

Stressors in the Lives of Teachers in the Mahikeng Area, South Africa

A.M.F. Pelsler¹ and C. van Wyk²

¹28 Geranium Avenue, Riviera Park, Mahikeng, North-West University, South Africa

²Protea Park no 10, Bergsigstreet, Hermanus, 7200 North-West University

E-mail: ¹<ampelsers@hotmail.com>, ²<vanwyk.christo1@gmail.com>

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ABSTRACT This paper reports on the stress educators are experiencing in Middle and Secondary Schools in the Mafikeng Region, a district in South Africa. Data was collected by visiting all the schools from five clusters. A standardised questionnaire (ASSET) was used to determine the causes of stress in the lives of educators. A theoretical and quantitative investigation was done. A total number of 955 educators are employed in the secondary and middle schools in the five clusters. A questionnaire was distributed to each of these teachers. Nine factors contributing to teachers' stress were identified, with a cumulative variance of sixty- eight percent. These factors are: managerial practices, relationship with work, causes of stress, career opportunities, job dissatisfaction, work success, leadership and management, remuneration and communication. Results in this study suggest that there is a direct link between these factors and the stress levels experience. More specifically two factors causing stress that were not previously identified by other researchers namely, communication and career opportunities were recognised whilst it was found that ill-discipline is not regarded as a crucial factor in causing teacher stress. The recommendations made on suggested ways of preventing and managing teacher's stress concerned two main points namely, recognising teachers' professional status and attending to their personal and academic development.

INTRODUCTION

A number of authors addressed stress from different angles. Phindela et al. (2008: 49) see stress as a dynamic and complex process that forms part of the interaction between individuals and the endeavours in their lives. Other authors emphasise the close and complex relationship between stress and different occupations (Banerjee and Mehta 2016; Janjhua et al. 2014; Basson et al. 2016). Various authors reflect on the impact of stress on teachers' functioning in the education sector (Shivendra and Kumar 2016; Hamid et al. 2015; Mushoriwa and Dlamini 2015). Although stress is a universal phenomenon, Werner (2011: 23) emphasises that most stress is experienced in work situations, that is, "when an individual is required to change his desired behaviour as a result of opportunities, constraints or demands related to ... work objectives." Lussier (2008: 43) suggests that one can experience pressures or become uncomfortable in one's work situation as a result of changes in job demands. The education sector is no exception in this regard.

In the rest of this paper the problem statement will be formulated followed by a discussion of the conceptual and theoretical framework in which different models to deal with stress

related issues in the education sector, are suggested. This is followed by an exposition of the empirical part of the study and concluding sections on the findings and recommendations.

This study not only intended to identify the significant stressors in the lives of educators in the particular area being studied but also aimed to provide different theoretical positions to explain these stressors. A further specific objective of the study was to obtain the perspectives of teachers in the area on stressors that impact on their lives by conducting a quantitative investigation. The last aim was to make recommendations on how teachers' stress should be handled.

Problem Statement

Keys (2002: 209) draws attention to the fact that stress negatively affects the well-being of the educator corps in that it causes educators to experience an array of feelings such as frustration, anger and depression. This can lead to bad mental health. Hall et al. (2005: 15) also point out that educators may be plagued by stress. The Department of Education in the North West Province is currently struggling with a number of serious issues that are closely related to teacher stress, among others that in November 2014 a staggering total of 4,600 teachers resigned from

their profession (Masombuka 2015; Rasumba 2015).

In view of the above, the problem that was investigated was to understand the nature and dimensions of the stress experienced by teachers in schools in the particular district that was studied.

This paper was done in two stages. Firstly, a theoretical framework was constructed that consisted of an exposition of various views on stress with particular emphasis on three stress models, namely the stimulus-based model, the response-based model and the interactive and transactional-based model. Based on that framework, an empirical investigation was launched in terms of which data was collected to determine the main causes of stress in the lives of the educators in the region studied.

Conceptual and Theoretical Framework

Different models of stress have been suggested in the literature to explain stress related issues in educational organisations. Huges et al. (2009: 346) proposed the application of the A-B-C model and Nash (2002: 37-40) that of Torelli and Gmelch. Other researchers suggested application of the Spielberger State-Trait (STP), the Transactional Process and the Job Demands-Control models of stress, as described by Mostert (2006: 18). Schulze and Steyn (2007: 692) applied the Response-based, the Transactional-based and the Stimulus-based models of stress in their work. The empirical research reported below was also based on the latter three models. These models were selected because they have been used effectively by different researchers in similar contexts (Naidoo et al. 2013; Jackson 2004; Schulze and Steyn 2007)

Stimulus-based Model

According to Cooper et al. (2001: 8) as well as Rout and Rout (2002: 20), this specific model was first developed in physics, more particularly, in the field of engineering. Stress is viewed as a state of the environment exterior to individuals that influences them in conditions of disarray (Benmansour 1998: 15; Cooper et al. 2001: 4). Phindela et al. (2008: 4) describe “stressors as events or circumstances that require us to make emotional, physical and mental adjustments” in such conditions. When a person’s ability to

cope or adapt is exceeded by demands made, stress occurs (Wilson and Hall 2002: 176; Rout and Rout 2002: 20). Stress is the independent variable, and life events are the stressors to which a person responds. If there are too many life changes in a relatively short period of time, one’s vulnerability to illness increases.

According to this model, stressors form part of the external environment of individuals. Stimuli come from situations outside of the individual and impact on the individual. If a number of factors cause prolonged stress, a person’s stress levels rise and this may cause permanent psychological damage (Alexandrache 2014). The stimulus theory of stress regards the individual as a mere receiver of stressful stimuli, and seems to have no concern for individual differences or the psychological processes involved. Stressors manifest themselves as demands in the working life of individual teachers, to such an extent that the “elastic limit” of the person in question’s ability to cope or adapt is surpassed (Schulze and Steyn 2007: 693).

HIV-AIDS, affirmative action or learner-discipline could function as external stressors. The same applies for over-crowded classrooms, educator shortages, illnesses, lack of job mobility, lack of financial and emotional rewards, difficult assignments, poor working conditions, disruptive learners, difficult administrators, lack of respect, little or no social and professional support for teachers (Gold and Roth 1985: 8).

In the North West Province it was remarked that the great number of teacher resignations (possibly due to stress), coupled with unfair dismissals, death, compulsory retirement and medical retirement are some of the external reasons for the serious shortage in teachers (Rasumba 2015).

Response-based Model

In the response-based model, an individual’s behavioural reaction to the environment or situational forces is highlighted (Lyon 2009). On encountering potential stressors, the individual responds with physiological, psychological and behavioural reactions (Bibbeya et al. 2012). A person who is exposed to continuous stressful situations may exhibit physical or psychological responses (Aquinas 2013: 163). A response may manifest in numerous forms, such as reflexive responses or even physiological reactions

like chronic health problems (Sulsky and Smith 2005: 5). In 1936, Hans Selye, referred to stress as “the non-specific response to any demand” (Rice 2012). Different stressors lead to different responses and these may change over time. Selye (1976) mentioned further that the stress syndrome represents a wake-up call to the body’s defensive forces to react to extravagant demands or infuriating stimuli. The General Adaptation Syndrome (GAS) refers to the demands executed on the body, as well as to the responses to such demands (Selye 1956: 115). Lyon (2009: 5) defines GAS as a managing process that stimulates the defence mechanisms of the person in an attempt to maintain equilibrium (homeostasis). As a defensive mechanism, it functions independently of the stressor, and progresses through three well-defined stages, namely alarm, resistance and exhaustion.

Masombuka (2015) provides an example of response-based stressors in his report on 4 600 teachers in the North West province who resigned in November 2014 because of rumours that pension reforms would cause the loss of a large slice of their pension fund.

The Interactive and Transactional-based Model

Lazarus, a social-personality psychologist, became interested in explaining the dynamics of troublesome experiences, and developed and tested a transactional theory of coping with stress (Lazarus 1966: 97; Lazarus and Folkman 1984: 103). Lazarus (1966: 99) believed that stress is not measurable as a single factor and does not exist in a single definable situation but should be viewed as a result of a transaction between a person and his or her environment, which encompasses a set of cognitive, affective and coping factors. According to Barling et al. (2005: 63), these factors include the abilities or competencies of the individual, skills and restrictions associated with group practices, traditions and environmental resources. All such factors may influence an individual in experiencing a situation. Slocum and Hellriegel (2006: 449) regard a person’s perception of the situation, encounters with stress, absence or presence of social support, and individual characteristics as other such factors. Stress originates from the interrelationships between stressors, individual’s perceptions of situations and their subjective

responses when confronted with a stressful situation (Schulze and Steyn 2007: 693).

The transactional theory is based on the notion that body and mind interact with stressful stimuli in the environment and also with the consequential responses (consequences) of the interaction. This notion forms the basis for the approach, particularly the interactional nature of stress (Martin et al. 2011). Although environments might have inherently stressful dilemmas in them, stressful conditions tend to fluctuate in relation to the perceptions of those who react to them. Some teachers might experience stress but have learned how to cope with it, and others have not. Some succeed in striking an agreement between their environment and themselves. Others possess the characteristics required for coping with stress factors, and still others enjoy the support of their colleagues (Mapfumo and Chitsiko 2012).

In a study where the focus was on the relationship between stress and management issues, Ngidi and Sibaya (2002: 27) identified a range of issues that South African teachers experience on a daily basis. Stressors such as time pressures, poor working conditions, educational changes, administrative problems and pupil misbehaviour were identified (Kreitner and Kinicki 2007: 599).

RESEARCH METHODOLOGY

A cross-sectional survey design was selected to assess existing attitudes, beliefs, opinions or practices regarding the educational environment, with specific focus on the relationships between and among various variables in a single group of educators from different levels and ages. An attempt was made to determine the impact of the different stressors teachers experience in their work environment and to evaluate the role(s) played by management and leadership to intensify or cause diminution of stress experienced by teachers in schools in the Mahikeng area.

Study Population and Sampling

The teaching corps of the district being studied served as the population for this study. The principals of 26 schools with a total of 955 teachers employed at these schools were approached and requested to have teaching staff complete

the questionnaire. The researchers managed to receive a total of 372 questionnaires, of which only seven were precluded due to partial or non-completion. In other words, 362 questionnaires (38%) were subjected to statistical analysis.

Data Collection

The ASSET (An Organisational Stress Screening Tool) was engaged in the collection of data in the form of a validated structured questionnaire to determine the level of work-related stress in teachers (Cartwright and Cooper 2002). A five-point Liked scale was used to score the questionnaire (Johnson et al. 2015). Research studies done by various researchers such as Jackson (2004), Van Wyk (2006), Jackson and Rothman (2006) and Naidoo and Botha (2012) proved the ASSET to be a valid measuring mechanism in several provinces in South Africa. The reliability of the data (mostly with an above .90 reliability coefficient) and shrewdness of the instrument were satisfactory.

Data Processing

The North West University (Potchefstroom campus) assisted with the statistical analysis by means of the application of a SPSS programme (SPSS Inc. 2009; SPSS 2011; McMillan and Schumacher 2010). Factors causing stress were identified from the data obtained. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (0.7) and Bartlett test of sphericity (favourable value of zero) indicated a strong relationship among variables and the suitable use of factor analysis (Ellis and Steyn 2013; Creswell 2012). A Cronbach's alpha of >0.90 was registered, and regarded as an above average level of reliability and internal consistency (Field 2009).

Reliability

The Cronbach's Alpha of all factors except one indicated was higher than 0.90 as indicated in Table 1 (McCrae et al. 2011). Research done by Naidoo et al. (2013), Rothman (2006), and Jackson (2004) also mention such high reliability and internal consistency scores during research done on causes of teacher's stress. The exceptionally high Cronbach Alpha coefficients could be presupposed as the ASSET questionnaire used was fine-tuned by Jackson (2004) for specific use in assessing causes of stress in teachers, and also successfully applied by Jackson and Rothman (2006). The factors indicate a collective variance of 68.45 percent, exceeding the 60 percent variance with ease (Fields 2009).

RESULTS

Table 1 indicates the amount of items falling under each factor, the mean, SD, Cronbach Alpha and the Variance explained.

The standard deviation in this case is small meaning the scores cluster closely to the average score. The alpha coefficient for the nine items was .898, suggesting that the items have relatively high internal consistency. The explained variation measured the proportion to which a mathematical model accounts for the variation (dispersion) of a given data set, which in this set was 68.45, and also served as an indication of the importance of potential explanatory factors.

Bartlett's Test of Sphericity and the Kaiser-Meyer-Olkin (KMO) of Sample Adequacy

The KMO value of .898 indicated its selection appropriateness of factors to assess stress teachers are experiencing as worthy and deter-

Table 1: Results of factorial analysis

<i>Factor No.</i>	<i>Identified factors</i>	<i>Items</i>	<i>Mean</i>	<i>SD</i>	<i>Cronbach Alpha</i>	<i>Variance explained</i>
1.	Managerial practices	8	3.21	1.18	.98	33.91
2.	Relationship with work	7	2.76	1.07	.94	7.43
3.	Perception on main causes of work pressure	4	2.79	1.27	.95	5.98
4.	Career opportunities	5	2.87	1.10	.96	5.56
5.	Negative job expectations	4	3.33	1.05	.91	4.40
6.	Work success	4	2.54	1.07	.91	3.35
7.	Leadership and management	2	2.61	0.90	.86	3.04
8.	Remuneration	4	3.13	1.08	.94	2.53
9.	Communication	2	3.38	1.14	.95	2.25

mine that there are correlations in the data set that are appropriate for factor analysis (Remenyi et al. 2007).

Exploratory Factorial Analysis (Pattern Matrix)

As shown in Table 2 nine factors were identified and a total of 40 items loaded onto the nine factors. 29 items were discarded as their loading was lower than 0.7. The factors, with their variances (importance or contribution to the stress teachers are experiencing) from the highest (most important) to the least important were identified as: Managerial practices (33.91), Relationship with work (7.43), Perceptions on main causes of Work pressure (5.98), Career opportunities (5.56), Negative job expectations (4.40), Work success (3.35), Leadership and Management (3.04), Remuneration (2.53) and Communication (2.25). The different items allotted under the factors were also identified.

DISCUSSION

Findings regarding stress in this study correlate with similar studies done by Van Wyk (2006), Naidoo et al. (2013) and Mushoriwa and Dlamini (2015). Several studies determined that the stress teachers are experiencing stems from job overload, inefficient remuneration, disproportionate work demands, negative job expectations, inappropriate leadership, learner ill-discipline and lack of empowerment of teachers (Hamid et al. 2015; Janjhua et al. 2014; Shivendra et al. 2016; Banerjee and Mehta 2016). This study found that several factors although differently labelled, causing stress in teachers, correlate with factors found by other researchers. These factors are: managerial practices, leadership and management, perceptions of main causes of work pressures, relationship with work, leadership and management, negative job expectations and remuneration. It must be mentioned that this study did not identify ill-discipline as a major factor causing stress for teachers. Two other factors that were not directly recognised as teacher stressors by other authors namely, communication and career opportunities, were however identified as critical in this investigation. Apart from sensitivity about career development teachers have an urgent need to be better informed about important issues that affect them directly. The

inclusion of these factors can be further justified by noting that Dandashe et al. (2014) who conducted their study in the same geographical region as the current investigation, argued that teachers place a high premium on clear and effective communication with their District Education Offices. Mushoriwa and Dlamini (2015) further stressed that a key part of a principal's responsibility is to attend carefully to staff development needs. If these emphases are understood in terms of teacher stressors, it is clear that ineffective communication between managers and teaching staff as well as a vague focus on individuals' career development, are two of the most crucial problems that can lead to teacher stress.

Even though stress is a universal phenomenon, Werner (2011: 23) emphasised that most stress is experienced in work situations "when an individual is required to change his desired behaviour as a result of opportunities, constraints or demands related to important work objectives". The interrelationships between stressors, individuals' perceptions of situations and their subjective responses, when confronted with a stressful situation are of critical importance (Schulze and Steyn 2007: 693). This explanation suggests that one can experience certain kinds of pressures or become uncomfortable in your work situation because job demands change from time to time (Lussier 2008: 43). Banerjee and Metha (2016) support this position and emphasised that occupational stress is an important contributor to the stress levels of teachers. Although the majority of teachers who participated in this study seem to cope with occupational or challenges such as time pressures, poor working conditions, educational changes, administrative problems and pupil misbehaviour, they still experience these internal issues as problematic. A possible explanation for this incongruity can be found in the the response-based theory whereby it is implied that under certain conditions individual teachers manage to handle their stress levels sufficiently even though the education system as such is not functioning optimally. These conditions can obviously be equated with instances of sporadic stress or where the intensity of stress levels is not very high.

Although the handling of minimum levels of stress as discussed in the previous paragraph, do not always have severe consequences for

teachers, continuous exposure to excessive stress could lead to personal dissatisfaction, low self-esteem, weak performance, and exhaustion (Banerjee and Metha 2016). Results suggest that there is a direct link between the external educational environment in which teachers operate and the intensity of stress levels they experience. Continued stress can also drastically lower job satisfaction and performance and can also damage the individual's personal life (Shivendra and Kumar 2016). Keys (2002: 209) mentioned that the effects of this kind of stress affect the well-being of the educators' corps to the point that they experience an array of feelings like frustration, anger, depression and even mental health (Hall et al. 2005: 15). Teachers who teach in the North West Province are plagued by this kind of stress. Rasumba (2015) reported in this regard that 900 teachers resigned in the North West Province in June and July 2015. It was clear from the responses in this study that resignations of such proportions place an additional stress on already overstrained teachers as they become responsible for the workload of their colleagues who resigned. The view held by Hall et al. (2005) is in line with the stimulus-based theory where experiences such as insufficient salary and the downward spiralling of the educational system are reported to lead to a lost sense of pride, decline in morale and feeling of helplessness (Hawking 2014: 5).

Teachers might further respond to aversive conditions by adopting the fight or flight reaction which could be devastating for the profession. Those that prefer to remain in the profession until retirement may only do it since they have no other source of income. In this case the so called GAS stress response could apply. This is a defensive response that does not depend upon the nature of the stressor but progress in three well-defined stages (alarm, resistance, and exhaustion) and if the GAS is severe enough and/or prolonged, diseases could follow that may even result in death. These stressors manifest themselves as demands in the working life of individual teachers to such an extent that the "elastic limit" of that person's ability to cope or adapt is surpassed (Schulze and Steyn 2007: 693). In the North West Province it has been reasoned that the great number of teachers' resignations coupled with unfair dismissals, death, compulsory retirement and medical retirement are seri-

ous external reasons for shortages in teacher number (Rasumba 2015).

CONCLUSION

Nine factors causing stress divulged itself during the factor analysis phase. This study proved the validity of all three stress models that were discussed in the conceptual and theoretical framework. Stress is a result of a transaction between a person and his or her environment, utilising a set of cognitive, affective and coping mechanisms. The way a teacher perceives a stimulus and responds to it causes stress levels to either intensify or dissipate. Stress that is not managed well will escalate and spread through the education environment; a situation that needs intervention from management with excellent managerial skills. Stress forms an integral part of a teachers life and by viewing its environment as toxic cause teachers to abandon the profession.

RECOMMENDATIONS

The following recommendations deal with suggested ways of preventing and managing teacher's stress by recognising their professional status and by focussing on their development.

Given the challenges and major issues surrounding stress in schools, it is recommended that teachers should always be managed as professionals whose input on critical matters such as, staff planning and deployment must be taken seriously. The main implication of this recommendation is that Transformational and Distributed leadership must be practised at school level when dealing with staff in meetings and in personal discussions. Working conditions and related issues such as time-tables, finances, extra-curricular responsibilities and staff involvement in school management should obviously form part of these deliberations. In addition teacher's personal development should also be catered for by means of motivational talk's and wellness programmes. Exercise programmes should also be used as means for stress relieve. All the aspects mentioned in this paragraph should lead to a cohesive group feeling amongst staff where individual members are prepared to sacrifice their own interests for the interest of the group/school. Support-groups and networking with colleagues in other schools should further

be encouraged. Teachers should also be encouraged to attend skills development programmes.

The second recommendation is that teacher development be addressed on a continuous basis in schools. With regard to personal issues, advisors or life coaches may be appointed to assist with personal stress and financial problems and for the development of careers. Teachers' academic needs should also be determined. It is important to balance teachers' wishes, requests and capabilities in order to select the right candidates for particular development programmes. Assistance by the Education Department with teacher development is crucial. Apart from offering workshops the Department should also design suitable policies and communicate relevant information to all stakeholders.

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