabilities and resources also leads to stress. Furthermore, occupational stress occurs when an individual lacks the ability to perform and complete the job demands (Henry & Evans, 2008).

For the past decade, Higher Education Institutions experienced an increase in student enrolment, lifelong learning and adult learning resulting in increased workload for employees. In a study by Kinman (2008) it was revealed that work overload is one of the major sources of occupational stress.

3 The organisational stress screening tool (ASSET) model

The Organisational Stress Screening Tool (ASSET) was developed by Cartwright and Cooper (2002) as an instrument to measure threats of occupational stress on employees. They used the ASSET model as an effective instrument to identify sources of occupational stress and their effects. The model provides information on the outcome levels of stress such as physical health, psychological wellbeing, and organisational commitment. According to this model a high score in the perception of individual's job indicates an increased perception of stressors related to high levels of stress. The model indicates that conditions that normally cause occupational stress are known as stressors. These stressors are work related and they may directly or indirectly affect organisational commitment.

4 Organisational commitment

Vakola and Nikolau (2005) define organisational commitment as a state at which an individual identifies with a particular organisation combined with the willingness and desire to remain a member in order to facilitate the organisational objectives. Individuals join the organisation hoping that they will find a work environment which is suitable for using their skills, knowledge and abilities (competencies) and satisfy their needs (Taiwo, 2010). Individuals meet these opportunities with chances of increasing organisational commitment (Geldenhuys, Laba & Venter, 2014).

Organisational commitment is a significant aspect and determinant of success in organisations (Jackson and Rothmann, 2006). As such, organisations are increasingly realising the significance of a healthy work environment which suitably allows individuals to utilise their, skills, knowledge and abilities (SKAs) (Camilleri, 2006). Taiwo (2010) suggests that employees must be granted the opportunity to utilise their skills, knowledge and abilities in a healthy work environment. A healthy work environment is identified with low occupational stressors. Therefore,

Teller, Ayeni and Popoza (2007) reports that organisational commitment can be increased by providing an occupational stress free environment for employees to operate in.

Organisational commitment is also defined as the relative strength of an individual's identification and involvement in a particular organisation (Slaughter & Zickar, 2007). Hamdi and Rajablu (2012) stated that organisational commitment as it is amongst the determinants of individual and organisational success. According to Siu (2004) organisational commitment is positively related to outcomes such as organisational citizen behaviour, job satisfaction and job performance. Conversely, organisational commitment is negatively related to outcomes such as absenteeism and turnover.

Arokiasamy and Nagappan (2012) view organisational commitment as an important factor for university leaders as it directly impacts on the quality output of the university (i.e. university graduates). Moreover, organisational commitment has an indirect impact on the socio-economic development of the nation (Florida, 2002).

According to the findings by Muhammad (2012) the majority of employers are increasingly realising the significance of maintaining a healthy work environment to increase organisational commitment. However, to achieve this, a better understanding of the effects of occupational stress on organisational commitment of employees within higher educational institutions is required. The researchers use Allen and Meyer's three components Model to assess the organisational commitment of the employees in Higher Education Institution.

5 Allen and Meyer's three-components model

This three component model was developed by Meyer and Allan (1990) including affective commitment, continuance commitment, and normative commitment.

5.1 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, Johari, Rashid, & Sambasivan (2003) 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. Johari *et al*, (2003) defines organisational commitment as the emotional attachment of an employee to their organisation.

Benligiray and Sönmez (2012) contend that the employee's attachment to and the desire to remain in their organisation could also be due to the matching of

his or her values and goals with the primary values and goals of the organisation. This means that if an employee has strong affective commitment, they will remain in the organisation because they want to. Variety of empirical research on organisational commitment has focused on the affective element (Lee, & Jamil, (2003); Rego & Miguela (2008); Gulova & Demirsoy (2012).

5.2 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 & Sonmez, 2012).

5.3 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 & Sonmez, 2012).

An individual's experiences towards his or her former or current organisation affects this form of organisational commitment (Johari *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 & Sonmez, 2012). An employee will therefore, continue to stay in the organisation because they feel obliged. For example, an individual may value loyalty towards the organisation more than all other things (Clugston, Howel & Dorfman, 2000). In addition to this, Greenberg and Bearon (2003) stated that employees who possess high levels of normative commitment are shy to disappoint their employers and are worried about what their colleagues would perceive them if they leave the organisation.

6 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 (Nikolaou & Tsaousis, 2002; Velnampy & Aravinthan, 2013). According to Viljoen and Rothmann, (2009) occupational stress is associated with low organisational commitment. In this case, occupational stress and organisational commitment are inversely related. Siu (2004) reported that employees who perceive high levels of occupational stress are less committed to their organisations. Conversely, employees perceiving low occupational stress are highly committed to the organisation (Coetzee & Rothmann, 2005).

Other studies indicated the negative impact of occupational stress on organisational commitment (Ford, Heinen & Langkamer, 2007; Mafini & Dlodlo, 2014). Furthermore, Rothmann (2005) reported that employees perceived job aspects, work relationship and job control as a huge source of stress resulting in reduced commitment towards the organisation. According to Jackson and Rothmann (2006) 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 have shown less organisational commitment. This may lead to withdrawal behaviour of employees towards their job which possibly is an outcome of organisational commitment (Stephen, 2014).

According to Ivancevich and Matteson (1980) occupational stress negatively affects individual behaviour leading to poor attendance, poor performance, poor health and lack of confidence. With regards to the organisation, occupational stress results in increased turnover rate, reduced levels of customer service, poor quality control and a downfall in production (Quick, Quick, Nelson & Hurrell, 1997).

Organisational commitment is related to occupational stress outcomes which include physical and psychological ill health (Siu, 2004). This means that organisational commitment has moderating effects between stressors and health relationships (Siu, 2002). Therefore, the moderating effects of organisational commitment protect employees from adverse effects of stress (Siu, 2004). In addition, a study by Jackson and Rothmann (2006) on educators in the North West Province found that commitment from the individual to the organisation moderates the effects of occupational stress on physical and psychological health. Therefore, organisational commitment interacts with sources of stress at work to determine its outcomes, such as, better job satisfaction and physical well-being. According to Teller, Ayeni & Popoza (2007) organisational commitment is amongst of the best indicators of motivation at work.

A study by Tytherleigh, Webb, Cooper, and Rickens (2005) revealed that employees at higher educational institutions show lower levels of organisational commitment due to high levels of occupational stress associated with work relationships,

resources and communication and job control. Therefore, this calls employees to manage and control their working conditions in order to increase organisational commitment. To give a clear description of organisational commitment, the Allen and Meyer's three component model was used.

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).

The research objectives of this study was to conceptualise occupational stress and organisational commitment in the literature and also to assess the relationship between occupational stress and organisational commitment

7 Research methodology

7.1 Participants

The present study on the views of university staff members on occupational stress and organisational commitment was undertaken with academic and support staff at a South African university. The sample of the study was drawn from the university population. The university consists of academic and support staff. The questionnaire was randomly distributed to the university staff to ensure fair representation.

7.2 Data collection instrument

A quantitative research design was used to acquire data in a higher education institution in South Africa. The design is preferably suitable for descriptive functions related to correlation research (Shaughnessy, Zechmeister, & Zechmeister, 2003). The study used an Organisational Stress Screening Tool (ASSET) and an Organisational Commitment Questionnaire (OCQ). ASSET is 37 item questionnaire used to measure the occupational stress of the employees. Its subscale includes questions relating to eight potential sources of stress, as work relationship, work–life balance, overload, job security, control, resources and

communication, job overall, pay and benefits (Jackson & Rothmann, 2006). The reliability of the scale is based on the Guttman split-half coefficient (Cartwright & Cooper, 2002). In studies by Coetzee & Rothmann (2005) as well as Setati (2014) the ASSET questionnaire indicated a good reliability.

An Organisational Commitment Questionnaire (OCQ) is the 21 item questionnaire used to assess the organisational commitment of the employees (Allen & Meyer, 1990). It measures the individual attitude towards the organisation (i.e. affective, continuance and normative organisational commitment). 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).

7.3 Data analysis

In this study the data was analysed with the aid of IBM-SPSS programme (IBM-SPSS, 2013). The programme carried out statistical analysis regarding on descriptive statistics and correlation analysis. Correlation analysis was used to determine the relationship between occupational stress and organisational commitment. Standard multiple regression analysis was carried out to measure the influence of the independent variables (i.e. work relations, work life balance, overload, job security, control, resources, job aspects and pay) on dependent variables (i.e., affective, continuance and normative commitment).

7.4 Factor analyses, descriptive and reliability of the measuring instruments

The percentage variance explained by each factor, the descriptive statistics (mean (M), standard deviation (SD), skewness and kurtosis) of the measuring instrument and their subscales were computed. The internal consistency of the questionnaires was determined by computing the mean inter-item correlation (r-Mean) and Cronbach alpha coefficient (α).

Table 1. Descriptive statistics, Sten and Cronbach Alpha Coefficients

Dimension	Sten	Mean	SD	Skewness	Kurtosis	α	r(mean)
Work life balance	3	10.25	5.39	0.72	-0.40	0.68	0.30
Resources and communication	4	12.65	5.90	0.68	0.23	0.76	0.42
Work relationships	7	20.35	9.64	0.69	0.45	0.79	0.36
Job overload	3	10.13	5.00	0.58	-0.29	0.62	0.29
Job insecurity	4	13.00	5.47	0.70	0.24	0.78	0.47
Job characteristics	8	23.00	10.4	0.70	0.60	0.65	0.22
Pay and benefits	1	3.65	1.69	-0.01	-1.33	-	-
Job control	6	11.7	5.97	0.57	0.31	0.75	0.44
Affective commitment	4	22.5	4.00	-1.33	1.86	0.83	0.51
Continuance commitment	6	20.8	3.33	0.40	0.34	0.89	0.39
Normative commitment	7	18.65	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 1 show that scores of the measuring instruments were normally distributed with low skewness and kurtosis except for the scores of pay and benefits. An acceptable Cronbach alpha coefficients varying from 0.62 - 0.89 was found in the study, it compares reasonably well with the guideline of 0.70 (Nunnally & Bernstein, 1994). The interim correlations of all dimensions are also acceptable when compared to the standard one of $0.15 \leq r \leq 0.50$ (Clark 1995).

Table 1 depicts that job characteristics proved to be the main source of occupational stress, as reflected by a high sten score of 8 followed by work relationship dimension with a relatively high sten score of 7. The dimension of normative commitment also reflected by a high sten score of 7 indicates that, in spite of participants perceiving some job aspects

and work relationships as major sources of stress, they still feel obliged to stay in the institution.

The sten scores of 4 to 6 indicate average sources of stress and average organisational commitment levels. This means that participants perceived the dimensions of resources and communication, job insecurity and job control as average sources of stress. The participants perceived the dimension of affective commitment and continuance commitment as average levels of organisational commitment.

The sten of 3 on the dimension of work life balance indicates that the participants experienced the perceived balance of work and personal life as relatively low. The sten score of l on the dimension of pay and benefits indicate that individuals experienced the perceived pay and benefits as a low source of stress.

Table 2. Correlation Coefficient between Measuring Instruments

Dimension/variable	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
Work life balance	-	-	-	-	-	-	-	-	-	-
Resources	0.20*	-	-	-	-	-	-	-	-	-
Work Relationships	0.32*+	0.56*++	-	-	-	-	-	-	-	-
Overload	0.56*++	0.51*++	0.57*++	-	-	-	-	-	-	-
Job security	0.36*+	0.37*+	0.40*+	0.46*+	-	-	-	-	-	-
Job Characteristics	0.45*+	0.50*++	0.53*++	0.55*++	0.44*+	-	-	-	-	-
Job Control	0.47*+	0.58*++	0.63*++	0.57*++	0.43*+	0.53*++	-	-	-	-
Affective commitment	-0.15*	0.23*	-0.15*	-0.16*	-0.13*	-0.21*	-0.30*	-	-	-
Continuance Commitment	-0.21*	-.0.30*+	-0.36*+	-0.28*	-0.28*	-0.30*+	-0.44*+	0.67*++	-	-
Normative Commitment	-0.21*	-0.32*	-0.22*	-0.27*	-0.22*	-0.25*	-0.46*+	-0.56*	-0.53*	0.70*++

Note: *Statistically significant: $p \leq 0.05$, +practically significant correlation (medium effect): $0.30 \leq r \leq 0.49$, ++ practically significant correlation (large effect); $r \geq 0.5$.

Table 2 depicts the 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 shows that affective, normative and continuance commitment were statistically significant (all medium effects) with 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 respectfully on the table.

8 Findings

The first objective of this study was to conceptualise occupational stress and organisational commitment. The literature indicates that occupational stress is associated with low organisational commitment and that they are inversely related (Viljoen & Rothmann, 2009). Employees who perceive high levels of occupational stress are less committed to their organisations and employees perceiving low levels of occupational stress are highly committed to the organisation (Siu, 2004). The employees occupational stress lead to mental, physical and psychological ill

health (Siu, 2004; Mostert, 2008, Viljoen & Rothmann, 2009).

The second objective of this study was to determine the relationship between occupational stress and organisational commitment. The reliability analysis of the scales of the ASSET indicated that the dimensions of work life, resources and communication, work relations, job insecurity and job control were sufficiently consistent. The results of the product moment correlation coefficient showed the existence of a statistically significant relationship between job stressors and organisational commitment (i.e., affective commitment, normative commitment and continuance commitment). However, work life balance was the only stressor that was not associated with all forms of commitment.

9 Conclusions and recommendations

The first objective of this study was to assess the relationship between occupational stress and organisational commitment. The second objective was to determine the relationship between occupational stress and occupational commitment. The reviewed literature and the empirical study indicate that stress becomes a concern when individuals perceive that the demands made upon them exceed their coping abilities (Cartwright & Cooper, 2002). Previous research has

shown that occupational stress has a negative impact on the organisational commitment of academic staff implying that a negative relationship exist between occupational stress and organisational commitment (Mahomed & Naude, 2006). This supports findings by Coetzee and Rothmann (2005) who reported that employees who perceived characteristics of their jobs and lack of control as a big source of stress became less committed to the organisation.

According to Tytherleigh, et al., (2005) occupational stress reduces the performance of individuals. Furthermore, occupational stress results in poor customer service and purposefully destructive behaviours. Research on stress among academic staff of universities indicated that the problems of stress in universities are continuously increasing (Winefield, Gillepsie, Stough, Dua, Happurachchi, & Boyd, 2000). Occupational stressors are aspects of the work environment that cause strains of individuals (Winefield et al., 2003). Consequently, higher educational institutions should develop interventions to reduce the occupational stress among staff.

The best method to combat occupational stress is to eliminate the sources of stress in the work environment thus easing the pressure upon individual employees. With regard to job control, a decentralised system should be created to allow participative decision making at all levels. This would result in reduced occupational stress among academic staff caused by job control. Furthermore, tasks and roles should be redesigned to ensure employee autonomy and control over their job aspects. Since work relationships are also a huge source of occupational stress, an effective communication system that enables proper feedback to all stakeholders may reduce stress regarding work relationship. Job overload is also a huge source of occupational stress hence it is essential to reduce overload.

The focus of the secondary level interventions is on providing the necessary training to management and employees to mediate occupational stressors. Secondary level interventions must be implemented for staff already showing symptoms of stress. Training techniques include relaxation, restructuring, time management and conflict resolution strategies are useful on some stressors (Cooper & Dewe, (2001). Organisations can also use the services of wellness program both internally and internally.

Future research regarding occupational stress for academic and support staff should be expanded to other higher educational institutions for a comparative study. In addition, it is recommended that future research of occupational stress and its outcomes should adhere to the multi-cultural context of the South African workforce

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