



Occupational stress among technical teachers in technical schools in Johore, Malacca and negeri sembilan

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ABSTRACT

This study investigated factors that contributed stress and the level of occupational stress among the technical teachers who are currently teaching in technical schools in Johore, Malacca and Negeri Sembilan. There were five teacher stress sources that included in this study: pupil misbehaviour, teacher workload, time and resources difficulties, interpersonal relationships, and recognition. A total of 92 teachers (N = 92) from nine technical schools in three states, which are Johore, Malacca and Negeri Sembilan were choosed randomly to represent the population by using the cluster over cluster method. The instrument for this study was adapted from the Teacher Stress Inventory constructed by Boyle, Borg, Falzon and Baglioni (1995) and had been modified by Mokhtar (1998) and Mazlan (2002). A pilot survey was done among 20 technical teachers in a technical school in Johore Bahru. The alpha croncbach for the instrument in this study was 0.982. The data were analyzed using both descriptptive (mean, frequency, and percentage) and inferency (Independent t-Test, Pearson Correlation, and One Way ANOVA) methods. Data analysis indicated that the overall stress level of respondent was moderate. Among the five stressors, pupil misbehaviour was the strongest determinant of teacher stress with a mean of 3.67. Other factors were teacher workload (mean = 3.00), time and resources difficulties (mean = 2.97), recognition (mean = 2.90), and interpersonal relationships (mean = 2.85) respectively. The workload and other factors had caused a moderate stress on the respondents. The results indicated that there was no significant difference of work stress among the respondent based on gender, marriage status, and highest academic qualification. Furthermore, the results were failed to indicate a significant correlation between teacher stress and demographic factors such as age, length of teaching experience, and the respondents' monthly salary.

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Introduction

In year 2001, Ministry of Education Malaysia had introduced the Education Development 2001-2010. Among the motives of this scheme is to develop individual potential entirely in order to produce mankind who are emotional, intellectual, spiritual, and physical balanced, consistent with the Philosophy of National Education; to promote creativity and inovation among students; to enhance knowledge, science, and technology culture; to increase life long learning; to prepare an efficient and effective education system which can achieve international standard; to become the educational centre that can provide excellent education and to increase Malaysia education's prestige in international level (Education Development 2001-2010, 2001). In the realization of this motive, our country has put a high expectation in our school teachers. They are perceived as the architect, designer, and saver of the future of our children who are responsible to educate them. However, we have to realize that teaching is not an easy job as what other people think and perceive. In fact, Claxton (1989) indicated that teaching is an occupation which is always demanding and changing. Deputy of Prime Minister, Datuk Seri Najib Tun Razak suggested that teachers' obligation is not only educate students so that they can succeed in examination but also to

become knowlegeable in various subjects (Utusan Malaysia, 7 Ogos 2005).

Former Deputy Chancellor of University of Technology Malaysia, Tan Sri Ainuddin Wahid indicated that teachers' obligation is heavy, which every teacher plays an important role in the development of attitude and personality of our future generation other than delivering knowledge and become a role model to their students all the time (Yaacob, 1985). Teachers' task in this context is not only tied to teaching, educating, and guiding (Faridah Karim dan Zubaidah Aman, 1998). In fact, teachers are required to equipped themselves with various quality, knowledge, and skills so that they can become ascetic model that should have ideal mannerism, become a role model to students, never make a mistake, and also manage to give an effective teaching (Peter Songan dan Narawi, 2002). This stereotype and high expectation in teachers is a source of teacher stress.

Datuk Seri Hishammuddin Tun Hussein, as the Minister of Education had revealed that teachers in Selangor, Malacca, Johore, and Kuala Lumpur have categorized as 'stressful teachers' seem that they have to spend 74 hours per week to perform their jobs including 50.4 hours or 68 percent related to curriculum (Utusan Malaysia, 7 Julai 2005). He also reported

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that teachers in this nation are averagely burdened by task to fill 108 types of form that not related to their job and spend 38 days every year to attend courses and training. Beside that, Presiden of National Union of The Teaching Profession (NUTP), Ismail Nihat stated that stress levels among teachers in this country are increasing and become worrying due to increasing teachers' workload. (Abdul Muin Sapidin, 2005). He added that nowadays, teachers have to face too many changes that come all the way until their work is overload. Ismail Nihat also summarized three causes of teacher stress, which are high expectation of parents that always demand excellent achievement of their children, students' misbehavior, and students that more clever than their teachers (Abdul Muin Sapidin, 18 Ogos 2005).

According to Faridah Karim dan Zubaidah Aman (1998), teaching is attributed as an occupation that always disclosed to high stress level. Gold dan Roth (1993) indicated that change is one of the sources of stress among teachers. Recently, teaching profession especially technical and vocational education department had received a great shock when the government decided to execute the new basis to teach Technical and Vocational Education (PTV) subjects in English in year 2006. Technical and vocational teachers are demanded to equipped themselves in order to carry out this new basis by attending various courses, seminars, and workshops all the week or in weekend meanwhile doing adaption to their teaching methods and strategies. This certainly will increases their workload directly and may causes higher stress especially those who haven't prepared to face this drastic change.

Now, occupational stress has a more significance on the teachers' professionalism, while the researches related to this issue is inadequate especially to technical and vocational teachers, hence, this study was conducted to survey stress level among technical teachers in technical schools in three states, which are Johore, Malacca, and Negeri Sembilan. Beside that, this research was aimed to determine main source of stress among the respondents. There were five teacher stress sources that included in this study: pupil misbehaviour, teacher workload, time and resources difficulties, interpersonal relationships, and recognition.

Sampel

Data were collected from technical teachers (N = 92) employed in nine technical schools in three states, which are Johore, Malacca, and Negeri Sembilan. Sampel were choosed randomly by using cluster over cluster method. Size of sampel was determined based on Krejcie and Morgan List. All questionnaires were returned directly to researcher in sealed envelopes to ensure confidentiality.

Instrument

The main approach to collect information about teacher stress in this study is based on the use of questionnaires. The self-report stress questionnaire was based on Teacher Stress Inventory, an earlier instrument developed by Boyle et al. (1995) and had been modified by Mokhtar (1998) and Mazlan (2002) for use in the Malaysia school context. Alpha Cronbach value for this instrument was 0.93. Minor changes have been made by researcher to this instrument to reflect teacher stress among technical teachers in technical schools.

The questionnaire is subdivided into 2 sections. The first section requested biographical information regarding gender, age, race, marriage status, field of study, highest academic qualification, length of teaching experience, and monthly salary.

The second section consisted of 48 questions. Teachers were asked to indicate the degree to which they found these aspects of their work stressful (the 48 items included the following: pupils' misbehavior, teacher workload, time and resources difficulties, interpersonal relationships, and recognition). They were asked to rate how stressful they found each item based on a Five Point Likert-Type Scale.

Pilot Survey

The main objective of conducting a pilot survey is to ensure the consistency and accuracy of each item in a questionnaire. Through pilot survey, the appropriateness of the instrument such as the use of correct word and sentence can be determined. Before the pilot survey was done, the instrument was checked and affirmed by Dr. Tan Soo Yin, former lecturer in Faculty of Education, University of Technology Malaysia. The questionnaire was then pilot tested among 20 technical teachers selected to represent the population in terms of teacher characteristics as outlined above from Sekolah Menengah Teknik Tanjung Puteri, Johore Bahru and the Alpha Cronbach value was 0.982 (>0.80 suggested by Mohamad Najib, 1999). The comments of these 20 teachers regarding the form, content and language used in the questionnaire indicated that this was suitable for use in the present context. Hence, the instrument developed can be accepted and used in actual survey.

Results

Data were analyzed systematically by using a SPSS version 12.0 software (Statistical Packages for Social Science). Stress levels for each stress factors were determined according to the table below:

Stress Factors

Table 3 sets out the mean ratings and standard deviations to the five sources of stress for the whole sample. The means ranged from 3.43 to 2.85; standard deviations form 0.96 to 0.74. As evidenced by the mean ratings, the top source of stress for technical teachers is pupil misbehaviour with mean score 3.43 (highest) and standard deviation 0.96. This followed by teacher workload (mean = 3.00), time and resources difficulties (mean = 2.97), recognition (mean = 2.90), and interpersonal relationships (mean = 2.85).

For pupil misbehavior, analysis revealed that the most significant cause of stress is pupils' reluctance to follow instruction, followed by pupils' impolite behaviour or cheek, and handling problematic pupils. Based on Table 4, 41.3 percent of respondents fall into the serious stress category. Results also showed that 41.3 percent and 17.4 percent of respondents having a moderate and mild stress respectively for pupil misbehaviour.

The present study revealed that responsibility for pupils' success in examination was the main workload that contributed to teacher stress. This followed by administrative work, managing workshop stock and inventory, and too much work in one time. The least significant workload was attending courses, seminars, and workshops to improve teaching skills and knowledge. Results also indicated that 58.7 percent and 23.9 percent of the technical teachers fall into the moderate and low stress categories respectively. Only 17.4 percent of respondents having serious stress for teacher workload factor.

For time and resources difficulties factor, "having a large class" was determined as the most significant stress factor, followed by difficulty in completing syllabus in the time available, and lack of material resources in meeting new educational basis. According to Table 6, more than half of the

respondents (58.7 percent) having moderate stress for this factor. The remaining respondents fall into the low (23.9 percent) and high (17.4 percent) stress categories.

Analysis revealed that the most significant stress factor for interpersonal relationships was "receiving unclear instruction from administrator", followed by observation by education officers and lack of colleagues' cooperation in conducting an activity. Based on Table 7, almost half of the respondents fall into the moderate stress category. Results also showed that 29.3 percent and 21.7 percent of respondents having a low and serious stress respectively for interpersonal relationships factor.

For recognition factor, the present study revealed that "lack of recognition for your work from administrator" was the main recognition stressor that contributed to teacher stress. This followed by poor promotion prospects and lack of encouragement to work better from administrators. Results also indicated that 47.8 percent and 27.2 percent of the technical teachers fall into the moderate and low stress categories respectively. Only 25.0 percent of respondents having serious stress for recognition factor.

Table 9 shows the teacher stress level among technical teachers according to mean and standard deviation for each factor. Results indicated that all five stressors cause a moderate stress to technical teachers separately. Overall, technical teachers was having a moderate occupational stress with mean 3.02 and standard deviation 0.72.

A t-test was used to compare male and female technical teachers on total scores on the Teacher Stress Inventory. The results revealed no significant differences between males and females ($p > 0.05$).

One-way ANOVA was used to compare the three marriage status groups: married, single and others. Table 11 gives the one-way ANOVA results. Table 11 indicated that there was no significant differences between the three marriage status groups in stress levels with coefficient of significant 0.83, larger than $p = 0.05$.

One-way ANOVA was used to compare the five highest academic qualification groups: SPM/MCE/SPVM, STP/STPM/HSC, Diploma, Degree, and others. Table 12 revealed that there was no significant differences between the five highest academic qualification groups in stress levels with coefficient of significant 0.511, larger than $p = 0.05$.

Table 13 indicated that there was no significant correlation between age and stress levels among technical teachers with coefficient of significant higher than 0.05. This means the age of respondents is not associated with their stress levels. Older teachers are not necessarily having higher stress levels than their younger colleagues, vice versa.

Table 14 revealed that there was no significant correlation between length of teaching experience and stress levels among technical teachers with coefficient of significant higher than 0.05. This means the length of teaching experience is not associated with teacher stress levels. More experienced teachers are not necessarily having more serious stress than their less experienced colleagues, vice versa.

Table 15 showed that there was no significant correlation between monthly salary and stress levels among technical teachers with coefficient of significant higher than 0.05. This means the monthly salary is not associated with teacher stress levels. Teachers with higher monthly income are not necessarily having higher stress levels than their colleagues with lower monthly income, vice versa.

Discussion

The main objectives of the present study were to identify main sources of stress and consequent stress levels in technical teachers, and to examine the demographic (gender, marriage status, and highest academic qualification) differences in stress levels, as well as examining the relationship between stress levels and demographic factor (age, length of teaching experience, and monthly salary). The present study has shown that, in line with other studies elsewhere (e.g. Zakiah, 2003;

Dussault, 1997; Ahmad, 1998), the overall stress levels among teachers is moderate. In addition to the sources of stress, the present study identified pupil misbehaviour is the main source of teacher stress in technical teachers, followed by workload, time and resources difficulties, recognition, and interpersonal relationship. These results are consistent with the findings of Ramli (2003), Pratt (1978), Abdul Rahim (2002), and Mazlan (2002) which indicated that pupil misbehaviour is the main cause of teacher stress.

The results reveal no gender differences in stress levels, which means that male and female technical teachers appear to have the same levels of stress. These results are consistent with the findings of Abouserie (1996), Tuettemann dan Punch (1990), Spooner (1984), and Zakiah (2003), but not with those of Dussault (1997), Siti Rohaini (1991), Kyriacou and Sutcliffe (1978), and Borg, Riding and Falzon (1991). The present study also indicated that there was no marriage status differences in stress levels. This result is not consistent with the findings of Gold and Roth (1993), which stated that single teachers showed a higher stress level than married teachers. The present findings indicate no highest academic qualification differences in stress levels, which is consistent with the findings of Zakiah (2003) and Mohd. Hasidin Zaini (1995). However, studies by Kyriacou and Sutcliffe (1978) and Siti Rohaini (1991) have proved that teachers with higher academic qualification, such as bachelor or higher were less stress than their colleagues with lower academic qualification, such as diploma.

The present study also indicated that there was no significant correlation between stress levels and demographic factors, such as age, length of teaching experience, and monthly salary in technical teachers. This findings are inconsistent with those of Kyriacou and Sutcliffe (1978) and Siti Rohaini (1991), which concluded that age and length of teaching experience are associated with teacher stress level.

Conclusion

Recently, teacher stress and burnout have become an area of interest among researchers and practitioners in this country. Although this present study has indicated that the stress levels among technical teachers in three states (Johore, Malacca, and Negeri Sembilan) are still moderate, but teacher stress is a profound problem that must be attended to and concerned if the quality and productivity of education is not to be undermined.

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Table 1: Five Point Likert-Type Scale

Stress Level	Score
No Stress	1
Mild Stress	2
Moderate Stress	3
Much Stress	4
Extreme Stress	5

Table 2: Categorization of Teacher Stress Level According to Mean Score

Total Score	Teacher Stress Level
1.00 to 2.33	Low
2.34 to 3.66	Moderate
3.67 to 5.00	High

(Source: Jawatankuasa Penyelidikan Fakulti Pendidikan, Universiti Teknologi Malaysia 2001/2002 in Azizi *et al.*, 2003)

Table 3: Sources of Stress: Means and Standard Deviation

Teacher Stress Factor	Mean	Standard Deviation
1 Pupil Misbehaviour	3.43	0.96
2 Teacher Workload	3.00	0.75
3 Time and Resources Difficulties	2.97	0.74
4 Interpersonal Relationships	2.85	0.81
5 Recognition	2.90	0.87

Table 4: Teacher Stress Level for Pupil Misbehaviour Factor: Frequency and Percentage

Stress Level	Frequency	Percentage
Low	16	17.4
Moderate	38	41.3
High	38	41.3
Total	92	100.0

Table 5: Teacher Stress Level for Teacher Workload Factor: Frequency and Percentage

Stress Level	Frequency	Percentage
Low	22	23.9
Moderate	54	58.7
High	16	17.4
Total	92	100.0

Table 6: Teacher Stress Level for Time and Resources Difficulties Factor: Frequency and Percentage

Stress Level	Frequency	Percentage
Low	22	23.9
Moderate	54	58.7
High	16	17.4
Total	92	100.0

Table 7: Teacher Stress Level for Interpersonal Relationships**Factor: Frequency and Percentage**

Stress Level	Frequency	Percentage
Low	27	29.3
Moderate	45	48.9
High	20	21.7
Total	92	100.0

Table 8: Teacher Stress Level for Recognition Factor: Frequency and Percentage

Stress Level	Frequency	Percentage
Low	25	27.2
Moderate	44	47.8
High	23	25.0
Total	92	100.0

Table 9 : Teacher Stress Level for Each Factor: Mean and Standard Deviation

Teacher Stress Factor	Mean	Standard Deviation	Stress Level
1 Pupil Misbehaviour	3.43	0.96	Moderate
2 Teacher Workload	3.00	0.75	Moderate
3 Time and Resources Difficulties	2.97	0.74	Moderate
4 Interpersonal Relationships	2.85	0.81	Moderate
5 Recognition	2.90	0.87	Moderate
Overall	3.02	0.72	Moderate

Gender Differences in Stress Levels.**Table 10: Gender Differences in Stress Levels: Mean and Coefficient of Significant (n = 92)**

Gender	N	Mean	Standard Deviation	df	t	Significant
Male	54	3.02	0.79	90	-0.05	0.43
Female	38	3.02	0.62	88.8	-0.05	

* $p < 0.05$ **Table 11: Marriage Status Differences in Stress Levels: Mean and Coefficient of Significant (n = 92)**

	df	Mean	F	Significant
Between Groups	2	0.099	0.187	0.83
Within Groups	89	0.528		

* $p < 0.05$ **Highest Academic Qualification Differences in Stress Levels.****Table 12: Highest Academic Qualification Differences in Stress Levels: Mean and Coefficient of Significant (n = 92)**

	df	Mean	F	Significant
Between Groups	2	0.353	0.676	0.511
Within Groups	89	0.522		

* $p < 0.05$ **Correlation Between Age and Stress Levels.****Table 13: Correlation Between Age and Stress Levels: Pearson Correlation and Coefficient of Significant**

	Teacher Stress	Age	
Age	Pearson Correlation	0.068	1
	Significant (2-tailed)	0.518	-
	N	92	92

* $p < 0.05$ **Table 14: Correlation Between Length of Teaching Experience and Stress Levels: Pearson Correlation and Coefficient of Significant**

	Teacher Stress	Length of Teaching Experience	
Length of Teaching Experience	Pearson Correlation	0.060	1
	Significant (2-tailed)	0.567	-
	N	92	92

* $p < 0.05$

a. Correlation Between Length of Monthly Salary and Stress Levels.**Table 15: Correlation Between Monthly Salary and Stress Levels: Pearson Correlation and Coefficient of Significant**

		Teacher Stress	Monthly Salary
Monthly Salary	Pearson Correlation	-0.088	1
	Significant (2-tailed)	0.405	-
	N	92	92

* p < 0.05