

Stress Factors and their Impact on Teachers in Secondary Schools in Sarawak: A Study of Selected Maktab Rendah Sains Mara (MRSM)

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To Link this Article: <http://dx.doi.org/10.6007/IJARPED/v13-i4/23512> DOI:10.6007/IJARPED/v13-i4/23512

Published Online: 04 December 2024

Abstract

This study investigates the causes and extent of stress among teachers in secondary schools, specifically in selected Maktab Rendah Sains MARA (MRSM) in Sarawak. Using a quantitative approach, a structured survey was conducted to 114 teachers across MRSM schools. Key stressors included workload, administrative leadership, and working conditions. The findings revealed significant differences in stress levels based on demographic factors, including years of experience and age. Through statistical analyses, including multiple regression, ANOVA, and t-tests, workload and administrative leadership were found to be the most influential factors contributing to teachers' stress. These results have implications for policy interventions aimed at improving teacher well-being and educational outcomes by reducing stressors. Recommendations for better stress management practices among teachers and administrative teams are discussed.

Keywords: Teacher Stress, Workload, Working Conditions, Maktab Rendah Sains Mara (Mrsm), Stress Management, Multiple Regression Analysis

Introduction

Teachers play a pivotal role in shaping future generations, with their performance directly influencing the quality of education. However, teaching is often considered a highly stressful profession due to various demands placed on educators. In Malaysia, teacher stress has been widely documented, yet specific studies focusing on Sarawak, particularly among MRSM teachers, remain limited. This study aims to address this gap by investigating the primary causes of stress and their effects on MRSM teachers in Sarawak. This study highlights the need for further exploration of work-related stress, particularly in contexts such as the MARA Junior Science College (MRSM) in Sarawak, which consistently demonstrates strong academic performance. Investigating teacher stress in high-performing institutions may provide valuable insights into its underlying factors and management. While previous studies often associate stress with negative outcomes or diminished performance, this study aims to examine whether stress can, in certain contexts, contribute to enhanced performance.

Stress is commonly described as an unpleasant emotional experience, often accompanied by feelings of anxiety, frustration, and irritation, and is typically linked to specific social issues (Haydon et al., 2018). It can also be defined as an individual's response to stimuli that exert psychological and physical pressure (Jepson & Forrest, 2010). Stress may arise from identifiable causes, but even subtle, ongoing pressures from work, school, family, and social relationships can negatively impact both the mind and body (Scott, 2020). According to Muthuvelayutham & Mohanasundaram (2012), stress occurs when an individual perceives themselves as unable to cope with the pressures and challenges, they faced. Whether stress leads to harm or serves as a source of motivation depends largely on the individual's response. Stress can result in physical and psychological dangers, but it can also provide the energy necessary to address life's challenges, eventually producing physical, psychological, social, and emotional responses.

Educators encounter both physical and mental stressors (Gallardo-López et al., 2019), and numerous studies have highlighted the link between the teacher-student relationship and teachers' quality of life. Disruptive student behaviors have been associated with increased teacher exhaustion and decreased enthusiasm (Aldrup et al., 2018; Aparisi et al., 2019), potentially leading to teacher attrition (Skaalvik & Skaalvik, 2018; Chambers Mack et al., 2019). High levels of stress among urban teachers are unsurprising given the significant challenges they face, including limited funding, overcrowded classrooms, persistent disruptive student behaviors, and the pressures of accountability policies (Ouellette et al., 2018).

A report published in the *International Journal of Environmental Research and Public Health* explored the impact of the COVID-19 pandemic on teacher stress, revealing that 980 teachers in Romania experienced burnout and "technostress" during the transition to online teaching between April and May 2020. These teachers faced stressors such as uncertainty about their job roles, challenges in class supervision, and fatigue from online teaching. Similarly, a report by *Mental Health Research Canada* revealed that the pandemic significantly increased stress and anxiety among teachers, with reported anxiety levels rising by 5% to 25%.

During the pandemic, educators at all levels of schooling—primary and secondary—were forced to adapt to new, unfamiliar teaching methods. Teachers were inundated with emails and messages from students and parents, had to manage unfamiliar technology, and were tasked with redesigning traditional teaching activities. The pandemic accelerated the adoption of changes linked to the Industrial Revolution 4.0, requiring teachers to become more dependent on technology (Ratten & Jones, 2020). This shift placed additional burdens on teachers as they navigated new teaching formats during the COVID-19 crisis. The challenge of effectively utilizing technology, such as social media, in the classroom is significant, as many teachers were not well-prepared to integrate these tools into their teaching practices, leading to challenges in student comprehension (Chaturvedi, Kumar Vishwakarma, & Nidhi, 2020).

If not managed effectively, teacher stress can have detrimental effects on students, including contributing to low self-esteem (Ramberg et al., 2019). Palanivel & Michael (2020), found that uncontrollable stress adversely affects job-related behaviors, leading to diminished interest in teaching, frequent errors, neglect of students' needs, aggression toward students, and

increased absenteeism. Furthermore, the study indicated that male teachers were more affected by job-related stressors than their female counterparts.

Problem Statement

Recent shifts in teaching modalities due to the COVID-19 pandemic have intensified stress levels among educators. In Sarawak, teachers face distinct challenges, including adapting to remote teaching and contending with limited resources. This study explores how various factors—such as workload, leadership practices, and working conditions—contribute to stress among teachers. It also aims to offer insights into effective stress management strategies for schools. The primary objective of this analysis is to examine whether there exists a significant relationship between the predictor variables (stress-inducing factors) and the independent variables (such as biographic and demographic variables, including school management structures). Research by McCarthy (2019) and Esteban (2019) indicates that stress is an integral aspect of teachers' daily work environment, often triggered by factors like heavy workloads, insufficient parental involvement, negative attitudes toward teachers, poor student discipline, and the demands of fulfilling additional administrative responsibilities. School management teams are frequently engaged in ongoing efforts to develop stress-coping strategies tailored to individual teachers. To effectively support teachers, school management teams should establish clear and achievable expectations, provide robust social support, engage in positive interactions, and show appreciation for educators' efforts.

Research Objective

The primary objective of this study is to explore the diverse forms and dimensions of stress that teachers in MRSB schools in Sarawak experience. The research will examine specific stress triggers within the distinct context of these academically rigorous boarding schools, considering both internal and external factors. This includes investigating how teaching responsibilities, student behaviour, administrative duties, and the broader school culture contribute to stress.

To address this central objective and answer the research questions, the study will focus on the following key areas:

1. To examine the nature and scope of stress experienced by teachers in MRSB schools in Sarawak.
2. To investigate demographic variations in stress levels among teachers.
3. To assess the impact of various stress factors, including workload and administrative leadership, on teachers' stress levels.

Methodology

A quantitative research design was employed for this study, utilizing a structured survey administered to 114 teachers across MRSB schools in Sarawak. The survey questionnaire was systematically divided into sections to assess demographic variables, stress levels, and specific stress factors, such as workload and administrative leadership. To analyze the data, statistical methods including multiple regression analysis, Analysis of Variance (ANOVA), and t-tests were employed to examine the relationships between demographic variables and stress levels, providing a comprehensive understanding of the factors contributing to teacher stress in these schools.

Results

Of the 114 respondents, 51.8% were female, with the majority falling within the 31 to 35 age range. Most participants (57%) reported having 6-10 years of teaching experience. A pilot test was conducted to assess the reliability of the instrument, refine individual components, and ensure the clarity of the instructions. The pilot's study also identified potential ambiguities in the questionnaire, addressing concerns related to material validity. According to Davis (2000), content validity is subjectively assessed by evaluating the relevance of the instrument's items as perceived by a group of subject matter experts. For the pilot test, 30 teachers were selected at random. The pilot instrument was distributed to the teachers on March 18, 2021, and data collection concluded on March 21, 2021, with a 100% response rate.

Reliability of Items

Cronbach's alpha is the most used measure to assess the internal consistency of an instrument. It yields a value between 0 and 1, where a reliability score of 0.7 or higher is deemed acceptable, 0.8 or higher is considered good, and 0.9 or higher is regarded as excellent. According to the literature on the instrument's source, the instrument demonstrated high internal consistency, with a Cronbach's alpha reliability coefficient of 0.920. This suggests that the questionnaire possesses a high degree of internal consistency.

Table 1

Reliability of Items

Reliability Statistics	
Cronbach's Alpha	N of Items
.920	36

Interpretation of Results

The findings of this study are consistent with previous research, which identifies workload and insufficient administrative support as the primary sources of stress among teachers. In the specific context of MRSM schools, renowned for their rigorous academic standards, the pressure on educators is particularly pronounced. This heightened pressure reflects the demands of maintaining high performance in a competitive academic environment, which exacerbates the stress experienced by teachers.

Question 1: What is the nature of stress experienced by teachers in MRSM schools in Sarawak?

The questionnaire included six stress factors that were designed to help identify which factors contribute most to teachers' stress. These six factors are as follows:

1. Students
2. Workload
3. Working Conditions
4. Job Prospects
5. Human Relationships
6. Administrator Leadership

Based on the interviews conducted, these six factors were recognized as key contributors to teacher stress. Among them, two factors emerged as particularly significant: 45% of respondents cited workload as a major stressor, while 30% identified administrator leadership as a key stress factor. These six factors were then statistically analyzed using SPSS. Multiple regression analysis was employed to determine which factor contributed most significantly to teacher stress. A backward regression method was chosen to reduce the number of predictors, mitigate multicollinearity issues, and prevent overfitting.

The results of the analysis are presented in Table 2. These findings indicate that the predicted scores (Y) derived from the linear equations of the stress factors are correlated with the observed actual stress scores. The researcher tested five models to identify the best-fitting equation. The first model, which included all six factors, produced an R-value of 0.358. This indicates a moderate correlation between the predicted and criterion scores. Additionally, the adjusted R-square value in Table 2 is 0.079, suggesting that 7.9% of the variance in the criterion scores can be explained by the linear relationship with the predictor variables.

Table 2

R values for 5 model of stress factors

Model	R	R Square	Adjusted R Square	Std Error of the Estimate
1	.358 ^a	.128	.079	.90388
2	.358 ^b	.128	.087	.89966
3	.358 ^c	.128	.096	.89553
4	.356 ^d	.127	.103	.89202
5	.355 ^e	.126	.110	.88847

Research Question 2: Are there any demographic differences related to stress levels?

This section explores the relationships between stress levels and various demographic characteristics of teachers. SPSS for Mac was used to perform various statistical analyses, with the significance level set at $\alpha = 0.05$ for all tests. The primary aim of this analysis is to examine teachers' perceptions of their stress levels across different schools.

To identify whether there were significant differences in stress levels among teachers from different schools, Analysis of Variance (ANOVA) was conducted. The least square difference (LSD) and Games-Howell multiple comparison tests were also applied to determine which specific schools differed significantly in terms of stress levels. The hypothesis tested was as follows:

H1: There is a significant difference in the mean stress levels experienced by teachers across the three schools.

The results, presented in Table 3, indicate that there were significant differences at the 5% significance level in the mean stress levels experienced by teachers based on the following factors:

- **Students** (p-value = 0.001)
- **Workload** (p-value = 0.001)
- **Work Condition** (p-value = 0.009)

However, no significant differences were found in the mean stress levels for the following factors:

- **Job Prospect** (p-value = 0.605)
- **Human Relationship** (p-value = 0.191)

These findings suggest that certain stress factors, such as students, workload, and working conditions, contribute to significant differences in stress levels among teachers, while others, such as job prospects and human relationships, do not appear to have a substantial impact on stress across the schools.

Table 3

Analysis of Variance (ANOVA) for stress levels experienced by teachers by schools

		Sum of Squares	df	Mean Square	F	Sig.
STUDENT	Between Groups	10.984	2	5.492	9.581	.001*
	Within Groups	63.054	110	0.573		
	Total	74.039	112			
WORKLOAD	Between Groups	9.864	2	4.932	9.539	.001*
	Within Groups	56.875	110	0.517		
	Total	66.739	112			
WORKCONDITION	Between Groups	7.091	2	3.545	4.883	.009*
	Within Groups	80.598	111	0.726		
	Total	87.689	113			
JOBPROSPECT	Between Groups	0.864	2	0.432	0.505	0.605
	Within Groups	95.034	111	0.856		
	Total	95.898	113			
HUMAN RELATIONSHIP	Between Groups	2.69	2	1.345	1.683	0.191
	Within Groups	88.733	111	0.799		
	Total	91.423	113			
ADMINISTRATOR LEADERSHIP	Between Groups	6.043	2	3.022	5.861	0.400
	Within Groups	57.227	111	0.516		
	Total	63.27	113			

Research Question 3: What are the impacts of various stress factors such as workload and administrative leadership?

The study reveals that most teachers (54.4%) experience moderate stress in their roles, which aligns with findings from Shen, H. J., Basri, R., and Asimiran, S. (2018), where 59% of teachers reported moderate stress. Only 8.8% (ten teachers) indicated that they experience very high levels of stress, while 11% reported that teaching is not stressful at all.

During the interviews, most teachers expressed that they perceive their stress levels as moderate. Teacher B, for example, shared that after five years of teaching at MRSM, she has become better at managing stressful situations. She highlighted her ability to control and effectively deal with her students and school principal as key factors in her stress

management. Teacher C, on the other hand, emphasized the supportive environment at MRSM, where colleagues collaborate to accomplish tasks, particularly during the shift to online teaching amid the COVID-19 pandemic. This collaborative approach has helped alleviate some of his stress, especially when faced with unfamiliar tasks.

These insights suggest that while workload and administrative leadership are recognized stress factors, the ability to adapt to stress and the support system within the school environment play significant roles in reducing teachers' stress levels.

Table 4

Stress level experienced by the teachers

Stress level	Frequency	Percent (%)
not stress at all	11	9.6
mild stress	28	24.6
moderate stress	62	54.4
very stress	3	2.6
extreme stress	10	8.8
TOTAL	114	100.0

Implication for Practice

To effectively mitigate teacher stress, school management teams should adopt more supportive leadership styles and consider reducing the administrative burdens placed on teachers. Implementing stress management programs, such as time management workshops and emotional support systems, could have a positive impact on teachers' well-being, fostering a healthier work environment.

The findings of this study indicate that teachers' stress levels were not significantly influenced by demographic variables such as gender, place of origin, race, qualifications, years of teaching experience, age, subjects taught, or classes taught. This result aligns with the study by Aziz, M. B. (2010), which highlighted the varied nature of factors contributing to teacher stress. These discrepancies can likely be attributed to differences in the context of the studies, the characteristics of the study samples, and variations in the instruments used to measure stress.

Research on teacher stress in Malaysia remains limited, with most studies focused on specific regions within Peninsular Malaysia. For instance, Othman and Sivasubramaniam (2019) investigated teacher stress in Klang, while Ismail, Abdullah, and Abdullah (2019) conducted their study in the eastern part of Peninsular Malaysia, and Shen, Basri, and Asimiran (2018) focused on Selangor. In Sarawak, the pioneering study on teacher stress was carried out by Abang Mat Ali (1998) in the Kuching Samarahan Division, followed by Bilal (2014), who examined stress within MARA institutions in the Kuching area.

These studies predominantly employed mixed-method approaches, combining quantitative and qualitative methodologies. Data collection methods included questionnaires and face-to-face interviews, while statistical and qualitative analyses were utilized to interpret the findings. Collectively, these studies provide valuable insights into teacher stress by identifying

the percentage of highly stressed teachers and highlighting key stressors, contributing significantly to the existing literature.

Understanding the sources of teacher stress is critical for the MARA Secondary Education Sector, as it can facilitate the development of remedial actions or preventive measures to help teachers manage stress more effectively. Insights into the relationship between personality traits and stress levels can inform teacher recruitment, training, and planning, while exploring the relationship between stress and demographic variables can enhance decision-making processes related to teacher postings. Furthermore, reducing stress-related challenges and enhancing organizational support can enable school administrators and teachers to improve overall education quality.

While most studies emphasize the negative impact of stress, this study aims to challenge that narrative by exploring whether certain levels of stress can positively influence performance. By identifying optimal stress levels that may enhance teacher effectiveness, this research seeks to provide school administrators with actionable strategies to modulate teacher stress, ultimately improving student outcomes and fostering better organizational performance.

Limitations

This study was limited to selected MRSM schools in Sarawak, and the sample size may not be fully representative of the broader population of teachers in Malaysia. To enhance the generalizability of the findings, future studies should consider expanding the sample size and including a greater number of schools from different regions.

Regression analysis in this study identified workload and administrative leadership as the primary contributors to teacher stress. The ANOVA results further revealed significant differences in stress levels based on age and years of teaching experience. Specifically, teachers with less than five years of experience reported higher stress levels related to workload. These findings suggest that newer teachers may face greater challenges in managing the demands of teaching, possibly due to limited experience in coping with workload pressures.

Conclusion

This study underscores the significant impact of workload and administrative leadership on teacher stress in MRSM schools in Sarawak. By identifying these key stress factors, the research provides valuable insights for developing strategies to improve the well-being of teachers. Addressing and reducing teacher stress can lead to enhanced educational outcomes, as well as a healthier and more supportive work environment for educators.

Future research should expand to include a wider geographical scope, incorporating teachers from diverse regions to allow for more generalizable findings. Additionally, future studies should explore specific intervention strategies aimed at mitigating teacher stress, such as professional development programs, wellness initiatives, and improvements in administrative support systems.

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