

SCHOOL RESOURCES, WORKLOAD, AND TEACHER JOB STRESS: A MODERATION MODEL OF GENDER

(Sumber Sekolah, Bebanan Kerja, Dan Tekanan Kerja Guru: Model Kesederhanaan Jantina)

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Abstract

One of the goals of the Malaysian Ministry of Education is to provide human resources to meet the needs of the country's progress in the future. Today's teachers are overburdened with tasks unrelated to teaching and learning, such as co-curricular activities, attending meetings, handling student programs, and managing tasks. The pressure faced affects the teacher's emotions and leads to job stress. Therefore, this study examined the moderator influence of gender on the relationship between school resources and workload on teachers' job stress. The study used a cross-sectional survey, and the data were collected from 109 teachers in Petaling Perdana. The study revealed significant relationships between workload, school resources, and job stress. The hierarchical regression results revealed that gender moderates the proposed relationships. Support strategies can be used as one way to overcome the emotional stress of teachers in schools.

Keywords: workload, resources, job stress, teacher, school

Abstrak

Salah satu matlamat Kementerian Pendidikan Malaysia adalah untuk menyediakan sumber manusia bagi memenuhi keperluan kemajuan negara pada masa hadapan. Guru masa kini terlalu dibebani dengan tugas yang tidak berkaitan dengan pengajaran dan pembelajaran, seperti aktiviti kokurikulum, menghadiri mesyuarat, mengendalikan program pelajar, dan mengurus tugas. Tekanan yang dihadapi mempengaruhi emosi guru dan membawa kepada tekanan kerja. Oleh itu, kajian ini mengkaji pengaruh moderator jantina terhadap hubungan antara sumber sekolah dan beban tugas terhadap tekanan kerja guru. Kajian ini menggunakan tinjauan keratan rentas, dan data dikumpul daripada 109 guru di Petaling Perdana. Kajian itu mendedahkan hubungan yang signifikan antara beban kerja, sumber sekolah, dan tekanan kerja. Keputusan regresi hierarki mendedahkan bahawa jantina menyederhanakan perhubungan yang dicadangkan. Strategi sokongan boleh digunakan sebagai salah satu cara untuk mengatasi tekanan emosi guru di sekolah.

Kata kunci: beban kerja, sumber, tekanan kerja, guru, sekolah

1.0 INTRODUCTION

According to former Minister of Education Malaysia, Dr. Maszlee Malik, as many as 2,123 out of 48,258 known teachers will experience moderate to high-pressure levels in 2018 (Rohman, 2018). A study by the National Union of Teaching Services (NUTP)

found that 70 percent of the 9,000 teachers nationwide are stressed because of their workload and must face the hassle in their workplace environment (Mohd Hafiz, 2019). Recently, the world of education was shocked by the revelation from the Senior Minister of Education, Datuk Radzi Jidin, that the retirement rate among teachers who retire compulsorily is the same as teachers who retire early. This means that many teachers are beginning to choose to end their service as teachers before the age of 60 (Mohamad Hafizi, 2022). This issue is shocking when the trend of teachers retiring early is increasing yearly. In 2015, 2,777 teachers chose to retire early, while the following year, 2016, increased to 3,591. This trend becomes more worrying when the figure continues to increase to 4,360 early retirement applications in 2021, equivalent to 1.06 % of the total number of teachers (Mohamad Hafizi, 2022).

Excessive stress at work can affect safety and occupational health (Ogakwu et al., 2024). It stems from a person's psychological and physiological disturbances (Bhattacharya & Ray, 2021; Carroll et al., 2022). If this problem continues to threaten a human resource organization, the accident rate in the workplace will continue to increase and can affect the productivity of a country (Castro, 2023; Metrailler et al., 2024). In Malaysia, the scope of the study of stress at work is still tiny (Chan et al., 2021). Teachers are the primary domain entrusted with the application process and imparting knowledge to the country's children; whether willingly or not, they must occasionally develop themselves with any form of change and renewal (Hojo, 2021). The situation generally results in teachers dealing with more challenging, heavier responsibilities and increasingly complex ones (Ozyildirim, 2024). Teacher stress can be defined as discomfort and negative emotions such as anger, anxiety, stress, and frustration stemming from aspects of their work as a teacher (Hojo, 2021; Wettstein et al., 2021). Teachers must do overtime and clerical work, provide teaching aids, and attend weekly courses or workshops while adjusting to new teaching methods (Herman et al., 2021). Therefore, it is essential to identify the causes of stress and ways to overcome them. The causes of stress among teachers can be divided into three categories: individual, organizational, and social (Junker et al., 2021). Individual factors include the teacher's personality, lifestyle, skills, and knowledge. Organizational factors include school structure, culture, system, and policy (Hagermoser Sanetti et al., 2021; Wiggan et al., 2021). Social factors include relationships with students, parents, colleagues, and authorities (Santamaría et al., 2021; Song et al., 2024). The main objective of this study was to examine the influence of school resources and workload on teacher job stress. The second is to examine the moderating influence of gender. By answering the research objective, the findings of this study can provide a preliminary overview of the phenomenon of stress among teachers.

2.0 LITERATURE REVIEW

2.1 Job Stress

The General Adaptation Syndrome (GAS) model comes from the study of Hans Selye, which explains the physiological theory of stress formation. The GAS model can be seen in Figure 1. Selye formulated stress reactivity as a three-phase process called the general adaptation syndrome. Phase 1 is alarm response. At this stage, the body changes from the first exposure to stress. At the same time, the body's resistance decreases, but after facing these changes, these changes will return to normal (balance point). If the stress is strong enough (such as a severe fire or extreme temperatures), death can occur. Phase 2 is the resistance stage. Resistance occurs if continued exposure to stress is compatible with adaptation. The body's characteristic alarm response signal almost disappears, and the resistance rises above normal.

Phase 3 is the fatigue stage. Continually facing the same stress, the body eventually successfully adapts to exhausting the adaptive energy. The alarm reaction signal appears again, but it cannot be returned to the original state (to its equilibrium point), so the individual suffers a severe illness that can lead to death.

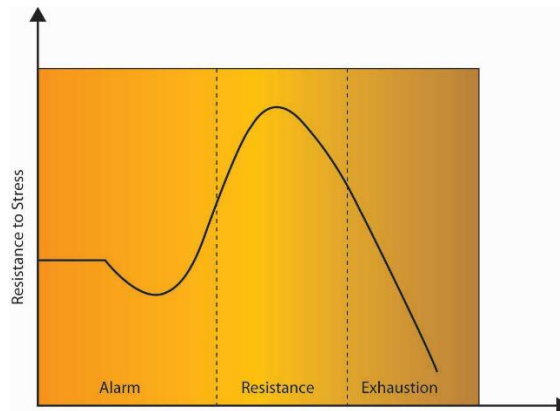


Figure 1: General Adaptation Syndrome (GAS) Model

Stress at work occurs when job requirements do not match an employee's abilities, resources, and desires. It can affect human psychology and physiology (Metrailler et al., 2024). An individual who feels stressed by the work done will show prolonged depression. When stressed, the psychology will be disturbed, and employees will fail to make good decisions (Tamunomiebi & Mezeh, 2021). This situation can affect their work performance and undermine organizational productivity. Stress at work is not one new phenomenon in the world. It exists in every organization, and no one can avoid stress (Hall, 2020). There are a few individuals who perform well if there is stress. Although most explanations in the literature show that a lot of workplace stress has a negative effect, there is no denying that it can positively impact a job (eustress). Some individuals thrive when there is stress (Lazarus, 2020). A level minimum of stress at work will cause an individual to respond to improve work performance, stimulate creativity, and encourage perseverance. Nevertheless, this situation is only faced by a few individuals, and anyone reacts adversely (distress) when stress becomes excessive and can be controlled (Yousaf et al., 2020). Work stress is unlike common workplace risks (agent neurotoxicity and economic risk). Excessive stress can lead to tension and cause depression. Depression effects from stress at work can cause psychological disorders (anxiety, sadness, and impatience/temper), physiology (stress blood and muscle tension), as well as behavior (poor work performance, accidents, sleep disturbances, and alcohol consumption) (Stogner et al., 2020). In addition, stress at work can cause an individual to be depressed, irritable, and dislike hanging out. Excessive stress can cause this problem to last up to the house and involve other parties. Stress that occurs at work can cause signs of anxiety. This cannot be very pleasant for their psychological and social relationships. Uncontrolled workplace stress can hurt employees, families, and organizations (O'Connor et al., 2021).

2.2 School Resources and Teacher Job Stress

Poor working conditions are an unsupportive school climate to work to the point of causing discomfort. According to Steiner and Woo (2021), school climate is the quality and characteristics of a school. There are four aspects of the school climate, namely cooperation (teacher interaction or communication in terms of work in school), teacher relationship with students, school resources (facilities available at school), and decision-making (teacher involvement in decision-making at school) (Collie et al., 2020). Job conditions in schools that are not conducive cause teachers to experience

stress (Wiggan et al., 2021). For example, good learning equipment or facilities can relax teachers in the learning process.

Thus, the unavailability of facilities and infrastructure results in teachers failing to teach maximally. By involving education stakeholders, providing school facilities is very important (Kaufman et al., 2022). However, in overcoming that, teachers must be more innovative and creative in teaching students so that students and teachers can create a conducive learning environment. Stress from school conditions can be anticipated by developing a positive and constructive mindset to improve quality working conditions at school (Collie et al., 2020). The issue of teacher shortage is not only in urban areas but also in rural areas. According to options, teachers are necessary for a subject to be adequately taught (Castro, 2023). Option teachers also play an essential role in developing students according to their knowledge. A lack of options for teachers will prevent a task from being carried out with specific and correct skills. When there is a teacher shortage in a school, other teachers will be burdened by having to assume more than ten essential roles so that there is no time with the family (Castro, 2023). This situation will cause a teacher to lack time to prepare teaching aids and have less time with students in the classroom (Wiggan et al., 2021). Therefore, the following hypothesis is proposed:

H1: There is a significant influence of school resources on teacher job stress.

2.3 Workload and Teacher Job Stress

Teachers in Malaysia must perform the essential duties as educators but also be entrusted to complete the Physical Activity, Sports and Co-Curriculum Assessment (PAJSK) reporting, Classroom Assessment, updating myPortfolio, celebrating sports day, canteen day, and others. According to Hojo (2021), the academic workload of teachers is related to essential tasks such as preparing the daily lesson plan, carrying out the learning and teaching (P&P) process, and writing self-reflection after completing the learning and teaching. Therefore, teachers are responsible for preparing and checking student assignments and side tasks such as making assessments and preparing student test reports or exams (Belizario et al., 2024).

In addition, according to Bellibaş et al. (2024), teachers act as subject coordinators, unit teachers, and secretary teachers of sports, games, clubs, and in uniform. Tiring work can be found in the profession involving human services such as teaching. Too much work has the potential to cause teachers to experience stress. This matter is in line with various studies that have documented that teacher stress can be caused by too much workload (Li et al., 2024). Furthermore, the teacher must also deal with the parents of the students. Teachers should explain about the academic and non-academic development of students. Until demands and responses when dealing with students' parents often make teachers uncomfortable. This discomfort certainly contributes to the teacher's experience of stress due to pressure from the student's parents (Hagermoser Sanetti et al., 2021). Therefore, the following hypothesis is posited:

H2: There is a significance influence of workload on teacher job stress.

2.4 Moderating Influence of Gender

Stress from within the individual contributes to it as a form of pressure that can be classified into demographics and personality. Boström et al. (2020) found that female teachers experience higher stress than male teachers. Ozamiz-Etxebarria et al. (2021) also support the consistency of findings. Neurologically, women's brains differ from men's, especially the thicker corpus callosum. This condition gives women more empathy and patience than men (Dreyer et al., 2022). When there is a problem,

women must share it and tell other people. In contrast to women, men choose to be alone with their problems. Because when men are emotional, they use the right brain, which is the solution brain. Men are stressed when testosterone levels are reduced (Dreyer et al., 2022). If testosterone is stable, the stress hormone, namely cortisol, will decrease. Stress can be controlled.

Different from estrogen (women). High estrogen does not reduce cortisol in men. Conversely, high estrogen increases feelings of fear and anger in men. Different from women, stress is controlled not by estrogen. Stress is controlled due to the release of oxytocin. When oxytocin is released into the system, feelings of love and affection increase significantly—for example, playing with babies or pets like cats. This will cause the oxytocin hormone to rise (Osca & López-Araújo, 2020). Topchyan and Woehler (2021) discovered that female teachers suffer burden at work due to their empathy and altruism. Female teachers create good relationships with students and are more engaged with students than their male counterparts and substitute teachers (Topchyan & Woehler, 2021). Many female teachers are less motivated and decide to change jobs, and some decide to retire early and continue to quit their jobs. Female teachers reported higher work overload, parenting stress, and work-to-family conflict (Hong et al., 2021). Therefore, based on the above discussion, the following hypothesis is proposed:

H3: Gender moderates the relationships between (a) school resources, (b) workload, and teacher job stress.

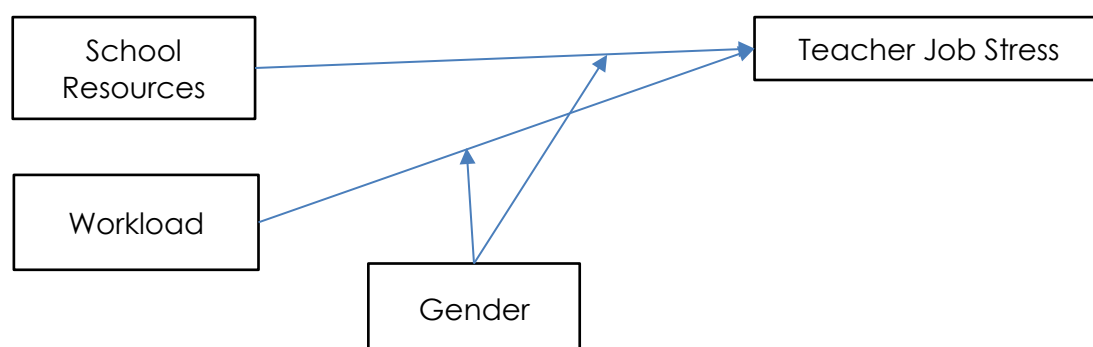


Figure 2 Portrays The Research Framework Of The Study.

3.0 METHODOLOGY

This study applies a survey method, and the population of the study is primary and secondary public school teachers in Petaling Perdana. The selection of the total sample is based on Green's (1991) formula. Green (1991) provides a rule of thumb of $50+8n$ (n =number of observations) for regression analyses. In this case, the minimum sample size needed in this study is 74. Thus, the sample for this study is acceptable at 150. In this study, the researcher used a questionnaire to obtain data from the respondents. The survey instruments were adapted from previous studies. The study used five items adapted from Betoret's (2009) study to measure school resources. Examples are "Schools have invested in fast Internet access that is available throughout the school" and "Schools have improved the amenities available for teachers and students to use." The 5-items to measure workload are adapted from Jomud et al.'s (2021) study. Examples of the items are "I have too much administrative work to do," "I have too many lessons to teach," and "I have excessive markings on student books or papers." Finally, Alhija's (2015) 5-item scale was adapted to measure teacher job stress. These include "I rarely feel calm," "I feel rushed; I do not have enough time," and "I feel a great weight on my shoulders." A 5-point Likert scale has

been used for measuring independent and dependent variables based on the scale based on the scale [1] = Strongly Disagree to [5] = Strongly Agree.

Hierarchical regression is employed to test hypotheses and relationships. In hierarchical regression, the independent variable (X) and dependent variable (Y) are broken down into several levels, each having a different influence on the dependent variable. A construct or variable is reliable when it gives a value of Cronbach's Alpha > 0.60 (Sekaran, 1992). Before doing the regression analysis, a classical assumption test was first performed. The classic assumption test includes a normality test that can be determined by looking at the skewness and kurtosis values. The skewness values must be between -3 and +3, while the kurtosis value must range between -10 and +10 (Kline, 2005).

4.0 FINDINGS

4.1 Demographic Profile

The researchers obtained feedback from 109 respondents. Most respondents were between 31 and 40 years old, with 39 respondents (35.8%). Next, most respondents are married, with 93 respondents (85.3%). Regarding teaching experience, most respondents have been teaching for 16 to 20 years (n=24, 22%). This demonstrates that most respondents are experts in their field of work.

Table 1 Demographic Table

Profile	Frequency (n)	Percentages (%)	
Age	21 – 30 years old	21	19.3
	31 – 40 years old	39	35.8
	41 – 50 years old	30	27.5
	51 – 60 years old	19	17.4
Marital status	Single	15	13.8
	Married	93	85.3
	Divorced	1	0.9
Teaching experience	Less than one year	3	2.8
	1 – 5 years	13	11.9
	6 – 10 years	22	20.2
	11 – 15 years	17	15.6
	16 – 20 years	24	22.0
	21 – 25 years	12	11.0
	26 – 30 years	18	16.5

4.2 Reliability and Normality Results

Table 2 shows the results of the study's reliability test. For the test's reliability to be determined, Cronbach's alpha value should be at least 0.60 or more (Sekaran, 1992). Cronbach's alpha value for the variables was above 0.60, indicating that reliability is assumed. Table 2 also explains the normality of distribution from the skewness and kurtosis. The results also showed that the normality of the data was assumed.

Table 2 Normality and Reliability Analysis

Variable	Skewness	Kurtosis	Cronbach's Alpha
School Resources	-1.682	2.113	0.930
Workload	0.386	-1.203	0.956
Teacher Job Stress	0.566	-0.920	0.958

4.3 Correlation Results

Table 3 Correlation Results

	Mean	SD	1	2	3
School Resources	4.038	0.957	1.000		
Workload	2.595	1.110	-0.220**	1.000	
Teacher Job Stress	2.391	1.056	-0.191**	0.840**	1.000

**Correlation is significant at the 0.01 level (2-tailed)

Table 3 shows a significant negative relationship between school resources and teacher job stress, $r = -0.191$, $p < 0.05$. Next, a significant positive relationship exists between workload and teacher job stress, $r = 0.840$, $p < 0.05$. Therefore, hypotheses 1 and 2 were accepted.

4.4 Moderation Effect of Gender

Table 4 Hierarchical Regression Results

Variable	Model 1	Model 2	Model 3
Model Variables			
School Resources	-0.400 0.000**	-0.383 0.000**	-0.310 0.000**
Workload		0.432 0.000**	0.489 0.000**
Interaction Effect			
Gender*School resources			0.178 0.000**
Gender*Workload			0.289 0.000**
R square	0.700	0.809	0.810
Adjusted R square	0.700	0.804	0.800

Regression Analysis

- Dependent Variable: Teacher Job Stress
- Model 1-Predictors: (Constant), School resources
- Model 2-Predictors: (Constant), School resources, Workload
- Model 3-Predictors: (Constant), School resources, Workload, Gender

Table 4 shows the regression result, indicating that the estimated equation is statistically significant at less than 1 percent ($p < 0.01$). This indicated that the models for Model 1, Model 2, and Model 3 are significant. Model 1 showed the regression analysis with two variables: school resources and teacher job stress. The model was significant with $R^2 = 0.700$ and Adjusted $R^2 = 0.700$. The result showed that school resources predict teacher job stress ($\beta = -0.400$, $p < 0.01$).

In Model 2, the two independent variables and the dependent variable were included in the model. After being statistically controlled, the model showed evidence of a direct relationship between independent and dependent variables. From Table 4, model 2 improved significantly with $R^2 = 0.809$ and adjusted $R^2 = 0.804$. The result showed that the control variables, namely school resources ($\beta = -0.383$, $p < 0.01$) and workload ($\beta = 0.432$, $p < 0.01$), were found to be significant at $p < 0.01$.

In Model 3, all variables and the interaction terms were entered to determine the significance of the interaction terms. In Model 3, when the interaction terms were included, the $R^2 = 0.810$, and the Adjusted $R^2 = 0.800$. The result showed that gender significantly moderates the relationship between school resources and teacher job stress ($\beta = 0.178$, $p < 0.01$) and between workload and teacher job stress ($\beta = 0.289$, $p < 0.01$). Therefore, hypotheses 3(a) and 3(b) were accepted.

To better understand the results of the moderator effect determined by the gender variable in the study, a simple slope graph was used to predict one point above the standard deviation and one point below the standard deviation rate of the gender variable. Figures 3 and Figures 4 show the simple slope graph made in this direction. As in Figure 3, school resources are on the X-axis, and teacher job stress is on the Y-axis in the simple slope graph. The relationship shows a significant negative correlation between school resources and teacher job stress both in females ($\beta = -0.211$, $p < 0.05$) and males ($\beta = -0.340$, $p < 0.05$). Thus, the relationship between school resources and teacher job stress is regulated by the gender variable. As in Figure 4, workload is on the X axis, and teacher job stress is on the Y axis in the simple slope graph. The relationship between workload and teacher job stress shows a significant positive correlation both in females ($\beta = 0.356$, $p < 0.05$) and males ($\beta = 0.300$, $p < 0.05$). Thus, the relationship between workload and teacher job stress is regulated by the gender variable.

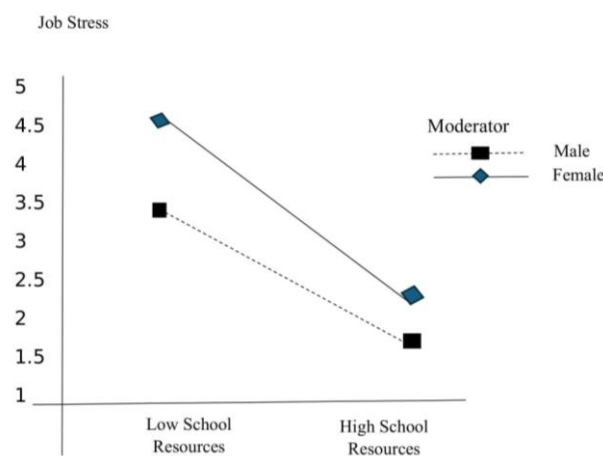


Figure 3 Slope Graph (Gender*School Resources)

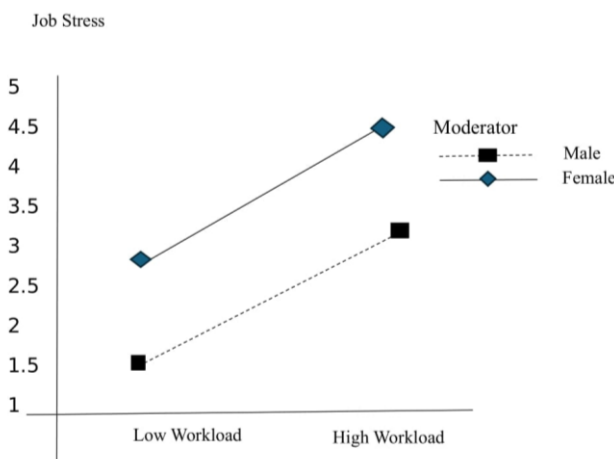


Figure 4 Slope Graph (Gender*Workload)

5.0 DISCUSSION

The role of the teacher is vital nowadays and has generally resulted in educators having to deal with various tasks and responsibilities. This situation causes teachers to be said to be very exposed to a high risk of experiencing stress. Therefore, this study examined the moderator influence of gender on the relationship between school resources and workload on teachers' job stress. The study revealed significant relationships between workload, school resources, and job stress. These findings have

been supported by previous studies such as Hojo (2021), Belizario et al. (2024), Bellibaş et al. (2024), Collie et al., (2020), and Wiggan et al. (2021). The hierarchical regression results revealed that gender moderates the proposed relationships where female teachers are higher than male teachers. These findings are consistent with previous studies such as Boström et al. (2020), Dreyer et al., (2022), and Ozamiz-Etxebarria et al. (2021). Working women can face conflict in fulfilling their responsibilities to family and work.

This conflict arises because of disability to meet the demands between work and family in a balanced way. Suggestions for improvement are to reduce teachers' workload, increase the number of teachers and support staff, and provide more quality childcare services (Taylor et al., 2021). When female teachers are at a good level of well-being, they can perform their daily tasks excellently. Services, facilities, and social support can improve the work-life balance. Support strategies can be used to overcome teachers' stress in schools. The study's findings show that administrators and management should adopt an open-door policy where teachers are welcome to meet with the principal if they face problems. In addition, providing a well-conditioned workplace can maintain the quality of work and reduce stress (Junker et al., 2021). Hyseni Duraku and Hoxha (2021) stated that transactional leadership behavior was found to have a positive relationship with work pressure, where if leadership behavior increases, work pressure will generally decrease.

There is a need to emphasize the importance of teamwork because work can be divided equally and completed in a shorter time (Taylor et al., 2021). Teamwork can increase teachers' potential, abilities, and skills and contribute to the school's excellence. Social support has been described as support that a person can access through social relationships with individuals, larger groups, and society, such as family, friends, and school management (Wettstein et al., 2021). If one obtains good social support from family members and friends, one will be better and not feel alone. The Ministry of Education can take preventive measures such as organizing workshops, seminars, and courses on managing stress problems teachers face. They need to monitor schools to get information from the principal and choose the course type that will be carried out.

The school administrator must be more sensitive and transparent in dealing with every staff problem. The administrator must provide various tools, modules, and reference materials for teacher needs. A positive relationship between teachers must also be established to reduce teachers' emotional stress (Li et al., 2024). The school needs to implement a program to strengthen teacher-student relationships. A positive relationship will indirectly create a healthy and harmonious environment. School administrators also can hold emotional management workshops for teachers. Workshops play a role in helping teachers control their feelings and emotions when they are facing a problem, especially at work. The ministry needs to make sure the digital infrastructure is robust and capable of meeting the needs of many teachers. Teachers no longer want to be stressed by digitization applications. The application should help teachers carry out their duties and facilitate their affairs, rather than the other way around, putting extreme emotional pressure on teachers.

6.0 CONCLUSION

Work stress faced by teachers has become an issue that is often researched in various educational studies. These studies can be used to help teachers increase public understanding of the problems faced by teachers as well as to form effective action plans for overcoming teacher work stress. Therefore, it is hoped that more studies related to teacher work stress can be conducted. All parties should give serious

attention to the issue of teacher work stress. This problem should be addressed before it spreads and becomes common among teachers. As the saying goes, "Prevention is better than cure." The study was carried out in several secondary and primary schools in Petaling Perdana. Future researchers are encouraged to expand the sample size to the other population. They should also consider other factors expected to be the core cause of stressful work for teachers. The cause of stress can also be discussed from the following perspectives: (a) disciplinary problem factors, (b) bureaucracy of school administration management, (c) teachers' interest in the education profession, and (d) personality type. To produce a more robust and consistent research response, a comparison can be made related to the level and cause of teacher stress, which is by reviewing to what extent the stressful situation that arises at school, especially at the beginning of school session, in the middle of the school session, and at the end of the school session. This study also does not consider the factors of the teachers' race and religion. Research further suggested looking at stress differences between races and religions of the teachers in several states.

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