

**OCCUPATIONAL STRESS, ORGANISATIONAL
COMMITMENT AND ILL HEALTH OF EMPLOYEES AT A
UNIVERSITY OF TECHNOLOGY**

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FOR THE READER'S ATTENTION

The reader is reminded of the following:

- The references as well as the editorial style, as prescribed by the *Publication Manual (5th edition)* of the American Psychological Association (APA), were followed in this dissertation. This practice is in line with the policy of the Programme in Industrial Psychology of the North-West University to use the APA style in all scientific documents as from January 1999.
- This mini-dissertation is submitted in the form of a research article. The name of the study leader appears on the article, as it has been submitted for publication.

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ABSTRACT

Subject: Occupational stress, organisational commitment and ill health of employees at a university of technology

Key Words: Occupational stress, organisational commitment, higher education, technicians, universities of technology

Higher education is important to the country's economic growth. Due to globalisation, it is important for higher education institutions to keep up with change. The introduction of universities of technology in response to this places a new demand on academic institutions in South Africa, creating more occupational stress on employees. Other expectations, for example demands for more research and publication exert more pressure on staff, which escalates these stress levels. Workload of staff fluctuates between higher and lower and with this, a change of fluctuating periods of stress from acute to chronic is described. This chronic stress has a negative impact on the individuals' physical and psychological health, their interpersonal relationships at work and the quality of their work, as well as on workplace morale.

The objectives of the study were to establish how occupational stress, ill health and commitment are conceptualised in the literature; to establish what the occupational stress levels of staff at a university of technology are and to assess the mutual relationships among occupational stress, organisational commitment and ill health of employees at the specific institution.

The research method consisted of a brief literature review and an empirical study. A cross-sectional survey design was used. A stratified random sample was taken of academic and support staff at a specific university of technology ($N = 334$). The ASSET Organizational Stress Screening Tool and a biographical questionnaire were administered on the personnel. Cronbach alpha coefficients were used to determine the significance of dimensions of the ASSET. Exploratory factor analysis was used to investigate the factor structure of the occupational stress items of the ASSET. Pearson correlation coefficients were used to specify the relationship between the variables. Standard multiple regression analyses were used to assess whether occupational stress predicts ill health and organisational commitment.

The results showed that two occupational stressors, namely control and work relationships were higher than the norm. Physical and psychological ill health was predicted by occupational stress due to job demands and lack of organisational support. Occupational stress because of job demands had a significant effect on both affective and behavioural commitment of employees.

Recommendations for future research were made.

OPSOMMING

Onderwerp: Beroepstres, organisasieverbondenheid en swak gesondheid van werknemers aan 'n universiteit van tegnologie.

Sleutelwoorde: Beroepstres, organisasieverbondenheid, hoër onderwys, teknikons, universiteite van tegnologie.

Hoër onderwys is belangrik vir die land se ekonomiese groei. As gevolg van globalisering is dit belangrik vir hoëronderwysinstellings om by te hou by verandering. Die bekendstelling van universiteite van tegnologie, as reaksie hierop, plaas nuwe druk op akademiese instansies in Suid-Afrika, wat weer meer beroepstres by werknemers meebring. Ander verwagtinge, byvoorbeeld die vereiste dat meer navorsing gedoen moet word en meer gepubliseer moet word, plaas meer druk op personeel. Werkslading van personeel fluktueer tussen hoog en laag, en hiermee saam is 'n verandering van fluktuerende stresperiodes tussen akute en kroniese stres beskryf. Hierdie kroniese stres het 'n negatiewe uitwerking op die individue se fisieke en psigologiese gesondheid, hul interpersoonlike verhoudings by die werk en die gehalte van hul werk asook op die moreel in die werksplek.

Die doelstellings van hierdie navorsing was om te bepaal hoe beroepstres, swak gesondheid en betrokkenheid in die literatuur gekonseptualiseer word; om te bepaal wat die beroepstresvlakke is van personeel wat by 'n universiteit van tegnologie werksaam is en vas te stel wat die onderlinge verwantskap tussen beroepstres, organisatoriese betrokkenheid en swak gesondheid by die spesifieke inrigting is.

Die navorsingsmetode bestaan uit 'n kort literatuuroorsig en 'n empiriese studie. 'n Dwarsdeursnee-opnameontwerp is gebruik. 'n Gestratifiseerde ewekansige steekproef van die akademiese en ondersteunende personeel by die spesifieke universiteit van tegnologie werksaam ($N = 334$), is gebruik. Die "ASSET Organizational Stress Screening Tool" en 'n biografiese vraelys is op personeel afgeneem. Cronbach se alfakoëffisiënte is gebruik om die beduidendheid van dimensies op die ASSET te bepaal. Verkennende faktoranalise is gebruik om die faktorstruktuur van die stres-items van die ASSET te ondersoek. Pearson korrelasiekoëffisiënte is gebruik om die verwantskap tussen veranderlikes te spesifiseer.

Standaard meervoudige regressie-analise is gebruik om te bepaal of swak gesondheid en organisasieverbondenheid deur beroepstres voorspel word.

Die resultate het aangetoon dat twee beroepstressore, naamlik kontrole en werksverhoudinge hoër as die norm was. Fisieke en psigologiese ongesondheid is voorspel deur beroepstres (a.g.v. werksdruk en 'n gebrek aan organisatoriese ondersteuning). Beroepstres het 'n betekenisvolle uitwerking op die affektiewe en gedragsverbondenheid van werknemers gehad.

Aanbevelings vir toekomstige navorsing is aan die hand gedoen.

CHAPTER 1

INTRODUCTION

This chapter deals with occupational stress, organisational commitment and ill health of employees of a University of Technology in South Africa.

In this chapter, the motivation for the research is discussed in terms of the problem statement and aims of the research. Thereafter the research method and division of chapters are discussed.

1.1 PROBLEM STATEMENT

Higher education is crucial to economic growth (Skolnik, 2002). Institutions of higher education are now more important to the country's economy than factories, mines and other manufacturing institutions (Florida, 2002). Therefore the government's policy for education and training is a matter of national importance, as stated by Minister Bengu in the Whitepaper on Education and Training (Department of Education, 1995), the importance of education and training is "of vital interest to every family and to the health and prosperity of our national economy" (p. 30).

In South Africa, the provision of education and training in higher education occurs primarily in colleges, technikons, universities of technology, and universities. According to Florida (2002), higher education institutions are important in this creative age, because it contributes to technology, talent and tolerance. The traditional technology transfer theory of higher education is affected by these institutions, not only through acting as generators but also as consumers, helping to shape its applications. As for talent and tolerance, these institutions act as magnets, attracting people who want to be near new ideas and thereby produce an even more attractive environment for others. It is therefore important for institutions of higher education to keep up with change, to drive change in society and to be subject to the forces of change in the community and the world (Egron-Polak, 2002; Schutte & Steyn, 2002). In this regard, Bloom (2002) introduced three preconditions: that higher education is no longer a luxury; that globalisation makes higher education reform necessary; and that implementation of policy must be considered from its inception.

In 1995, Minister Bengu pointed out in the White paper on Education and Training (Department of Education, 1995) that, education and training, the central activities of our society, must change to support the needs of the future (Schutte & Steyn, 2002). In a letter to the Minister, COSATU (2000) also stated their policy that higher education should be transformed. In this they identified higher education transformation as a critical component of the reconstruction and development process of the country. Higher education institutions that are directly responsible for the management of tertiary teaching and learning are now an environment of considerable uncertainty, especially while transformation is under way (Skolnik, 2002). The higher education policy of the new South African government is intended to address the apartheid legacy of an unequal, inefficient and ineffective system. Subotszky (2002) points out that the government's attention was focused on reducing the number of higher education institutions during the period 1997 and 2001 neglecting the issues of equity and redress.

The name University of Technology has been used for a certain group of higher education institutions in South Africa since 2004. Before then, these institutions were known as technikons. For purposes of this study, it therefore is important to define the concept of a technikon in order to understand what a university of technology in South Africa entails. Technikons in South Africa are the equivalent of universities of technology, technological universities, technical universities or institutions of technology found in countries such as the USA, Britain, Australia, New Zealand and Hungary, the Hogescholen in Belgium and the Netherlands, or the *fachhochschule* in Germany. They are administered by the Higher Education section of the National Department of Education, along with universities.

Technikons in South Africa, according to Du Pré (2000), have grown considerably in the past seven years. From 1993 to 1999, university first-time enrolments were up by 15%, while those at technikons grew by 46%. Department of Education statistics show that universities drew 50 523 first-time undergraduate enrolments, compared to the 42 682 of technikons. By 1998, technikons had bypassed the universities, attracting 62 309 first-time undergraduates, as opposed to the 60 801 of the universities. The newest statistics are, however, not available at this stage. To define a technikon for purposes of this research, the description of Du Pré (2000) will be used.

