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An empirical study of stressors that impinge on teachers in secondary schools in Swaziland

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This study employed the descriptive-correlation research design to determine whether secondary school teachers experience work-related stress. Participants included 239 teachers selected from schools in the Hhohho region of Swaziland. A questionnaire was used as the instrument to determine the level of work-related stress experienced by these teachers. Findings showed that teachers were moderately stressed by their work. Contractual problems and the nature of their work were two aspects that were reported to be the main stressors for the sample, while the work environment and work relationships were only mildly stressful. There was a weak relationship between the level of work-related stress and the demographic variables of gender, marital status, and qualifications. Age had a moderate significant relationship with the level of work-related stress for the sample. The study recommends that stress management programmes for teachers are imperative to deal with the consequences of stress.

Keywords: descriptive study; *job* performance; strain; stress; stress management; stressors; teacher stress; teacher welfare policy; work environment; work relationship

Introduction

Stress refers to the combination of physiological and psychological reactions that negatively affect individuals as a result of conditions in their environment. Antoniou and Cooper (2005) define stress as a form of emotional and automatised response to the perception of threat. Concern over the effects of stress on the performance of managers and employees in the corporate world is particularly prevalent in research (Rapmund & Moore, 2000; Wasala, 2001; Antoniou & Cooper, 2005). However, minimal research has been conducted into work-related stress amongst secondary school teachers in Swaziland (Ngidi & Sibaya, 2002; Jackson & Rothmann, 2006). Therefore, it was necessary to investigate work-related stress among secondary school teachers in Swaziland. Specifically the study sought to determine the level of work-related stress among secondary school teachers in the Hhohho region of Swaziland; ascertain the aspects of teachers' jobs that were the main source of work-related stress; and, determine if there was a significant relationship between the level of work-related stress of secondary school teachers and their demographic variables (i.e. gender, age, marital status, and qualifications).

Literature review

A large number of studies show that teachers are exposed to a workload that results particularly in stress and strain (see Kenny, 1999; Jackson & Rothmann, 2006; Pienaar & Van Wyk, 2006; Milner & Khoza, 2008). According to Kenny (1999), at least one-third of teachers suffer from extreme stress and/or burnout. In a longitudinal study involving 63 Swedish teachers, Anshel and Kaissidis (1997) found relationships between stress and strain or burnout. However, the authors noted that relationships between stress and coping strategies on the one hand, as well as stress and social support, were weak. Cooper and Cartwright (1994) interviewed a total of 710 teachers from the islands of Malta and Gozo, using a 20-item Sources of Teacher Stress Inventory. Cooper and Cartwright (1994) found that students' misbehaviour and workload accounted for most of the variance of a general stress factor. In another study, Van Dick and Wagner (2001) tested the theoretical model of teacher stress on a large sample of 356 German teachers using complex structural equation modelling. The results of the study revealed that workload led to stress reactions from the teachers, whereas principal support, beliefs of self-efficacy among participants, and use of appropriate coping strategies reduced their experiences of work-related stress.

The study by Jepson and Forrest (2006) aimed to identify the role of individual contributory factors to teacher stress. Results from their study indicated that as occupational commitment increased among teachers, cases of stress decreased. In addition, it showed that significantly higher levels of 'incidences' stress were reported among the primary school teachers than those reported by their secondary school counterparts. Thus, Jepson and Forrest's (2006) study demonstrated that individual contributory factors were significant to the prediction and understanding of work-related stress experienced within the teaching profession. A cross-sectional study was conducted by Kokkinos (2007) to establish the relationship between burnout, personality characteristics and job stressors in primary school teachers from Cyprus. A sample of 447 primary teachers participated in the study and results showed that both personality and work-related stressors were associated with burnout dimensions. Neuroticism, for example, emotional outbursts such as anger, anxiety and depression were common predictors of all dimensions of burnout, although in personal accomplishment it had a different direction. Managing students' behaviour and time constraints were found by Kokkinos (2007) to systematically predict dimensions of burnout.

In an international comparative study Pithers & Soden (1998) sampled 169 Scottish and 163 Australian teachers to examine the effects of work-related stress and strain among teachers working in the vocational and further education phase in the two countries, respectively. In addition, the authors examined the personal coping resources among the participants in their study. Overall, the study found that stress and strain similarities between the two groups far outweighed the differences. For instance, there were no between-group differences in strain levels, which were found to be at 'average' levels for both groups. Nevertheless, for both groups of teachers, role overload

appeared to be a strong source of occupational stress.

Nhundu (1999) carried out a study to establish the sources, incidence, and severity of stressful work situations among 475 teachers and 95 head teachers in Zimbabwe. The findings showed that classroom teachers rated their work more stressful than head teachers. Participatory teachers also indicated that they experienced more stress concerning working conditions, where the most stressful factor, irrespective of personal characteristics, was low salaries. On the other hand, people-related responsibilities such as dealing with parents was rated the most stressful factor among the head teachers. Furthermore, it was interesting to note that newer teachers and head teachers in that study (i.e. those with less experience) generally rated their work as more stressful than those with more teaching experience and administrative experience respectively. Despite the above-mentioned correlation between teacher stress and teacher performance at their workplace and general wellbeing, little is known about teachers in Swaziland and their experience of stress. Therefore, it was deemed necessary by these researchers to investigate work-related stress among secondary school teachers in Swaziland.

Person-environment (P-E) fit theory and hypotheses

Research on the P-E fit orientation suggests that the congruence between individual characteristics (e.g. needs abilities or values) and environmental characteristics (e.g. job supplies, job demands or organisational values) predict attitudes and behaviour (Adkins, Ravlin & Meglino, 1996; Cable & Judge, 1997). Sekiguchu (2004) observed that whether a good fit today will be a good fit tomorrow depends on the stability of the variables on which matches are made. Some characteristics may be more changeable. For example, personality and values are often used in conceptualising P-E fit. Although both personality and values are considered relatively stable, values are less stable than personality and susceptible to a variety of changes and the influences of new environments (Ryan & Kristof-Brown, 2003). Therefore, while fit in terms of personality similarity may be relatively stable, fit in terms of value congruence may change over time. The P-E fit theory focuses on the positive outcomes of having a close fit between a person and the environment (Ellis & Tsui, 2007).

Essentially, the P-E fit model posits that there are characteristics of organisations that have the potential to be congruent with characteristics of individuals, and that the individuals' attitudes and behaviours will be influenced by the degree of congruence or fit between individuals and organisations (Roberts & Robin, 2004). Hence, the general assumption underlying the P-E fit model is that positive attitudes and behaviours are a function of the compatibility of individuals to their environments (Lee & Antonakis, 2007). How individuals would respond to a given situation appears to be a function of the fit or congruence between that situation and their individual characteristics. Teachers appear to be caught in a complex web of personality, as well as professional responsibilities. At the extreme, it is possible that teachers in perform-

ing their professional duties may be faced with the dilemma of conflicting values between personal and professional needs. A fit between the personal and professional needs of the teacher may result in positive reactions, even in the face of difficulties. However, incongruence between those needs may result in personality disequilibrium that may impact the teacher's ability to handle situations. Therefore, the researchers were of the opinion that this theoretical model would assist in describing the causes of work-related stress among secondary school teachers in the Hhohho region of Swaziland. The following hypotheses were tested:

$H_0$1: There is no significant relationship between work-related stress and gender among high school teachers.

$H_0$2: There is no significant relationship between work-related stress and age among high school teachers.

$H_0$3: There is no significant relationship between work-related stress and marital status among high school teachers.

$H_0$4: There is no significant relationship between work-related stress and qualification among high school teachers.

Methodology

Design and sample

This study used the descriptive-correlation research design. A descriptive study describes data and characteristics about a population or phenomenon being studied. According to Bell (2005), descriptive research studies are non-experimental in that they deal with the relationships between non-manipulative variables in a natural rather than laboratory setting. The researchers used the design because of its capacity to describe data, whether in words, pictures, charts or tables, and whether the data analysis shows statistical relationship or is merely descriptive. The target population was all high school teachers in the Hhohho region of Swaziland. The Hhohho region has a total of 1,217 classroom teachers in 41 high schools (Central Statistics Office, 2007). A total of 239 teachers represented the sample size.

Data collection instrument

A modified version of the questionnaire on workplace stress developed by the Chartered Society of Physiotherapy, London [CSP] (2009) was adapted by the researchers to suit the present research situation and environment. The questionnaire instrument contained self-administered items reflecting the purposes of the present study, in accordance with their relevance to suit the local situation. The questionnaire was divided into three sections. The first section of the questionnaire on stress consisted of a 5-point Likert scale where teachers indicated their level of work-related stress where 1 = not stressful, 2 = mildly stressful, 3 = moderately stressful, 4 = very stressful, 5 = extremely stressful. The second section of the questionnaire consisted of a list of 46 stressors categorised into four aspects of the teacher's job, namely, work environment, nature of the work, work relationships, and contractual. Respondents were requested

to indicate the degree to which a particular statement was a source of stress at work. The Likert-type format was preferred because, according to De Vos, Strydom, Fouche & Delport (2005) this format yields equal-interval data, a fact that allows for a more powerful statistical tool to be used to test variables. The last section sought demographic data from the respondents, namely, gender, age, marital status and qualifications. The last part of this section was an open-ended question, which requested respondents to make any remarks with regard to work-related stress that they felt were not addressed by the questionnaire instrument.

Validation of instrument

Pilot testing

Noting that the instrument was adapted and modified to suit the local setting, it was then given to experts in the Department of Educational Foundations and Management of the University of Swaziland for both face and content validity. Following the exercise, their recommendations were incorporated into the final draft of the instrument. Pilot testing was conducted in the first week of March 2010 using a sample of 30 secondary school teachers in the Manzini region of Swaziland. The purpose of the pilot study was to develop and test the adequacy of the research instrument; assess the proposed data analysis techniques to uncover potential problems; discard all unnecessary, difficult or ambiguous question items; and re-word any question/items that were not answered as expected. There was an indication that the items were clearly worded and the 30 participants did not experience any difficulty in understanding the items on the instrument. An analysis of the 52 items on the questionnaire showed correlations above 0.75 on each of the items. This was deemed to be high enough and the instrument was seen as yielding a satisfactory internal validity. To ensure instrument reliability, the researchers used Cronbach's alpha co-efficient. The reliability of the instrument was obtained at a coefficient of .85. The instrument was deemed reliable since the obtained alpha coefficient (.85) was above the acceptable .70 (De Vos et al., 2005).

Data collection method

The questionnaire was administered by hand to the 10 randomly selected schools. However, prior permission was sought and obtained to carry out the study from the respective principals of the selected schools. This preliminary request was to help explain the rationale of the investigation and the way it was organised. After the principals' approval of the request, the researchers personally administered the questionnaire to the sample of 239 high school teachers who took part in the study. Respondents were informed of the anonymity and confidentiality of their participation. At no stage, even after the investigation was completed would their persons or responses be revealed to their principals or their employer, the Teaching Service Commission, or the general public. The researchers waited to collect the questionnaire

from the respondents after they had completed them and by so doing we ensured that a favourable rate of return was achieved.

Data analysis procedure

The Statistical Package for the Social Sciences (SPSS) version 10.0 was used to compute the information regarding the level of work-related stress, work-related stressors, and the relationship between work-related stress and demographic variables of gender, age, marital status and qualifications of participating high school teachers. The collected data were analysed using the following procedures: the mean and standard deviation was obtained to determine the level of work-related stress for the sample. Means and standard deviations were obtained for all the aspects of the teachers' jobs to determine those aspects that were major sources of work-related stress. The Pearson Product Moment Correlation coefficient was used to examine the relationships between the mean score of work-related stress and demographic variables. Responses provided to the open-ended questions were reported descriptively as they were provided by the respondents.

Findings and discussion

Results

The results of this study provided information on the sample's level of work-related stress, job aspects that were prevalent stressors, and the relationship between the level of work-related stress and demographic characteristics of the sample.

Research question 1

What is the level of work-related stress among secondary school teachers in the Hhohho region of Swaziland?

Research question 1 sought to determine the level of work-related stress among secondary school teachers in the Hhohho region of Swaziland. Table 1 shows the level of work-related stress among secondary school teachers.

Table 1 Mean and standard deviation for the level of work-related stress among secondary school teachers (*N* = 239)

	N	*M*	*SD*
Level of work-related stress	239	3.11	1.06

The respondents rated their level of work-related stress on a 5-point Likert scale where 1 = not stressful, 2 = mildly stressful, 3 = moderately stressful, 4 = very stressful, 5 = extremely stressful. The mean level of work-related stress was 3.11 with a standard deviation of 1.06. This means that secondary school teachers in the Hhohho region of Swaziland are moderately stressed by their jobs.

Research question 2

Which aspects of their job are the main sources of work-related stress among secondary school teachers?

The purpose of research question 2 was to ascertain the aspects of their job that are the main sources of work-related stress among secondary school teachers participating in the study. Table 2 shows sources of work-related stress among participating teachers.

Table 2 Means and standard deviations of aspects of their job causing work-related stress among high school teachers (*N* = 239)

Job aspect	*M*	*SD*
Contractual problems	3.25	1.35
Nature of the work	3.16	1.36
Work environment	2.94	1.36
Work relationships	2.61	1.27

Note: Ranked in descending order from prevalent to least prevalent

In Table 2 the aspects of the teachers' jobs were ranked in descending order, according to means. This was to indicate which aspects were the main sources of work-related stress for high school teachers. The teachers reported being stressed by all four aspects relating to their work. They reported to be moderately stressed by contractual problems (3.25) and the nature of their jobs (3.16). They were mildly stressed by their work environment (2.94) and relationships in the workplace (2.61).

Research question 3

What is the relationship between the level of work-related stress of high school teachers and their demographic variables?

Table 3 shows the relationship between the level of work-related stress of 239 high school teachers in the Hhohho region of Swaziland and their demographic characteristics.

Table 3 Correlations between work-related stress level and demographic variables (*N* = 239)

Variable	*N*	*r*	*p*
Gender	239	–.058	.374
Age	239	.216**	.001
Marital status	239	.073	.262
Qualification	239	.085	.192

** Correlation is significant at 0.001 level (2-tailed)

$H_0$1: There is no significant relationship between work-related stress and gender among high school teachers

The results showed that there was no significant relationship between work-related stress and gender among high school teachers ($r = -.058$, $p = .374$). Therefore, the null hypothesis was accepted. This was a weak relationship, as well as a negative one.

$H_0$2: There is no significant relationship between work-related stress and age among high school teachers

The results showed that there was a significant relationship between work-related stress and age among high school teachers ($r = .216$**, $p = .001$). Therefore, the null hypothesis was rejected. This was a moderate and positive relationship indicating that stress levels increased with the increasing age of the respondents.

$H_0$3: There is no significant relationship between work-related stress and marital status among high school teachers

The results showed that there was no significant relationship between work-related stress and marital status among high school teachers $r = .073$, $p = .262$). Therefore, the null hypothesis was accepted. This was a very weak relationship.

$H_0$4: There is no significant relationship between work-related stress and qualifications among high school teachers

The results showed that there was no significant relationship between work-related stress and qualifications among high school teachers ($r = .085$, $p = .192$). The null hypothesis was therefore accepted. This was also a weak relationship.

Ancillary findings

There were interesting relationships discovered during the analysis, although they did not meet any of the objectives of the study. These were relationships relating to the demographic characteristics, such as qualifications, age, and marital status of the sample. For instance, there was a moderate relationship between marital status and age ($r = .454$**, $p = .000$) which was significant. Qualifications correlated significantly with both age ($r = .271$**, $p = .000$) and marital status ($r = .242$**, $p = .000$). However, these relationships had significantly weak correlations with the revealed stressors on teachers.

Discussion

No work environment can be completely immune to stress. There are, however, indicators evident in this study which show that some work-related aspects are more stressful than others. The level and impact of stressful work-related factors on the teaching profession has been revealed through the open questionnaire. Teachers experience stress in different ways and the level of stress is associated with aspects of the job, namely, contractual problems and the nature of the work. Judging from the

responses by participating teachers in the open questionnaire one could suggest that the current economic situation in Swaziland appears to impact teachers' experiences of stress at their workplace.

The findings indicated that the first and major source of work-related stress was as a result of contractual problems. Under contractual problems there was a lack of power and influence, a threat of job losses, performance related incentives, poor pay, lack of accommodation, badly planned changes, temporary contracts, and a shortage of teachers. The threat of job losses and temporary contracts are perceived in this study to have a strong linkage in that teachers who work under contract are usually given contracts ranging from three months (one-term) to six months (two-terms). These teachers work under stress in that there is no guarantee that their contracts will be renewed once they expire. The possibility of losing their job at any time is a stressful event for these teachers. Moreover, contract teachers work without pay for many months; this poses a serious financial challenge to the teachers, which is a great source of stress. Performance related incentives, poor pay, and lack of accommodation in schools are the result of monetary problems. Particularly, accommodation for teachers appears to be a perennial problem for most schools. There is either no accommodation or very little available, forcing teachers to share houses/rooms. Responses from the participating teachers appear to suggest that these are a major source of stress for teachers in Swaziland.

The finding that curriculum changes in secondary education is a major source of stress for secondary school teachers in the Hhohho region appears to agree with those reported in South Africa and Zimbabwe (Ngidi & Sibaya, 2002; Zindi, 2002). Both Ngidi and Sibaya (2002) and Zindi (2002) maintain that it is not that teachers object to the changes themselves, but to the manner in which such changes are implemented. The curriculum transformation from the International General Certificate of Education (IGCE) to the International General Certificate of Secondary Education (IGCSE), and currently to the Swaziland General Certificate of Secondary Education (SGCSE), has come with additional challenges for the teachers. Firstly, teachers appear not to be adequately prepared in terms of training to deal with such fundamental changes in the curriculum. Secondly, the transformation within the curriculum has not been accompanied by adequate changes in facilities and other supporting resources to assist teachers in the implementation of the new changes. Therefore, most teachers lack the ability and skills to undertake the implementation of the new curriculum. As a result, it would appear that these teachers remain under constant threat of having their jobs terminated, but they also feel threatened by the new demands accompanying the changes in the curriculum. These feelings together appear to be some source of stress for the teachers.

The findings of this study, which appear consistent with those of Borg and Riding (1993), Ngidi and Sibaya (2002), and Nhundu (1999), revealed the nature of the work as the second major source of work-related stress. For instance, responses in the open

questionnaire appear to suggest that teachers may experience some level of stress from work overload, time pressure and deadlines, long working hours, taking work home, unrealistic objectives, making mistakes, boring or repetitive work, and keeping students occupied. These findings concur with those of Anshel and Kaissidis (1997), Kokkinos (2007), Magagula (1994), and Pithers and Soden (1998) in reporting that teachers experience stress as a result of work overload, keeping up with time-lines, long working hours, doing school work at home, and dealing with difficult students.

An equally important revelation in the study relates to issues of gender, qualifications, experience and marital status, as well as teachers' experience in relation to poor pay and performance incentives. It was noted that regardless of the above demographic variables, teachers experience more stress from poor pay and performance incentives, which reduce the teachers' happiness in their work situation as well as their ability to perform. These findings appear consistent with those of Cooper and Cartwright (1994), and those of Santavirta, Solovieva and Theorell (2007), which reported that teachers experienced high levels of stress as a result of poor remuneration packages and fringe benefits in spite of the volume and challenging work that they do. In addition to the above, the present study provides information that is important to teaching administration and teachers' welfare. It was found that the teachers in the sample were stressed mainly by contractual problems and the nature of their work. The study also revealed that age was the only demographic characteristic that had a positive statistically significant relationship with work-related stress levels for the sample.

Conclusion

On the basis of the data presented and analysed in this study, it is obvious that teachers are stressed by their work. The study revealed contractual problems as the major stressor for teachers and this component included the lack of power and influence, threat of job losses, performance related incentives, poor pay, lack of accommodation, badly planned changes, temporary contracts, and shortage of teachers. Factors which caused the least stress for teachers came from the aspects relating to work relationships. These included "physical and sexual harassment", "my beliefs conflict with those of my school", "an unsympathetic boss", "my spouse's attitude towards my work", "work demands on my relationship with my family", "work demands on my private life", "my relationship with my colleagues", "complaints/criticism from parents or the public", "feeling undervalued", "lack of support from parents", "lawsuits from parents", and "too much supervision".

Teachers' work-related circumstances could be improved using the results of this study. To achieve this requires practical policy issues relating to teacher welfare, as well as infusing interventionist programmes within the teacher education curriculum. A good interventionist programme designed to equip teachers with some stress coping strategies would be an ideal approach. Moreover, the Ministry of Education and Training could organise workshops and invite experts in stress management to address

teachers. But, it is equally important to state that teaching administrators need to do more to improve teachers' lives in the workplace in order to reduce stress levels. It would be advantageous for the students, the school administrators, and the parents to have less stressed teachers in schools. The major sources (contractual problems and the nature of the work) of work-related stress for teachers have implications for the Teaching Services Commission, which is the teachers' employer, and principals who are teachers' supervisors in the workplace.

The researchers acknowledge certain limitations relating to the study, which need to be emphasised. The study was restricted to secondary school teachers in the Hhohho region of Swaziland. However, the researchers would have preferred to include samples of secondary school teachers from schools in all four regions of Swaziland in order to be able to generalise findings to the entire population of secondary school teachers in Swaziland. However, due to time and financial constraints, the study was limited to investigating work-related stress among secondary school teachers in the Hhohho region of Swaziland.

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