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Job Demands & Job Resources: Predicting Burnout and Work Engagement among Teachers

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Abstract. In recent years, there has been a growing consensus among researchers and educators that studies related to teachers are pertinent to understand ways to improve teachers' work engagement. This study adapted Hakanen, Schaufeli and Ahola [1] Job Demands-Resources Model to understand teachers' burnout and work engagement in Malaysia. Questionnaires were sent out to 1,300 teachers in Negeri Sembilan schools and 600 responses were obtained after the one month data collection period. The data was analyzed through Structural Equation Modelling (SEM) using Amos 21.0. The research findings and implications are further discussed in this paper.

Keywords: burnout, job demands, job resources, teachers, work engagement

1. Introduction

Researchers and educators agree that the most crucial factor in determining a student's performance is the teacher's quality. Teachers play such a valuable role in shaping the student's growth, academically and socially. A teacher's role has evolved from the traditional role, which used to be solely teaching, to include also administrative work. In addition, teachers are also responsible for disciplining and counselling the students. School teachers are also considered the backbone of a country's development since teachers play a crucial role in strengthening unity and building national identity as well as developing human resources to meet the challenges of globalization. All these contribute to the point of view that education is the pillar of success to a country, while school teachers are pillars to a successful education. Thus, it is not surprising that school achievement is popularly discussed in Malaysia and plays a significant role in the development of the country.[2]

Studies related to teachers are pertinent to understand ways to improve their performance and should be given continued support especially in Malaysia where this area of research has not been comprehensively conducted. In recent years, there has been an increasing interest in research relating to teachers' workload. Hakanen, Bakker and Schaufeli [3] found that as the level of workload increases, teacher's burnout also increases. Even though there has been no specific studies to examine whether teachers in Malaysia experience burnout, the studies by Mukundan and Khandehroo [4] and Wong and Tay [5] provide some evidence that teachers in Malaysia do feel burnout. Burnout as described by Manderbacka, Lahelma and Martikainen [6] is a syndrome of cynicism, exhaustion, and reduced professional efficacy. Empirical studies show burnout causes turnover.[7, 8, 9] For instance, Babakus, Yavas and Karatepe [7] found that job

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demands such as role conflict and role ambiguity stimulate frontline employees' emotional exhaustion and turnover intentions. Furthermore, burnout has also been reported to reduce work engagement.[10, 1] The implications of teachers' disengagement are tendency to quit, less interest in the job, and lower performance in school.[10, 11] Such implications can be costly to all parties including schools and district education offices. For example, students will lose the value of being taught by an experienced teacher whilst schools and district education offices will need to recruit and train replacement teachers.

The present study was conducted because teachers in Malaysia and many countries are burdened with workloads that may lead to job stress. A study on 26 occupational types revealed that teachers, social officers, customer service representatives, ambulance drivers, prison and police officers experience the most stress.[12] One reason for the high level of stress amongst teachers is because they have to perform multiple responsibilities such as teaching and administrative work and hence become fatigued.[13] Similarly, Hakanen, Schaufeli and Ahola [1] also found that due to their heavy workload, teachers were more likely to feel emotional exhaustion which is a component of burnout. Teachers' mental resources and energy to perform well and accomplish good results will be reduced when they are emotionally tired because of their job demands.[14] Thus the objective of this study is to identify the factors that lead to burnout and work engagement among teachers.

2. Conceptual Framework and Hypothesis

The present study is based on the job demands-resources model by Hakanen, Schaufeli and Ahola [1]. The job demands-resources model has been widely used to aid discussions on how job burnout occurs through high demands and a lack of resources. Job demands are stressors in a situation which involves high efforts endured to achieve the expected performance level. Job demands are generally perceived to be a loss because meeting such demands requires the investment of valued resources, viewed as gains. Therefore, workers need to invest more resources to meet the demands and to protect themselves from further depletion. Strain occurs when the workers feel they no longer have sufficient emotional resources to handle the interpersonal stressors.[15] In this model, job resources may play either an intrinsic motivational role because they foster employees' growth, learning and development, or they may play an extrinsic motivational role because they are instrumental in achieving work goals.

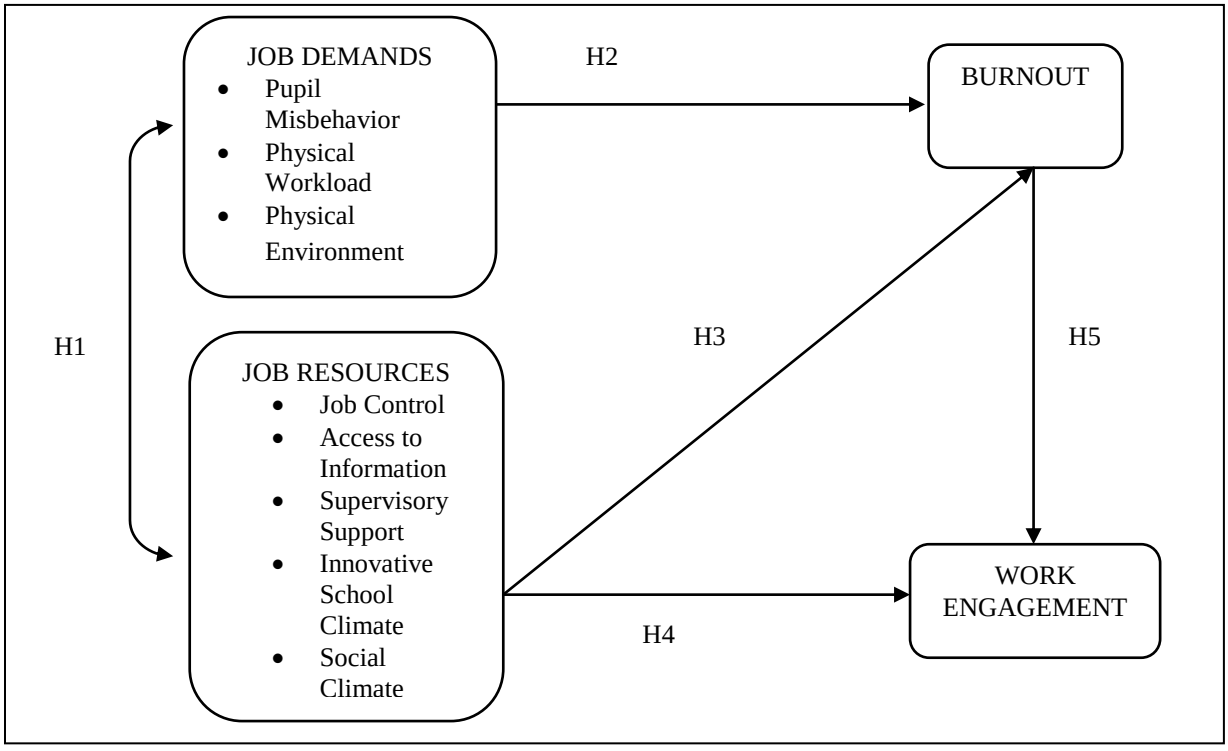

Fig. 1: The Conceptual Framework (Adapted from Hakanen, Schaufeli and Ahola [1])

Job demands refer to aspects of physical, social or organizations that require from employee continuous efforts, physically or mentally, and are therefore associated with certain physiological and/or psychological costs.[10] In this study, job demands consist of pupil misbehaviour, physical workload, and physical environment as the job demands of teachers. Job demands can be a stressor in a situation which involves high efforts to endure the expected performance level.[1] In contrast, job resources may play either an intrinsic or extrinsic motivational role because if teachers lack resources, they cannot cope with demanding demands.[1] Job resources refer to aspects of physical, psychological, social or work organizations that may i) cut down the job demands and the cost associated with physiological and psychological, ii) are purposeful in accomplishing work goals and iii) stimulate individual growths, learning and development.[10] A lack of job resources can lead to increased job demands and in contrast, when job resources are available, job demands are low.[10] Indeed, when job resources are lacking (such as lack of support from the headmaster) the demand on teachers will be high. For example, when teachers are required to handle a pupil's misbehaviour alone without the support of their headmaster, this would place a physiological/psychological strain on the teacher. Hence it is hypothesized that:

H1: There is negative relationship between the job demands of the teachers and the job resources provided by the school.

Teaching is a stressful profession and teachers show high levels of exhaustion and cynicism.[6, 16, 17] According to Maslach [18], burnout is caused by high job demands that drain the employee's energy, and in an attempt to cope with the resulting burnout, the employee withdraws mentally. Several studies investigating burnout show that burnout is related to job demands, such as time pressure and work overload. [19, 20] This is because giving too much for too long is energy depleting and this leads to burnout. For instance, when teachers are burdened with a heavy workload for a sustained period of time, the energy required to perform their tasks would be depleting and this leads to burnout. Thus, the following hypothesis was developed:

H2: There is a positive relationship between job demands of the teachers and feeling of burnout among them.

As for the relationship between job resources and burnout, a lack of job resources (e.g., job control or supervisory support) would lead to burnout.[9] This is because, according to the conservation of resource theory by Hobfoll [15], psychological strain happens when one of these circumstances occurs: i) when resources are vulnerable, ii) when there was no resources, and iii) when individuals do not gain the expected level of return regardless of their invested resources. For example when teachers do not have job control and access to information, they tend to feel depressed because they are not being given adequate resources to do their job. In the long run, the employee's energy is drained and this will lead to burnout as the teacher cannot cope anymore with the depression. Hence, the following hypothesis is developed:

H3: There is a negative relationship between job resources provided by the school and burnout among teachers.

Work engagement is defined as a positive, fulfilling, work-related state of mind that is characterized by vigour, dedication and absorption.[21] The motivational process links job resources with organizational outcomes (e.g., organizational commitment) via work engagement.[9] Job resources might play an intrinsic motivational role because they enhance a teacher's growth, learning, and development, or they may play an extrinsic motivational role because they are instrumental in achieving work goals. Hence, it is postulated that job resources are positively related to engagement.[10] Teachers will experience high work engagement if their job resources such as job control, access to information, and supervisory support are available because the job resources help them to perform their jobs. On the other hand, they are likely to have poor work engagement if these resources are lacking.[9] This is because when teachers lack resources, it makes it difficult for them to perform their jobs which lead to withdrawal behaviour, and the long term consequence of this withdrawal is disengagement from work.[10] Hence, the following hypothesis is developed:

H4: There is a positive relationship between job resources provided by the school and work engagement of the teachers.

Concerning the relationship between job resources and work engagement, we posit that that it is mediated by burnout. The work engagement among the teachers would increase if their job resources are available, whereas, they are likely to have poor engagement if these resources are lacking.[9] This is because a high level of burnout caused by a lack of resources is associated with low levels of engagement.[9] Teachers' work engagement will increase if they do not feel burnout because of a lack of resources. In contrast, when teachers do feel burnout because of a lack of resources, their work engagement will decrease. Hence, the following hypothesis is developed:

H5: Burnout mediates the relationship between job resources provided by the school and work engagement of the teachers.

3. Methodology

3.1. Measures

Job demands (12 questions) and job resources (14 items) were measured using questions developed by Hakanen, Schaufeli and Ahola [1]. Both items were measured on a five-point Likert scale (Job demands, 1 = Never, 5 = Very Often; Job resources, 1= Very sufficient, 5=Totally Sufficient). The items for burnout were based on 15-items on the Maslach Burnout Inventory General Scale (MBI-GS) by Maslach and Jackson [22]. All items were scored on a seven-point Likert scale (0=Never; 6=Always). Work engagement was measured using 17 items from the Utrecht Work Engagement Scale (UWES) by Schaufeli, Salanova, Gonz á lez-Rom á and Bakker [21]. The 17 questions were measured on a seven- point Likert scale (0=Never, 6=Always).

3.2. Samples

A list of primary and secondary schools were obtained from the Negeri Sembilan State Education Department. Permission to conduct the survey among the primary and secondary schools in Negeri Sembilan had to be obtained from the Ministry Of Education and the Negeri Sembilan state education department prior to contacting the schools. Although there were nine districts in Negeri Sembilan, only three districts with the highest number of schools were selected. A total of 1,300 questionnaires were distributed to these three districts: Seremban (149 schools), Jempol (66 schools) and Kuala Pilah (63 schools). Six questionnaires were distributed to all the schools in the three districts. The questionnaires were addressed to the school's headmaster. A total of 600 responses were obtained after the one month data collection period and this constituted a response rate of 46%. However, 30 questionnaires were unusable due to incomplete sections and analysis was carried out on 570 respondents.

Approximately eighteen percent of the respondents were male and eighty-two percent of respondents were female. The respondents were evenly distributed across different age groups. They also have substantial teaching experience: < 4 years (24.70%), 5-9 years (19.30%), 10-14 years (15.80%) and more than 15 years (40.20%). Most of the respondents have a degree education (see Table 1).

Table 1: Sample Characteristics (N=570)

Variables	(%)
Gender	
Male	18.40
Female	81.60
Age	
Under 30 years	19.50
30-39 years	33.70
40-49 years	33.70
50 years and above	13.10
Job Tenure	
0-4 Years	24.70
5-9 Years	19.30
10-14 Years	15.80
15 Years and above	40.20
Qualification	
Teachers' College Certificate	19.80
Diploma	21.10
Degree	49.80
Master	9.10
Others (e.g : Ph.D)	0.20

4. Results of Hypothesis Test

Structural Equation modelling was used for hypothesis testing. The SEM analysis was carried out using AMOS 21.0. The proposed measurement model demonstrated an acceptable fit to the data (χ^2= 757.68, p= 0.00, df = 174; GFI = 0.88, CFI = 0.90, NFI = 0.88, RMSEA = 0.08) with 90% confidence interval between 0.07 and 0.09. The model achieves an acceptable fit to the data when GFI and CFI equals or exceeds 0.90, and RMSEA values fall below 0.08.[23] After establishing an acceptable level of validity in the measurement model, the assessment then proceeded to the proposed structural model.

The fit statistics of the proposed structural model suggest good fit as they are all within the range associated with good model fit ($\chi2$ = 257.76, p= 0.00, df = 58, GFI = 0.93, CFI = 0.93, NFI = 0.90, CFI = 0.93, RMSEA = 0.08) with a 90% confidence interval of 0.07 to 0.09). The mediation model also demonstrated an acceptable and improved level of fit when compared with the structural model without mediation ($\Delta\chi2$ = 44.82, Δdf = 2, $\chi2$ = 257.76, df = 58, p-value = 0.000, CFI = 0.92, RMSEA = 0.08 with a 90% confidence interval of 0.07 to 0.009). The proposed structural model is given in Figure 2. The summary of hypotheses testing results are given in Table 2. The mediation effects were tested using the procedure suggested by Baron and Kenny [24] and Sobel's test.

Table 2: Summary of Hypothesis Results

No.	Hypothesis	Estimate and p-value	Conclusion
1.	There is negative relationship between job demands of the teachers and job resources provided by the school	-0.13; 0.03	Supported
2.	There is a positive relationship between job demands of the teachers and feelings of burnout among them.	0.20; 0.00	Supported
3	There is a negative relationship between job resources provided by the school and burnout among teachers.	-0.35; 0.00	Supported
4.	There is a positive relationship between job resources provided by the school and work engagement of the teachers.	0.30; 0.00	Supported
5.	Burnout mediates the relationship between job resources provided by the school and work engagement of the teachers	-0.46; 0.00; 3.01*	Supported

*Value based on Sobel's test for mediation

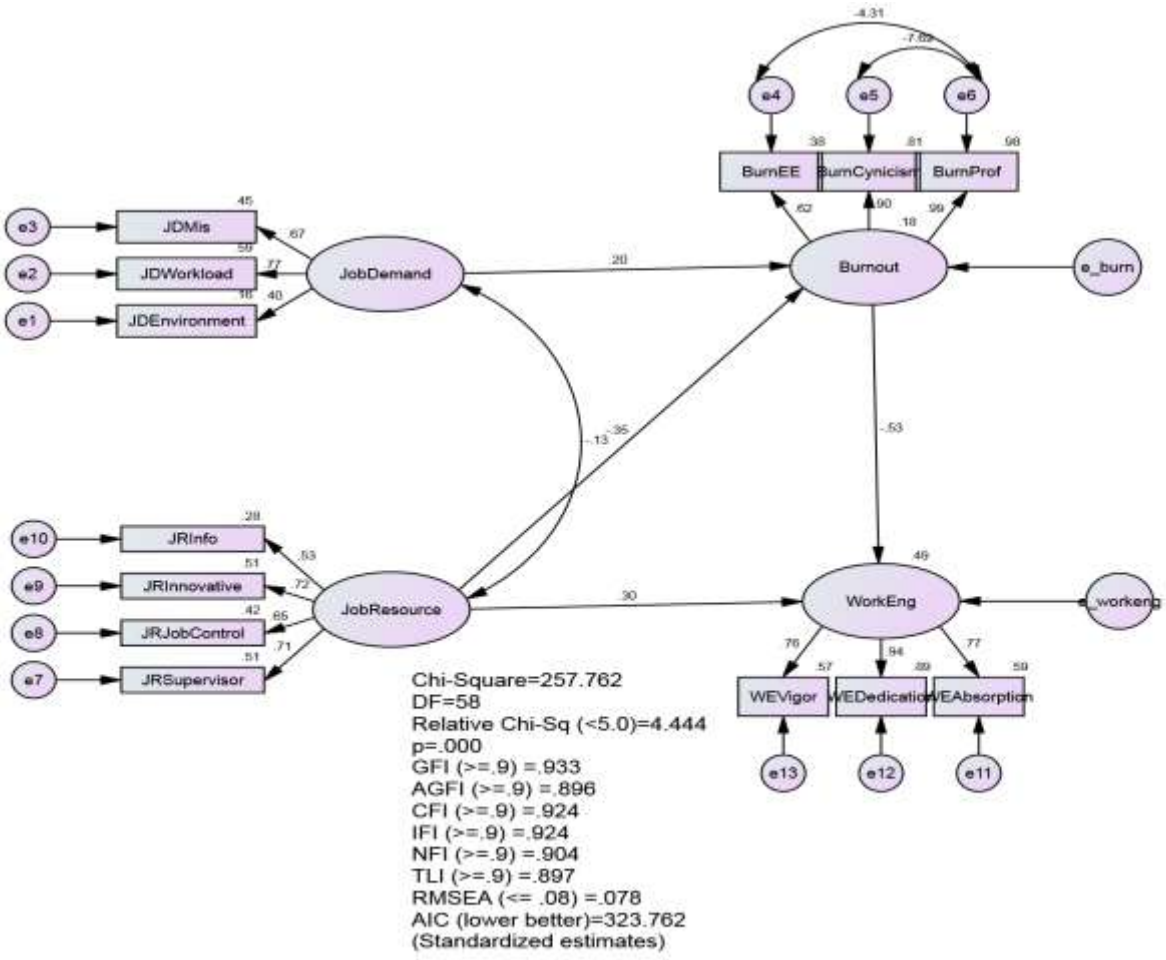

Fig 2: The Proposed Structural Model (with significant parameter estimates)

5. Discussion & Conclusion

The results showed that job demands are negatively correlated to job resources. The results is consistent with previous research that reported a lack of job resources would result in high job demands while the availability of job resources would be give rise to low job demands.[1, 10, 20] The results of this study also showed that there was positive relationship between job demands and burnout. In other words, high job demands such as physical workload and pupils' misbehaviour would drain the teachers' energy. In an attempt to cope with that would result in burnout. When teachers are consistently laden with a heavy workload, this would deplete the teachers' energy which then leads to burnout. The findings of this study are consistent with other research which have also found that job demands is positively related to burnout.[8, 10] Hence to effectively reduce burnout, it is suggested that the school reduces some of the physical workload of teachers such as administrative works performed by the teacher and provide sufficient time for teachers to complete their tasks. Other than that, improving the physical environment in the school will also reduce teachers' burnout such as improving the quality of indoor air in classrooms and teachers' room, providing a safe and comfortable working environment and equipping schools with sufficient teaching aids and laboratory equipment.

From Table 2, it can be seen that job resources have a negative significant effect on burnout, indicating that low job resources will lead to burnout. Teachers would experience burnout when they are not provided with sufficient resources such as job control, access to information and supervisory support. These findings suggest several courses of action for headmasters. First, teachers must be empowered to make decisions that concern their tasks (job control). Second, teachers should be provided sufficient information about what is expected from them at their workplace (access to information). Third, headmasters must provide support and timely feedback on how well the teacher is performing their jobs (supervisory support). When teachers have such resources, their burnout level will be reduced and they will engage to the schools and students.

From the statistical results in Table 2, we can also see a significant relationship between job resources and work engagement, consistent with past studies.[25, 26, 27, 20] Thus, to increase the work engagement of teachers, policy makers need to provide more resources to teachers. Finally, the findings indicate that burnout creates a link between job resources and work engagement. Although it is mentioned in literature that high job resources lead to work engagement, not much is known about how job resources lead to increased work engagement.[1, 20, 27] The current study found that high job resources eventually lead to work engagement by reducing burnout (the mediator). In other words, when there is a lack of job resources, the work engagement of teachers would reduce because of burnout. The study has gone some way towards enhancing our understanding of why high job resources would lead to increased work engagement.

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