

THE INFLUENTIAL FACTORS AFFECTING OCCUPATIONAL STRESS: A STUDY AMONG SECONDARY SCHOOL TEACHERS IN KELANTAN

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Abstract: Occupational stress or workload stress is the physical or psychological factor that has been pushed by any force behind its range of stability, producing a strain within the individuals. Occupational stress experienced by teachers is attributed by their workload. It can cause anxiety and depression which can lower the teacher's ability to function at work or in their daily life. The purpose of this study is to identify the relationship of time management, work-related stressors, self-motivation and teaching experience on the occupational stress among teachers of secondary school in Kota Bharu. A set of questionnaire was distributed to 200 teachers from daily and cluster secondary schools in Kota Bharu. Using the Multiple Linear Regression method derived with statistical tool Statistical Package for the Social Sciences (SPSS) version 22, the finding shows that there is a significant linear relationship between time management, work-related stressors, teaching experience, self-motivation and the occupational stress. The regression analysis shows that the factors of time management, work-related stressors, teaching experience and self-motivation affect occupational stress. Furthermore, this study also found that time management is the most important factor that affects the level of occupational stress among the teachers. It proved that the effectiveness of individual time management is very important in order to manage stress level. Therefore, it suggests that school teachers need to be provided with time management training course and educators motivation program.

Keywords: Experience, depression, motivation, stress, teachers

1. Introduction

Stress is a disease frequently associated with mental health and often attacks society. Signs and symptoms of stress or depression suffered by teachers should be identified earlier to prevent the teachers from being affected by stress which leads to being aggressive and endangering students' lives (Mahdzir, 2017). Career in teaching and education is one of the most important careers in the world. Teachers are entrusted to deliver knowledge to students and instil good values in every student. The education system in Malaysia is amended from time to time to fulfil the requirements of modern world. The changes have made the education field more challenging and the teachers need to be more proactive. Therefore, to achieve the ultimate goal of the education, teachers will have to adopt and adapt various factors including enhancement of knowledge and skills. To meet the high demand in education, teachers began to feel stress in facing the variety of transformation in education.

Based on intervention process held by the Ministry of Education in 2012, 530 teachers which represented 0.128 percent from the total teachers around this country are facing mental problem (Mohd, 2012). This scenario probably happens because of stress and depression that occur without knowing it. One of the possible stress factors found is that the teachers are burdened with a lot of workload and they are facing student's discipline problem (Muhammad et al., 2016). With regard to Henton and Brennan (2017), teaching is the best job in the world but the increase in marking workload, administration and exam targets have led to some teachers need to work 12 hours a day and this pressured them. The sheer amount of workload has given an impact on their mental health.

In a study, secondary school teachers in Kota Bharu were used as participants to identify the occupational stress level among teachers as well as to investigate the other factors that contribute to the stress. The other reason that is dominant to occupational stress among teachers is they are facing the

problem of heavy workload other than teaching. They also have less spare time for themselves and their family since they have to face students that have discipline problem. This has inspired the researcher to conduct the study to know whether time management, work-related stressors, teaching experiences, self-motivation certainly affect occupational stress among teachers. Therefore, this study provides the baseline data to correctly identify the significant factors that influence teacher's level of stress.

2. Review of Literature

Occupational stress is the physical or psychological factor that has been pushed by any force behind its range of stability, producing a strain within the individuals (Jeyaraj, 2013). Variety of symptoms occur and begin to take impose on individual's mental and physical because of occupational stress. According to Chetia et al. (2018), occupational stress involved the combination of high job demands and less control on it that can lead to stress. All the central zone secondary school teachers experienced high level of occupational stress in their workplace because of the prevalence factors of occupational stress in which more than half of teachers show up to be interpersonal related activities, administrative related stressors, students' parents related stressors and homework interface (Gebrekirstos, 2015).

Time management is identified as the maximum use of time for the productivity and achievement. Time management also contributes to the successful of personal and professional lives (Sahito et al., 2016). Besides, they also found that time management skills of teachers give positive impact to the students' performances. According to Fun and Royo (2010), stress in teaching profession is also related to time management where teachers are burned with works and fail to manage time properly. Aris, Rahim and Tan (2002) conducted a study on 130 secondary and primary school's teachers at Kota Tinggi District and the finding found that time constraint scores the highest mean as a factor that causes stress among the teachers.

In a study on the factors that influence stress, burnout and retention of secondary school teachers, Fisher (2011) found that the years of experience is significantly correlated to stress. Aftab and Khaton (2012) found that there is a significant high mean occupational stress score for teachers with 6 to 10 years of teaching. It is explained that when the teachers' got older, they became exhausted and make them less competent to cope with the challenging demands. According to Shkempi et al. (2015), there are significant associations between teachers' experience and workload. Teachers with experience of 0 to 10 years, and 21 to 40 years reported that work overload caused them to have stronger stressor. Farah (2015) had the same findings in which the more years of experience of a teacher caused an increase of stress compared to the less experienced teachers. It has been thought that teachers with more experience in teaching field face the challenges when they have to deal with the current student's misbehaviour. The new educational policy also causes burnout among older teachers.

Kamaruddin (2007) and Anwar (2011) found that work burden is one of the factors causing occupational stress among teachers. Malaysian Ministry of Education has revealed that teachers in Selangor, Johor, Melaka and Kuala Lumpur are categorised as "overloaded teachers". It is because they have to work about 74 hours a week including 50.4 hours for curriculum (Liza et al., 2014). Furthermore, Agai et al. (2015) conducted a study and found that from 300 respondents, about 45% of the teachers experienced high level of work-related stress. This situation happens due to the continual changes in the educational system. New situations, roles and great expectations from their superiors are the main factors that contribute to occupational stress among teachers (Teuta, 2015).

According to Ambong et al. (2014), there is a significant linear relationship between student discipline and stress level among teachers. It showed that students discipline causes stress among teachers. Furthermore, Yahya, Kim and Ismail (2010) found that 41.3% of teachers experienced high stress level because of the students' discipline. Students' misconduct or unacceptable behaviour of students is one of the factors that increase the stress level among teachers. According to Kamaruddin (2007), students misconduct is the main factor of occupational stress among teachers in secondary schools since he found that the mean of occupational stress due to students' misconduct is high. Ramli (2003) found that factors that cause stress among secondary school's teachers in Kuala Pilah, Negeri Sembilan are student's discipline problem. Since the teachers are also required to be responsible on student's discipline at school, teachers are often blamed to the deterioration of students' discipline. Student's bad attitude is the domain factor that influences teacher's occupational stress.

3. Methodology

A cross-sectional study with a combination of stratified and cluster sampling technique was conducted to sample the participants from secondary school teachers in Kota Bharu. There are 16 secondary schools in Kota Bharu with 1337 teachers. Two strata are classified as daily secondary schools and cluster secondary schools. The daily secondary schools consist of students from form 1 to form 6 while cluster secondary schools are secondary school with form 1 to form 6 students and it has been awarded as Cluster School of Excellent by Ministry of Education based on their school performance such as in academic, sport achievement and co-curricular. Three schools are specified as the cluster secondary school strata while four schools are specified as daily secondary school strata. A total of 200 sample size was selected that coincides with the number of teachers from seven secondary schools using simple random sampling method. All the teachers in the chosen schools are appointed as the sample. The schools involved are SMK Ismail Petra, SMK Dato' Ahmad Maher, Maktab Sultan Ismail, SMK Putera, SMK Chung Hwa, SMK Kota Bharu and SMK Sultan Ismail.

This study involves a dependent variable which is occupational stress and four independent variables which are time management, work related stressor, student's attitude and work experience as shown Figure 1.

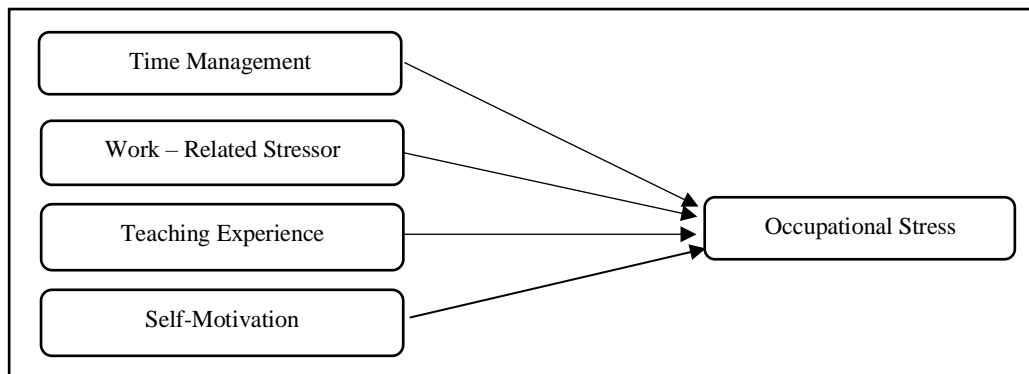


Figure 1: Theoretical Framework

SPSS version 22 was performed to analyse the findings of this study. Pearson's Correlation analysis was used to measure the strength of correlation and the significant relationship that exists between the independent variables (time management, work-related stressor, teaching experience and self-motivation) and dependent variable (occupational stress). Besides, the significant factor that has the most influence on occupational stress among the teachers was analysed using Multiple Linear Regression analysis. A validated online questionnaire using Google Form was distributed to the selected teachers which was adopted and adapted from Teacher Stress Inventory (TSI) and Depression Anxiety and Stress 21 Items Questionnaire (DASS 21) developed by Fimian (1988) and Lovibond (1995). The questionnaire has five sections. Section A consists of questions regarding time management, Section B consists of questions regarding work related stressor and Section C consists of questions regarding self-motivation. Section D consists of questions regarding the dependent variable which is occupational stress and Section E comprises of Demographic Profiles of the respondents. All the questions in Section A to Section D were measured by Likert scales in which the value 1 for strongly disagree and the value 10 for strongly agree. For the variable Teaching Experience, the input was taken from Section E on the question that relates to the number of teaching years. The items for time management variable is shown in Table 1.

Table 1: Items for Time Management Questionnaire

Items
I easily do things more than my capability.
I become impatient if others do things too slowly.
I try doing more than one thing at a time.
I have little time to relax in time of day.
I think about unrelated matters during conversations.
I feel uncomfortable wasting time.
There isn't enough time to get things done.
I rush in my speech.

The items for work-related stressor variable is shown in Table 2.

Table 2: Items for Work-Related Stressor Questionnaire

Items
There is little time to prepare for my lessons.
There is too much work to do.
The pace of the school day is too fast.
My class consists of too many students.
My personal priorities are being short changed due to time demands.
There is too much administrative paperwork in my job.

The items for self-motivation variable is shown in Table 3.

Table 3: Items for Self - Motivation Questionnaire

Items
I feel frustrated because of discipline problems in my classroom.
I feel frustrated because I have to monitor student's behaviour.
I feel frustrated because some students would do better if they tried.
I feel frustrated when attempting to teach students who are poorly motivated.
I feel frustrated because of poorly defined discipline problems.
I feel frustrated when my authority is rejected by administration.

The items for occupational stress variable is shown in Table 4.

Table 4: Items for Occupational Stress Questionnaire

Items
I found it hard to wind down.
I tend to over react to situations.
I felt that I was using a lot of nervous energy.
I found myself getting agitated.
I found it difficult to relax.
I was intolerant of anything that kept me from getting on with what I was doing.
I felt that I was rather touchy.

4. Result and Discussion

The reliability analysis result in Table 5 shows that the Cronbach's alpha value for all variables exceeded 0.7 which means that the questions for every variable are reliable to be used in this study (Nunnally, 1978). Thus, the scale can be considered reliable and the data obtained are trustworthy.

Table 5: Reliability Analysis Results

Variables	Number of Items	Cronbach's Alpha
Time Management	8	0.702
Work-Related Stressor	6	0.863
Self-Motivation	6	0.692
Teaching Experience	7	0.914

Respondent characteristics in Table 6 shows that 80 (40%) of the respondents are male secondary school teachers and another 120 (60%) are female teachers. Moreover, 104 (52%) of the teachers are from cluster secondary schools in Kota Bharu and the other 96 (48%) are from daily secondary schools.

Table 6: Frequency Distribution of Demographic Profiles

Variable	n (%)
Gender	
Male	80 (40)
Female	120 (60)
School Type	
Cluster	104 (52)
Daily	96 (48)

All the items in variables are measured using the Likert Scale as 1 for strongly disagree until 10 for strongly agree. The item’s mean scores are computed for each variable to measure and represent the variables. The strength and significant relationship between the factors (time management, work-related stressor, self-motivation and teaching experience) and occupational stress are measured using Pearson Correlation analysis. Table 7 shows that time management, work-related stressor, self-motivation and teaching experience have significant linear correlation with occupational stress among the teachers since the *p*-value is less than 0.05. The values of Pearson’s Correlation Coefficient range between 0.465 until 0.585 which indicated that work-related stressor and self-motivation have significant positive moderate linear relationship with occupational stress among the teachers while time management has significant positive weak linear relationship with occupational stress. The increase of lack time management, workload and low self-motivation among the teachers will lead to the increase of occupational stress level. Teaching experience and occupational stress have significant negative weak linear relationship that discloses the teachers with a lot of teaching experience will have lower occupational stress level.

Table 7: Correlation Analysis Results

Dependent variable	Independent variables	Pearson’s Correlation Coefficient	<i>p</i> -value
Occupational Stress	Time Management	0.465	< 0.0001
	Work – Related Stressor	0.500	< 0.0001
	Self-Motivation	0.585	< 0.0001
	Teaching Experience	-0.221	0.002

The graphical analysis of residual is used to investigate the adequacy of regression model and to check the assumption of linear regression model. Figure 2 shows the Normal *P-P* Plot to check for the assumption of normality of the residual. It shows that the normality assumption is satisfied since each residual is plotted against its expected value under normality. Residual plot in Figure 3 is constructed to see whether the assumption of error variance is violated. The residuals are randomly scattered due to the homogeneity of variance. The assumption stated that the variances of error terms are similar across the values of the independent variables. Therefore, the variance homogeneity assumption is satisfied. The validity of these results can verify that the linear model is adequate.

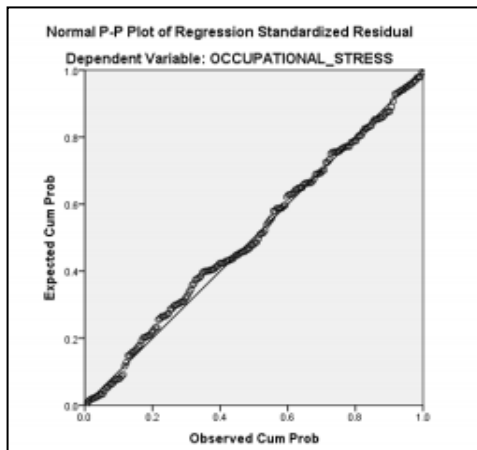


Figure 2: Normality Plot

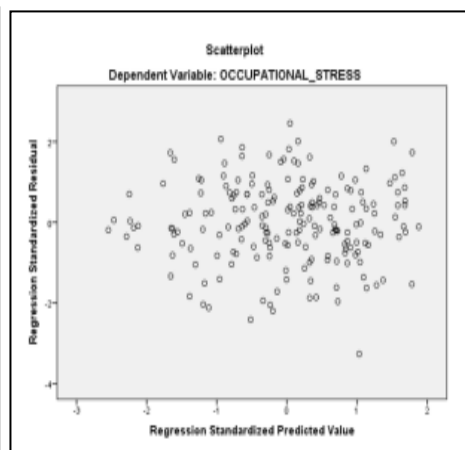


Figure 3: Residual Plot

Intercorrelation between the variables are observed using the value of Variation Inflation Factors (VIF). Table 8 shows the value of VIFs are less than 10 which indicated that all of the predictor variables do not correlate to each other and the multicollinearity problem does not exist.

Table 8: Multicollinearity Results

Variables	VIF
Time Management	1.316
Work – Related Stressor	1.441
Self-Motivation	1.152
Teaching Experience	1.005

Multiple linear regression analysis was carried out to find whether factors (time management, work-related stressor, self-motivation and teaching experience) will affect the level of occupational stress among secondary school teachers. The results on regression goodness of fit model indicated that 52.6% of the total variation in occupational stress level of secondary school teachers can be explained by factors of teaching experience, time management, work-related stressors and self-motivation ($R^2=0.526$, $F=54.057$, $p<0.001$).

The overall model indicates significance of the model since the p -value from ANOVA table is less than 0.05. At least one of these factors significantly affect occupational stress among secondary school teachers. Result in Table 9 found that all the factors listed significantly influence the stress level of teachers since the p -value of T-statistics is less than the significance level of 0.05. This finding apprised that time management, work-related stressor, self-motivation and teaching experience are the factors that influence the teacher’s level of stress. Moreover, from the coefficient value observed, time management appears to be the most influence factor that contributes to the occupational stress among the secondary school teachers in Kota Bharu. Once a teacher fails to manage time properly, the occupational stress level is said to be increased.

Table 9: Regression Analysis Results

Variables	Coefficient Value, β	p -value	Decision Rule	Conclusion
Constant	-0.781	0.222	-	-
Time Management	0.441	< 0.0001	Reject H_0	Significant
Work – Related Stressor	0.272	0.001	Reject H_0	Significant
Self-Motivation	0.416	< 0.0001	Reject H_0	Significant
Teaching Experience	-0.044	< 0.0001	Reject H_0	Significant

5. Limitation and Directions for Future Research

Despite the results presented, some limitations are noted throughout the study. First, it only considers four factors as possible significant predictors of teacher’s stress. There are still many factors that may be significant. These include marital status, academic position, number of subject teach in a term and number of teaching hours per week. Future research should take these factors into consideration as possible significant predictors of teacher’s occupational stress for a more bona fide study. Besides, the study sample may not be the best representing the secondary school teachers in Kelantan since the sample size was generally small which selected the teachers from Kota Bharu district only. Future research should include larger population; possibly by getting teachers from each district in Kelantan to take a broader view. Last but not least, it is important to consider that the school culture can greatly affect the teachers level of stress. Additional research is necessary to investigate the aspects of school environment and culture that may be impact teacher’s experience of stress.

6. Conclusion and Discussion

The findings from Pearson Correlation analysis found that there is a significant linear positive moderate correlation between time management, work-related stressors and self-motivation with occupational stress level. This finding is identical with the finding from Anwar (2011) regarding job stress among secondary school teachers in Perak which stated that workload factor is positively related to the feeling of stress among the teachers. Meanwhile, teaching experience is found to have a

significant linear negative relationship with occupational stress level among secondary school teachers. This finding appears to contradict Farah (2015) who claimed that the more years of experience of a teacher causes the increasing of stress feeling compared to a less experienced teacher. It is because teachers that have more experience tend to feel stress due to the student's misbehaviour and the great changes in educational policy. Therefore, this study revealed that experienced teacher in Kota Bharu has been able to cope with the changes made in educational policy or possibly because the student's misbehaviour problem in Kota Bharu is low. Results from Multiple Linear Regression analysis show that time management, work-related stressor, self-motivation and teaching experience affect occupational stress among secondary school teachers in Kota Bharu. In addition, the finding discloses that time management is the factor that mostly contribute to the level of stress of the teachers.

This study can be useful to the school/ministry leaders in finding the possible ways to help decrease the stress levels of teachers and improve their perception on working experience. The education management/ministry can improvise and focus on the factors that increase the stress level of the teachers especially lack of time management since the stress will affect the quality of life of an individual. It is very important for the Ministry of Education to conduct seminar and courses for teachers regarding the effective ways to overcome and solve student's discipline problem at schools. Besides, the school administrators need to put more caution if there is a teacher who shows stress or depression symptoms by providing earlier counselling session. Other than that, teachers also need to give recognition that can motivate them to perform their duty better and feel appreciated. Hence, the teachers will carry out their responsibilities with passion and least stressful. On account of that, occupational stress level among school teachers will possibly decrease.

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