

Sources and Levels of Stress among Mainstream and Special Needs Education Teachers in Mutare Urban in Zimbabwe

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ABSTRACT This study attempted to identify, describe and compare the sources and levels of stress as well as the coping strategies among teachers in four mainstream schools (n=40; males=20; females=20) and three Special Needs Education schools (n=40; males=20; females=20) in the Mutare Urban district of Education in Eastern Zimbabwe. The seven schools were conveniently selected. A comparative survey design was used. The respondents were requested to complete a stress diagnostic questionnaire. Respondents were also asked to report on how they coped with stress and what system changes in the Ministry of Education, Sport, Arts and Culture in Zimbabwe could prevent or ameliorate their stress. Cross tabulations were used. The study revealed that both groups of teachers were stressed by perceived lack of government support, lack of resources and heavy workload, and time spent on individual pupils for those in Special Needs Education. Stress levels for the teachers were in general elevated but those of women both in the mainstream and in Special Needs Education were more elevated than those of their male counterparts. Main stress management methods included sharing problems with colleagues, physical exercise, cheering with family and friends. Suggested system-wide improvements to reduce stress included provision of more resources, reduction of class size and better remuneration.

INTRODUCTION

All people experience stressful events at one time or another in their lives. Because stress is central to human life, it has occupied the discourse of many experts for many years (Adams 1999). Stress has been realised as the reaction of the body of every person to physical and psychological factors which impact on that person (Kaiser and Polezynski 1982; Terry 1997). In the same vein, Gordon (1991) observes that stress refers to a psychological and physiological state that results when certain features of an individual's environment, including noise, pressure, job promotions, monotony, or the general climate attack or impinge on that person.

The discourse on stress has also been undertaken from a number of angles ranging from the conceptual understanding of stress, to its causes, effects and its management once it has reached uncomfortable levels (Selye 1974, 1980;

Ivancevich and Matteson 1980; Hubert 1984; Dollard 2001; Mapfumo et al. 2012).

The sources of teacher stress are conceivably many. Ballantine (1997), citing the work of LeCompte and Dworkin (1991) remarks that sources of teacher stress can even include cultural and structural features of the school. Some well-organised schools ironically stress teachers by lacking the appropriate flexibility which teachers need in their work. Some changes in societies also stress teachers such as the relative decline in the status of the teacher in developed countries with the decline in the pay packets of the teacher both at school level and in universities (Dworkin 2001).

The specific work environment for teachers has also been found to be stressful. Jarvis (2002) has noted that long hours and heavy workloads were issues of special concern to teachers in England where Moore (2000) also noted that there were stressful problems in scheduling, allocation of time for various classes and activities and the physical layout of the school. In his seminal work in Zimbabwe, Nhundu (1999) found that major sources of stress for teaching professionals included high workload, lack of resources, overcrowded classrooms and perceived lack of government support. Teacher personality fac-

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tors and leadership styles have also been implicated in causing stress for teachers, although these variables were not considered for this study.

The negative aspects of stress are staggering. Revell cited in *The Observer* (12 October 2003) states that in Britain 13 million working days were lost to stress in 2002. Revell also adds that 667 million British pounds were lost to such palliative measures as massage, yoga and certain other therapies that fell short of addressing the root causes of stress.

The effects of stress have also been identified as wide ranging (Eskridge and Coker 1985; Independent Education Union 1996; National Association of Teachers in Further and Higher Education 2003). These are largely negative and at both personal and organizational levels. At the personal level symptoms of stress may be in the form of headaches, backaches, indigestion, sleep problems, chest pains, obsessive behaviour, inability to concentrate, heart disease, stroke, severe depression, and hallucinations (Sapivi.co.uk nd). Effects of stress at organizational level include: increasing absenteeism, decreasing commitment to work, increasing staff turnover, impairing performance and productivity, increasing complaints from clients and customers and damaging the organisation's image both among its workers and externally (Leka et al. 2003). Chaplain (2008) and Kyriacou and Kunc (2007) argue that because of stress in the teaching profession, the attrition rate of teachers has reached alarming proportions in some parts of the world. Specific effects of stress in Australia have been reported in the form of large numbers of teachers who are superannuated on grounds of ill health through a combination of psychological and physical effects of work-related stress.

There have also been different responses by teachers to stress. Some of these include the seeking of social support and involvement in entertainment that takes away the focus from the stressful atmosphere in the teaching profession (Chireshe and Mapfumo 2003; Mapfumo et al. 2012).

To the knowledge of the authors, there has not been a rigorous study such as the present one that systematically aims to compare the sources and levels of stress in Zimbabwe with specific reference to mainstream and Special Needs Education (SNE) teachers.

Goals of the Study

The first objective of this study was to identify the sources and levels of stress for mainstream and SNE teachers. The second objective was to determine stress reduction strategies employed by teaching professionals to deal with whatever stress they perceived in their work.

To address these objectives, two questions were asked. The first was, 'What were the sources and levels of stress among mainstream and Special Needs teachers?' The second was, 'What strategies did professional teachers use to reduce or prevent the stress which they perceived to be related to their jobs?'

METHODS

Design

The design used here was the comparative survey design which is the design of choice for assessing knowledge, beliefs and attitudes (Munn and Drever 1999). This design was especially suitable considering that teachers had to report on their experience and impressions of the stress situation in which they operated and how they reacted to the stressful situation to make it less stressful.

Instrument

The specific instrument used was a stress diagnostic questionnaire adapted from the work of Antoniou et al. (2000) after some preliminary work by Kyriacou and Sutcliffe (1979).

The instrument was divided into five parts soliciting Biodata, seeking responses to main items (based on the findings of Antoniou et al. 2000), asking whether teachers had thought about running away from their positions (Kyriacou and Sutcliffe 1979). The instrument then requested teachers to report on the mechanisms that they used to reduce or prevent stress. The instrument was validated through a pilot study with 10 teachers (5 mainstream and 5 special needs education). These 10 teachers did not form part of the main study sample. The pilot study respondents were asked to evaluate and report on the clarity of instructions as well as the ambiguity and relevance of items. The criteria jury opinion or evaluation jury was also used to es-

establish the validity of the adapted questionnaire. An expert in diagnosing stress was asked to comment on the vagueness and/or relevance of the items. Recommendations of the evaluation jury and the results of the pilot study were used to improve the questionnaire.

The scoring on the main part of the questionnaire was such that:

1. stood for no stress at all (a named condition never presented as a source of stress)
2. stood for occasional stress (a named condition only at times presented as a source of stress)
3. stood for regular stress (a named condition often presented as a source of stress) and
4. stood for the most persistent stressor (a named condition was always a source of stress)

Sample

The sample was made up of 80 teachers (40 from mainstream and 40 from Special Needs Education). Forty were male while 40 were female. The sample was drawn from 7 conveniently selected schools in Mutare urban. The schools were near the researchers. There were 3 special needs education schools. All the 40 teachers from these three schools agreed to take part in the study. The researchers had to match the number of special needs education teachers (40) with the number of mainstream teachers for easy comparison purposes. To achieve this, 10 teachers (5 male and 5 female) were randomly selected from each of the four Mutare urban mainstream schools.

Data Collection Procedure

After obtaining the permission from the authorities to carry out the study in the index schools, the second author administered the questionnaire in person from one school to another over a period of two weeks. She collected the completed questionnaires immediately after the respondents had completed them.

Data Analysis

Cross tabulation was used to present the overall data on stress levels and coping mecha-

nisms. The data on stress level were further analysed using the t-test to make direct comparisons between stress levels for mainstream teachers and Special Needs teachers.

Ethical Considerations

The participants in this study were informed that participation in the study was completely voluntary and that permission that had been obtained from the Ministry of Education, Sports, Arts and Culture and from school authorities did not imply that those who were invited to participate were obliged to do so. They were assured that their responses would be confidential and would be used only for purposes of the study that was being undertaken and that every effort would be made to ensure that their responses could not be traced to them. They were also informed that they could withdraw from the study at any time if they so wished.

RESULTS

Table 1 reveals that the vast majority of mainstream teachers saw lack of government support as often and always stressful while a large majority saw lack of resources, heavy workload and big classes as the next most persistent stressors. The stressors perceived as least persistent by mainstream teachers were the requirement for more skills than the teachers had as well as the stressor to do with lack of pupils' interest.

Table 2 reveals that the most persistent stressors among Special Needs Education (SNE) teachers were lack of resources, too much time spent on individual pupils, heavy workload and lack of government support. The least stressful factors were off-work problems and complexity of the tasks in the process of teaching special needs children.

Table 3 presents seven directly comparable stressors from the top ten stressors in each of two groups. The average stress levels for mainstream and SNE teachers are the same (3.15) on a scale of 1 to 4. This means that teachers irrespective of specialisation are 'often' bothered by the factors in Table 3. In general too, there are no significant differences (t-test 10% level of significance) in stress level from these seven top stressors except in connection with lack of pupils' interest which bothered SNE teachers

Table 1: Major sources of stress among mainstream teachers

Rank order	Sources of stress	No stress (1)		Occasional stress (2)		1 and 2 Regular stress (3)		Persistent stress (4)		3 and 4	
		N	%	N	%	%	N	%	N	%	N
1	Lack of government support	2	5	2	5	10	5	12.5	31	77.5	90
2	Lack of resources	2	5	3	7.5	12.5	8	20	27	67.5	87.5
3	Big classes	4	10	3	7.5	17.5	8	20	25	62.5	82.5
4	Heavy workload	4	10	4	10	20	6	15	26	65	80
5	Off-work problems	4	10	6	15	25	8	20	22	55	75
6	Complexity of tasks	3	7.5	8	20	27.5	7	17.5	22	55	72.5
7	Taking the work home	7	17.5	7	17.5	35	6	15	20	50	65
8	Ignoring formal chain of command	5	12.5	9	22.5	35	9	22.5	16	40	65.5
9	More skills expected than the teacher has	9	22.5	8	20	42.5	6	15	17	42.5	57.5
10	Lack of pupils' interest	13	32.5	9	22.5	55	2	5	16	40	45

Table 2: Major sources of stress among SNE teachers (N=40)

Rank order	Sources of stress	No stress (1)		Occasional stress (2)		1 and 2 Regular stress (3)		Persistent stress (4)		3 and 4	
		N	%	N	%	%	N	%	N	%	N
1	Lack of resources	0	0	5	12.5	12.5	6	15	29	72.5	87.5
2	Time spent on individual pupils	5	12.5	1	2.5	15	4	10	30	75	85
3	Heavy workload	3	7.5	5	12.5	20	12	30	20	50	80
4	Lack of government support	4	10	5	12.5	22.5	7	17.5	24	60	77.5
5	Big classes	4	10	6	15	25	3	7.5	27	67.5	75
6	Lack of pupil progress	4	10	7	17.5	27.5	11	27.5	18	45	72.5
7	Lack of pupil interest	4	10	9	22.5	32.5	10	25	17	42.5	67.5
8	Lack of support staff	7	17.5	5	12.5	30	1	2.5	25	62.5	69
9	Off-work problems	6	15	13	32.5	47.5	6	15	15	37.5	52.5
10	Complexity of tasks	10	25	10	25	50	4	10	16	40	50

Table 3: Statistical comparison of stress levels which are common among mainstream and SNE teachers

Rank order	Source of stress	Average stress level				
		Mainstream	Special needs	t-value	t-probability	10% sig. level
1	Lack of government support	3.5	3.2	1.684	0.096	Not sign.
2	Lack of resources	3.4	3.6	-0.76	0.476	Not sign.
3	Big class	3.4	3.6	-1.397	0.166	Not sign.
4	Heavy workload	3.5	3.5	0.00	1.000	Not sign.
5	Off work problems	3.02	2.8	1.874	0.068	Not sign.
6	Complexity of tasks	3.25	2.7	2.079	0.041	Sign.
7	Lack of pupil' interest	2.5	3	-2.39	0.019	Sign.
	Overall	3.15	3.15	0	0.5	Not sign.

more than it did mainstream teachers and in the area of complexity of tasks which bothered mainstream teachers more than it bothered SNE teachers.

Table 4 shows that there were some marked differences between the sources of stress for

the two groups. Large percentages of the SNE teachers were persistently bothered by time spent on individual students and lack of student progress respectively. Very low percentages of teachers in the mainstream were bothered by those two factors. While the majority of the

Table 4: Stressors which are different between mainstream and SNE teachers (only stressors indicated as 'often' and/or 'always' included) (N=80)

Source of stress	Mainstream teachers		SNE teachers	
	N=40	%	N = 40	%
Taking the work home	26	65	6	15
Ignoring the chain of command	26	65	3	7.5
More skills expected than the teachers have	23	57.5	2	5
Time with individual pupils	12	30	34	85
Lack of pupil progress	7	17.5	29	72.5
Lack of support staff	2	5	26	65

SNE teachers were persistently bothered by lack of support staff, very few mainstream teachers were bothered by that factor. Three other factors: taking work home, ignoring the chain of command and lacking appropriate skills bothered substantial numbers of teachers in the mainstream but did not bother SNE teachers to any considerable extent.

Teachers' Thoughts About Quitting Their Jobs

Fifty-two percent (52%) of the SNE teachers and 42% of the mainstream teachers reported having had thoughts about leaving their jobs.

Table 5 shows that the most-mentioned stress-reduction strategies used by mainstream teachers were sharing problems with co-workers, physical exercise and cheering with family and friends. The least stress-reduction strategies used by these teachers were the reading of books/novels and watching of television. SNE teachers largely managed their stress through physical exercise, reading books/novels, sharing problems with co-workers and visiting. The strategy least used by SNE teachers was praying/going to church.

Taken together, teachers mostly handled stress by physical exercise and sharing ideas

with colleagues, cheering with friends and relatives and least by watching television.

DISCUSSION

Some major findings here are in agreement with those by Nhundu (1999) whose study revealed that the major sources of stress among teachers in Zimbabwe included a high workload, lack of resources, overcrowded classrooms and lack of government support. Nhundu's findings are supported by the findings here with respect to both mainstream teachers and SNE teachers. Findings by Chireshe and Mapfumo (2003) with a sample of mainstream teachers in Zimbabwe were largely in agreement with those by Nhundu as well as those in the present study.

Findings with respect to SNE teachers were also consistent with those of Antoniou et al (2000) while those for mainstream teachers were consistent with those of Nhundu (1999) and Chireshe and Mapfumo (2003). The place of off work factors in causing stress at work has been found before by Hittner (1981) whose study revealed that such conditions as marriage, divorce, pregnancy, death of a loved one and even change of residence raised stress levels of teachers. The present study did not, however, estab-

Table 5: Stress-reduction strategies used by mainstream and SNE teachers

Stress reduction strategy	Mainstream teachers		SNE teachers	
	N = 40	%	N = 40	%
Sharing problems with co-workers	38	95	34	85
Physical exercise	36	90	38	95
Cheering with family and friends	35	87.5	30	75
Enough sleep and eating well	30	75	-	-
Listening to music	28	70	-	-
Watching television	25	62.5	26	65
Reading books/novels	23	57.5	35	87.5
Praying/going to church	-	-	22	55
Visiting	-	-	32	80

lish the nature of the off-work factors that stressed some teaching professionals in this sample from Zimbabwe.

The place of the government in the causing of stress is clear from the fact that the government has the last word on such stress-inducing aspects as salary, class size and workload in general (Chireshe and Shumba 2011). Both groups revealed that their classes were so large as to stress them. No wonder that the mainstream teachers are stressed by having to carry their work home especially so the marking and the planning (Nhundu 1999).

It is possible that SNE classes were 'large' in a different sort of way. The Ministry of Education Sport and Culture, through the Special Needs Circular (1985) laid down a teacher-pupil ratio of 1:7 for intellectually challenged classes and 1:19 for Special class (among other provisions of the Circular). What seem to be small classes are 'large' when it is realised that SNE teachers are especially stressed by the long time they devote to individually assisting the children who are under their care (Jarvis 2000; Brownell 2003; Mukwidzwa 2004). This finding was, however, different from that of Antoniou et al. (2000) whose study revealed that the amount of time spent by the teacher on the individual student had only a small stress effect on the teacher (listed 9th out of the ten stressors identified in that study). Perhaps the teachers in SNE stressed themselves further by setting unrealistic academic standards for their pupils who had to take the same examinations as the more academically able pupils in the mainstream (Brownell 2003).

The stress associated with the complexity of the work by mainstream teachers bears on the perceived lack of competence in some areas. We supposed that mainstream teachers were sometimes called upon to teach courses that they were not trained in and were further disturbed by the regular changes in curriculum to which the teachers had to adapt very quickly. We suspected that scenario made the teachers feel incompetent in some areas in the same way as was discovered by Fimian and Santoro (1983) and also by Terry (1997).

Stress levels were generally elevated for both mainstream and SNE teachers with both groups showing that they were 'often' stressed by the index factors in this study. That over 50% of the teachers in SNE contemplated leaving their jobs

was, therefore, consistent with the findings of Male and May (1997) who found that teachers in SNE in the United States had no intention of making SNE teaching a long-term career as well as the findings of Metzke (1988). The same finding is also articulated in the literature review and studies on special needs education by Billingsley (1991/1993) and the work of Brownell et al. (1997) and Brownell et al. (1995) as well as Miller et al. (1999). Similarly, Cooley and Yovanoff (1996) as well as Fimian and Blanton (1986) found that the problem had escalated such that SNE teacher preparation programmes were underpatronised by trainees whereas the demand for trained SNE teachers was rising rapidly. This study did not, however, establish whether this scenario was the same in Zimbabwe.

The stress management strategies used by mainstream and Special Needs Education teachers were in line with the findings of Carter (1994) in the United States where he found that teachers employed relaxation exercises, organising and setting priorities, maintaining diet and exercise, discussing problems with professional colleagues and taking days off. The extensive use of physical exercise by Special Needs Education teachers and not by mainstream teachers might have something to do with the wider regimen of stress management strategies to which Special Needs Education teachers were exposed during their training and in in-service sessions (Carter 1994; Pullis 1992; Greer and Greer 1992). Sharing problems with relatives and friends is a typical human response and it has been found that social support at work was associated with lower blood pressure and that blood pressure rose in time when the social support was not available (Quigley 2003).

Interestingly, not one respondent from either mainstream or Special Needs Education teachers mentioned organising time and setting priorities as well as scanning the environment to preempt the negative effects of stressors (Aspinwall and Taylor 1997; Greenglass 2001; Sundberg 2005). This failure by the teaching professionals to report the use of these proactive coping skills is regrettable since it has been found that people who use proactive coping skills are motivated in achieving personal and professional growth. It is possible that they would report lower levels of stress if they used proactive coping skills. Sundberg (2005) found that those who used proactive coping skills were

motivated to achieve personal and professional growth, to see job satisfaction as their responsibility and have more patience for set-backs, better time-management skills and to hold up better to stress.

The use of prayer as an important stress management tool is especially interesting in that it is possible that Special Needs Education teachers saw working with children with disabilities as the will of God. If this is correct, it is sad that these very dedicated, empathic, idealistic and people-oriented professionals have been found to be the ones most vulnerable to stress and the ones likely to leave the profession (Cherniss 1980; Pines et al. 1981). Some of these may even burn out 'but stay on the job, counting the days until weekends and ultimately, their retirement' (Carter 1994). But, hopefully, others do remain in the profession, learn to cope with the stress of the profession and grow with those stresses (Howard and Johnson 2003).

CONCLUSION

This study aimed to compare the sources and levels of stress among teachers in the mainstream (40) and in Special Needs Education (40) in Mutare Urban in Eastern Zimbabwe. This study revealed that mainstream teachers were largely stressed by lack of government support, lack of resources and heavy workload while SNE teachers were largely stressed by lack of resources and time spent on individual pupils. Stressors common to both groups were lack of government support, lack of resources, big classes and heavy workload. Stress levels for the teachers were in general elevated but those of women both in the mainstream and in SNE were more elevated than those of their male counterparts. The stress levels of women in SNE and in mainstream were the same. Teachers in mainstream and those in SNE seemed to be stressed by the same general factors and they also use comparable but not identical stress reduction strategies.

RECOMMENDATIONS

This study makes a number of recommendations. At school system and government level there is need for the improvement of conditions under which teachers work particularly to reduce or eliminate the thoughts of teachers run-

ning away from their positions. There is need for the government to improve the provision of resources the shortage of which the teachers indicate was a top stressor for the two groups. There is also need for the government to address the issues of large classes and the concomitant heavy workloads. For the teachers in Special Needs Education the issue of providing them with support staff to carry some of the workload is vital.

The study recommends further research in the area which should be done country wide taking into consideration the demographic characteristics of the participating teachers such as gender, age, professional qualification and teaching experience.

LIMITATIONS OF THE STUDY

The findings presented in this study reflect the sources and levels of stress among a small sample of mainstream and SNE teachers and thus may not represent all teachers in Zimbabwe. In addition, the demographic characteristics of the sampled teachers other than being a mainstream or SNE teacher which may influence the stress levels were not considered during the analysis of the data.

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