The Relationship between Workload and Performance of Research University Academics in Malaysia: The Mediating Effects of Career Commitment and Job Satisfaction

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Abstract: The purpose of this study is to test the relationship between job workload and academic performance among university academic staff in Malaysia. The paper also attempts to discuss and then seek empirical evidence to the two mediational paths (namely, career commitment and job satisfaction) that explain the focal relationship between job workload and academic performance. To test the three proposed hypotheses, the study used cross-sectional data collected from academic staff serving in Malaysian Research Universities (MRUs). The final sample of 191 valid and complete responses was analysed using SmartPLS 3.3.3 to test the hypotheses. Results showed that workload is negatively related to academic staff performance. In addition, job satisfaction mediates workload and academic staff performance linkage. These findings reinforce the importance of job satisfaction as an influencing factor against the deleterious effect of job workload and academic staff performance. The study has shown that, contrary to our expectations, career commitment does not mediate the relation between job workload and academic staff performance. Going forward, this study provides new insights about the effect of job workload on the performance of university academic staff through intervening variables.

Keywords: Career commitment, Job satisfaction, Job workload, Academic staff performance, Malaysian Research University

1. Introduction

Universities are part of the larger academia delivery system that serves the fundamentals of research and education. In the two-way legacy process of knowledge exchange, research is the inception of lessons. Upholding this fundamental practice of research and teaching, Malaysian universities focus on the dual-core functions, namely knowledge creation and knowledge transmission (Yousefi & Abdullah, 2019). As the delivery standard of Malaysian higher education changes according to the needs of globalization, so, it goes parallel with the responsibilities of academic staff (Basarudin et al., 2016). University academic staff are required to perform complex work, such as conducting competitive

research, publications, fulfilling teaching and supervision duties, executing research funding applications, and attending to administrative tasks - juggling all these while working in an increasingly demanding environment. In this atmosphere of increased demands and loads, academic staff have professed concerns regarding declining career commitment on the back of management-centric universities (Dorenkamp & Ruhle, 2019).

With mounting load and pressure, academic staff finds that their satisfaction at work has dipped (Jameel & Ahmad, 2020). An increased workload has been reported as a major stressor especially when earnest work is not given due recognition (Chin & Rasdi, 2014). Consequently, demotivation and diminishing work performance set in (Kenny, 2018). In the research and teaching literature, several studies have focused on academic staff's search for meaning, and the effects were reported to be positively related to work performance (Han et al., 2020; Mehrad, 2020). Nevertheless, these studies had a restricted scope - the comparison between the value of the educational system with job tasks, in general, and the quantity and quality of academic staffs' capabilities. Without scrutinizing staff performance, important variables such as workload types and consequences were not considered.

Among the literature on university academic staff, insufficient studies have explored the cohort's experience of job constriction and vulnerability to stress that were contributed by work overload (Zaidan & Juariyah, 2020). Some studies focused on how excessive workload perceptions led to stress and general apprehension (Nugraha et al., 2018). Other researchers observed that academic staff who report excessive workloads have difficulty in performing problem-solving skills and personal motivation (Melin et al., 2014). Yet, there is a research gap in the testing of complex models that deepens the understanding of university academic staff's perceived workload and performance effects. Finally, the general literature also highlighted the fact that although the larger society acknowledges the important role of university academic staff's in knowledge transmission, little attention and concern have been given to the consequences of this cohort's vulnerability to workload impacts, in terms of job satisfaction, career commitment, and academic performance (Mukhtar & Fook, 2020). Houston et al. (2006) stated that level of performance remains high with academic staff attributing this to academic staff commitment and satisfaction rather than salary and working conditions.

Thus, the present study was designed to examine the effect of workload on performance among academic staff in Malaysian universities. In management theory and research, academic staff performance has been a robust variable examined in recent decades (Khairina et al., 2020). Hence, this study specifically examined job satisfaction and career commitment as mediators towards performance. Both job satisfaction (Yee, 2018) and career commitment (Fu & Deshpande, 2014) have been investigated thoroughly and separately as antecedents of performance while the workload was confirmed as an antecedent to both variables. Thus, we also propound on the possibility of their mediating effects on the workload–performance relationship, which calls for a thorough investigation. In particular, we study the mediating effects of job satisfaction of academic staff and career commitment (the degree to which academic staffs are loyal to their profession) on the relationship between the workload and academic performance (the degree to which academic staff or institutions have achieved their short-or long-term academic goals). With this in mind, this research may add to the extant literature on the stressor-attitude-outcome dynamics in the academic workplace.

2. Workload and Academic Staff Performance

The workload is the all-encompassing and wide-ranging activity that consumes employees' time. This includes but is not limited to executing professional duties and responsibilities, as well as the direct/indirect pursuit of work-related interests. In the context of higher education, numerous researchers used similar workload definitions when studying the academic staff cohort (Pace et al., 2019; Sallehuddin et al., 2019). Rahman and Avan (2016) defined lecturers' specific workload as the amount of time spent in performing a portfolio of researching and teaching tasks, facilitating co-curricular activities, and being involved in meetings, among others. In the context of Malaysian universities, the workloads of academics are grouped into at least five categories which are teaching and supervision, publication, research and consultation, managerial work, and community services (Basarudin et al., 2016). All academic staff members are expected to perform in the above-mentioned areas, regardless of being employed on a teaching-research or research-only basis. At present, the university academia faces constant challenges in meeting the diverse needs of students and performance requirements. The pressure becomes overwhelming for academic staff, and when stress ensues, their

capacity declines (Martin-Sardesai & Guthrie, 2018). As commonly reported, when subjected to greater job demand of tasks, the common manifestation is numerous errors and delayed responses. Additionally, two causes of diminishing performance quality are high-task workload and task complexity (Lyell et al., 2018). Sufficient studies have found that work overload is a stress trigger when employees are confronted with either the quantity or difficulty of tasks (Kimura et al., 2018). As the task quantity/volume and difficulty increases, employees' level of job stress rises in tandem. Finally, many studies have examined the workload-job stress-job performance dynamics (Pace et al., 2019). Thus, we propose the next hypothesis:

H_1. Job workload will be negatively related to academic staff performance.

2.1 The Mediating Role of Job Satisfaction

This study adopts the job satisfaction definition of Joung et al. (2015), which refers to the emotional contentment that shapes attitudes about the job. Accordingly, this construct is built with two components, namely cognitive and affective. Weiss (2002) has reported that both components affect overall attitude and behavior. In a study situated within the university context, the researcher observed a negative relationship between job overload and satisfaction at work among academic staff (Ahsan et al., 2009). In a Malaysian context, one study found that job workload negates job satisfaction among university teaching staff (Leung et al., 2000). Conversely, a strong and positive relationship was found between job satisfaction and job performance where job satisfaction was suggested as a good predictor for superior performance at work (Diamantidis & Chatzoglou, 2019). Another study observed how job satisfaction had led to an increase in work efficiency and performance (Aziri, 2011). This underscores the importance of employee satisfaction in the aspect of organizational productivity and performance (Aksoy et al., 2018). In an Arabic culture-centric study, the researcher reported that job satisfaction displayed mediating effects when role conflict and role ambiguity influenced multiple aspects of organizational commitment (Yousef, 2017). In a study of southern Indian employees in a transportation company, job stress, job satisfaction, and job commitment displayed partial mediating effects between the quality of work-life and work-life balance (Aruldoss et al., 2020). As far as the profession in academia is concerned, academic staff's level of satisfaction may implicate how emotionally attached they are towards their university (Szromek & Wolniak, 2020). Looking into the aspect of employee health, researchers observed that psychological health was impacted by workload as a work stressor and job satisfaction as a mediator (Jou et al., 2013). Similar findings were reported when job satisfaction mediated the workload-job performance relationship (Jalal & Zaheer, 2017). The mediating role of job satisfaction and its importance were upheld by Crede et al. (2007) as it carries various situational and dispositional characteristics and is an agency of organizational outcomes. Thus, we propose the next hypothesis:

H_2. Job satisfaction will mediate the association between workload and performance of university academic staff.

2.2 The Mediating Role of Career Commitment

This study adopts the career commitment definition provided by Blau (1985), which refers to employee's emotional experience of being satisfied with and their aspiration to further develop themselves in their current career. According to Colarelli and Bishop (1990), committed workers tend to first set career-centric aims, recognize viable paths, and then endeavor to achieve them. Lee et al. (2000) highlighted that career-committed employees are dedicated to work engagements and display exemplary performance compared to those who are less committed. This is reflected in the attitudes of university academics who are highly committed to their career. This cohort tends to establish an understanding of their institution's needs, and then proactively adjust and align their career goals with institutional goals (Wang et al., 2017), ideally supporting job involvement and innovation-driven behaviors. Chang (1999) observed that career-committed academic staff became highly motivated when their expectations were matched by their institution. In extending the commitment-stress-outcome literature, Suliman (2002) interestingly reported a converse outcome; career-committed employees professed greater intensity of stress than their less-committed colleagues. Specifically, academic staff

with a high level of commitment to their job tend to undertake more responsibilities or work longer hours which does not necessarily result in more productivity. Instead, it can result in overworked and dissatisfied staff members, adversely impacting the bottom line in eventuality. Such faculty members ultimately bear academic hardships due to their vested emotional investment and identification with their esteemed institution (Szromek & Wolniak, 2020).

In addition to the stress-to-outcome link, the mediating role of commitment has been tested within numerous management contexts. In the study of work commitment, Morrow's (1993) suggestion involves the examination of a reciprocal effect lending to the fact that joint work commitment is possibly a superior work outcome predictor. This examination angle may be better compared to separate examinations of each work commitment forms of influence on outcomes at work. A past study found that job satisfaction and organizational commitment played full mediating roles on the dynamics of person-job fit and turnover intentions (Chhabra, 2015). In a self-evaluation impact study, the researchers scrutinized job satisfaction with the principal aim to confirm career commitment as a mediator (Zhang et al., 2014). Consequently, career commitment only played a partial mediating role in the core self-evaluation and job satisfaction relationship. To the best of the researcher's knowledge, studies on the workload-performance relationship where commitment is examined and tested as a mediator have yet to emerge (see Figure 1). Thus, we propose that:

H_3. Career commitment will mediate the negative relationship between workload and academic staff performance.

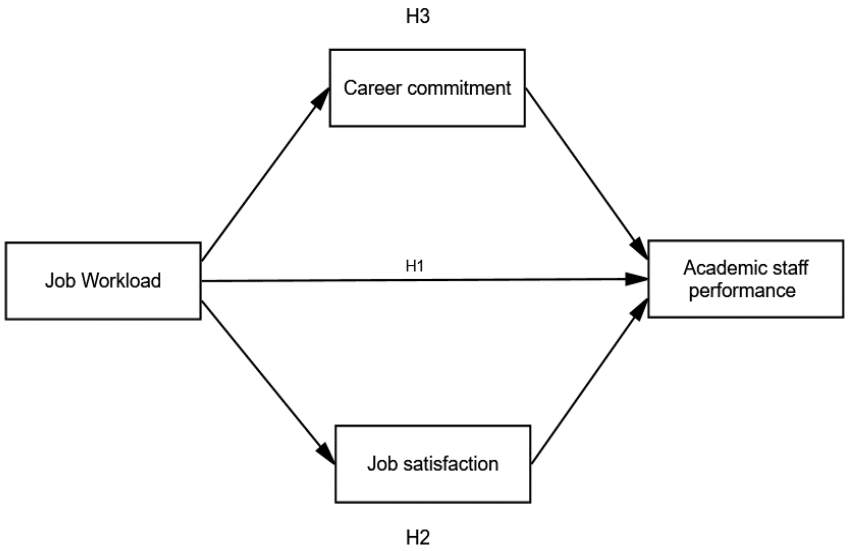

Figure1: The research framework

3. Methods

3.1 Research Design

It is an integral part of the research. It is a basic structure covering the overall strategy regarding the method to be used in the study. Selecting a correct research design that tallies with the objectives helps obtain an authentic result (Haegele & Hodge, 2015). Survey research design and quantitative methods have been used for this study as we do hypothesis-generating research (exploratory research) (Andrade, 2019).

3.2 Sample

Globally, research universities (RUs) are leading in terms of scholarship, innovation, and solutions - key ingredients in the makings of a developed country. These contributions from RUs create

impacts on the country's economy, security, and wellbeing. Malaysia's higher education sector comprises two major providers, namely public and private institutions (Fernandez, 2010). To foster competition and boost performance rankings, public universities are classified into three groups: RUs, wide-ranging universities, and focus universities. The concept of Malaysian Research Universities (MRUs) was first introduced as a response for Malaysia to successfully transition from a developing country status to developed country status. Consequently, five public universities have been designated as MRUs (Ministry of Education, 2015). It can be discerned that the faculty members of these MRUs may face more occupational issues than what is previously known since university management teams are dealing with the pressure of participating in fierce competition with their institutional peers (Ramli et al., 2020). Notably, the success of academic programs heavily relies on competent faculty leaders and members - their dedication towards teaching as well as their commitment and integrity towards competitive, rigorous research (Noordin & Jusoff, 2010; Roslan et al., 2021).

The respondents of this study were faculty members employed in the five Malaysian Research Universities (MRUs). The targeted population was 9,333 academic staff selected based on their institution's latest number of academic staff by position, citizenship, and gender (Ministry of Education, 2015). The final sample consisted of 191 completed responses through the stratified random sampling technique. The response rate was 76.4% from the 250 sets of questionnaires initially distributed. Women represented 46.59% (89 respondents) and men 53.4% (102 respondents) of the sample with an average age of 45 years old. The sample includes diverse positions, ranging from senior lecturers (47.6%) and lecturers (5.8%), followed by associate professors (33.5%), and professors (13.1%) (See Table 1).

Table1. Demographic results.

Demography	**N**	**Percentage**
Gender		
Female	89	46.59%
Male	102	53.4%
Position		
Senior lecturers	91	47.6%
Lecturers	11	5.8%
Associate professors	64	33.5%
Professors	25	13.1%
Research University		
UM	40	20.94%
Faculty of Science	13	
Faculty of Education	14	
Faculty of Business and Accountancy	13	
UKM	37	19.37%
Faculty of Social Science and Humanities	10	
Faculty of Science and Technology	10	
Faculty of Economics and Business	17	
USM	37	19.37%
Faculty of Biological Sciences	12	
Faculty of Medical Sciences	13	
Faculty of Educational Studies	12	
UPM	38	19.89%
Faculty of Human Ecology	15	
Faculty of Educational Studies	14	
Faculty of Medicine	9	
UTM	39	20.41%
Faculty of Engineering	13	
Faculty of Science	13	
Faculty of Built Environment and Surveying	13	

Note. UM= University of Malaya, UKM= Universiti Kebangsaan Malaysia, USM= Universiti Sains Malaysia, UPM= Universiti Putra Malaysia, UTM= Universiti Teknologi Malaysia.

3.3 Procedure

We used a stratified random sampling technique and identified the samples that represented specific academic ranks in several selected faculties or schools from each MRU. Firstly, we determined the sample according to the faculty research areas (pure science and social sciences). Then, we selected the related department and the sample according to the rank of academicians (lecturer, senior lecturer, associate professor, and professor). A sample of 191 staff was selected and distributed among selected faculties. We ensured that the number of academic ranks selected in a faculty or school must be in the same proportion as the overall academic ranks available in the university itself. The proposed stratified random sampling procedure is according to the number of faculties and academic ranks being selected, given the population was N = 9,333. Questionnaires were distributed to the respondents after signing a consent form. The permission for questionnaire completion was obtained from university chairpersons and faculty deans. The respondents took an average of 30 minutes to complete and return the questionnaires. The data collection period ended within two months.

3.4 Measures

The qualification of variables was based on several criteria, specifically the validity and reliability of measures. The variables have already been examined in past studies where they also demonstrate sound psychometric properties.

Job Workload. This measure was estimated using a scale with nine items, some of which include academic workloads in management over the past 12 months, the quality and quantity of teaching and research-related works, adequate time, and a reasonable number of consultations undertaken (Houston et al., 2006). A sample item is "I regularly need to work after hours to meet my work necessities." This 5-point Likert scale is anchored in the extreme scores of one (strongly disagree) and five (strongly agree) at both ends, with a Cronbach's alpha value of 0.872.

Academic Performance. The 10-item global academic performance scale was used to measure staff's academic performance (Abubakar et al., 2018). The items are academic reputations, employability of graduates, faculty ratio, study output, globalization, academic prize and field medals, research grant, abundant resources, infrastructures and facilities, and community service. This 5-point Likert scale is anchored in the extreme scores of one (strongly disagree) and five (strongly agree) at both ends, with a Cronbach's alpha value of 0.974.

Career Commitment. Blau's (1985) scale was used to assess this measure. Sample items are "I like the advocatory profession too much to give it up," and "I am disappointed with being a lawyer" (reverse-scored). This 5-point Likert scale is anchored in the extreme scores of one (strongly disagree) and five (strongly agree) at both ends, with a Cronbach's alpha value of 0.90.

Job Satisfaction. Tsui et al.'s (1992) 6-item scale was used to estimate this measure. Sample items are "How satisfied are you with the nature of the work you perform?" and "Considering everything, how satisfied are you with your current job situation?". This 5-point Likert scale is anchored in the extreme scores of one (very dissatisfied) and five (very satisfied at both ends, with a Cronbach's alpha value of 0.79.

4. Data Analysis and Results

Data analysis was conducted using the SmartPLS 3.3.3 software through the partial least square structural equation modeling (PLS-SEM) technique. It was chosen to test the proposed hypotheses following Hair et al.'s (2017) advocacy on its suitability for examining from simple to complex models as well as from small to medium sample sizes.

4.1 Assessment of Measurement Model

The measurement model was assessed for reflective indicators and the reliability and validity of constructs were confirmed. Following Hair et al.'s (2017) guidelines, factor analysis was conducted on the various latent constructs. The values of the constructs' composite reliability scored from 0.759 to 0.898, which were above the threshold of 0.7 (Hair et al., 2017).

The model's validity was confirmed by examining convergent validity. First, the results show the value of factor loadings were above 0.70. This indicates that the items of each research variable achieved acceptable convergent validity. The other two major measurements were the average variance extracted (AVE) which scored above 0.50 while composite reliability (CR) scored 0.70. Finally, the value of Cronbach's alpha was above 0.70. This indicates that the research variables achieved acceptable convergent validity (Hair et al., 2017) (see Table 2).

Table 2. Construct reliability and validity measure

Latent variables	Indicators	loading	Cronbach's α	rho_A	CR	AVE
Academic staff performance	AP3	0.822	0.885	0.887	0.913	0.636
	AP4	0.809				
	AP5	0.816				
	AP6	0.785				
	AP7	0.759				
	AP8	0.792				
Career Commitment	CC1	0.773	0.879	0.895	0.906	0.580
	CC2	0.812				
	CC3	0.849				
	CC4	0.706				
	CC5	0.710				
	CC6	0.811				
	CC7	0.702				
Job Satisfaction	JS3	0.835	0.898	0.901	0.920	0.621
	JS1	0.726				
	JS4	0.795				
	JS5	0.806				
	JS6	0.811				
	JS7	0.779				
	JS8	0.759				
Job workload	WL1	0.779	0.759	0.762	0.846	0.580
	WL2	0.779				
	WL3	0.779				
	WL4	0.779				

Note. AP= Academic staff performance, CC = Career Commitment, JS= Job Satisfaction, WL= Job workload, CR= Construct reliability, AVE= Average variance extracted.

Discriminant validity uses empirical standards to distinguish the degree of one construct to another. As proposed by researchers to combine several methods, this study applied the Fornell-Larcker criterion with the Heterotrait-Monotrait (HTMT) ratio of correlations (Henseler et al., 2015). Following the Fornell-Larcker criterion, the results indicated that discriminant validity was achieved because the square root of the AVE of each construct was higher than the correlation values among any construct pairings. Also, the values of HTMT were below the threshold value of 0.85 in all cases as shown in Table 3. Consequently, this study confirms that academic staff performance, career commitment, job workload, and job satisfaction could be mutually discriminated in the study.

Table 3. Measurement model: discriminant validity

	Fornell-Larcker Criterion				Heterotrait-Monotrait Ratio (HTMT)		
	ASP	CC	JW	JS	ASP	CC	JW
ASP	0.797						
CC	0.379	0.762			0.421		
JW	-0.243	-0.389	0.762		0.291	0.456	
JS	0.730	0.453	-0.291	0.788	0.814	0.513	0.342

Note. ASP = Academic staff performance; CC = Career commitment; JW = Job workload; JS = Job satisfaction.

4.2 Structural Model Assessment

A measurement model assessment was conducted, and it confirmed the validity and reliability of the structural model proposed by this study. Given this, it was observed that the structural relationships were established. As the target latent construct, academic staff performance yielded an R^2 of 53%, which demonstrated a moderate predictive power. Meanwhile, as the mediating latent constructs, career commitment yielded an R^2 of 15% and job satisfaction at an R^2 of 8.5%. Figure 2 shows the structural model illustrating the direct and indirect effects of job workload on academic staff performance via the mediating paths of career commitment and job satisfaction, respectively. Figure 2 also presents the standardized path coefficients and explained the variance of endogenous variables. Finally, any threats of collinearity of the focal constructs were ruled out because the variance inflation factor (VIF) values yielded less than five (see Table 4).

Table 4. Collinearity statistics of structural model (inner VIFs)

Construct	ASP	CC	JW	JS
ASP		1.385	1.202	1.284
CC				
JW		1.000		1.000
JS			1.000	

Note. ASP = Academic staff performance; CC = Career commitment; JW = Job workload; JS = Job satisfaction.

In determining the significance (path coefficient) of relationships between the variables (see Table 4), the bootstrapping technique was utilized (Hair et al., 2017). The procedure involves resampling the sub-sample of 5,000 cases that are equal to the valid observations. It was based on the two-tail significance level of 5%.

PLS provides the understanding of constructs in their exogenous-endogenous exchange in the structural model because it allows for the calculation of path coefficients and the coefficient of determination (R^2) values of the endogenous constructs (Figure 1). The significance of path estimates was calculated by performing bootstrap analysis with 5,000 resamples.

As shown in Table 4, these results fail to reject H_1. The results revealed that job workload is negatively related to academic staff performance (β= -0.243.48, t = 3.294, $p < 0.001$). To test the parallel mediation, the bootstrapping technique was used by conducting the resampling procedure with a substitution, which has insignificant characteristics to the normality distribution of data (Preacher & Hayes, 2008). In Table 5, in the presence of mediators, the direct effect between workload and academic staff performance is not significant (β = -0.018, t = 0.287, p > 0.001). According to indirect effect, career commitment does not mediate the relation between job workload and academic staff performance (β = -0.021, t = 0.783, $p > 0.001$), thus the results reject H_3. Instead, job satisfaction mediates the relationship between job workload and academic staff performance (β = -0.204, t = 2.771, $p < 0.001$), thus the results fail to reject H_3.

Table 5. Mediation result.

Model "A" Total Effect					Model "B" Direct effect					Model ''C'' Indirect effect				
			Bias corrected bootstrap (95% CI)					Bias corrected bootstrap (95% CI)					Bias corrected bootstrap (95% CI)	
Path	Coefficient	t-value	LCI	UCI	Path	Coefficient	t-value	LCI	UCI	Path	Coefficient	t-value	LCI	UCI
JW→ASP	-0.243***	3.294	-0.37	-0.08	JW→ASP	-0.018	0.287	-0.15	0.099	JW→CC→ASP	-0.021	0.783	-0.096	0.025
										JW→JS→ASP	-0.204	2.771	-0.376	-0.059

Note. ASP = Academic staff performance; CC = Career commitment; JW = Job workload; JS = Job satisfaction.

Table 6 presents the effect size (f^2) of the structural model. Comparing against Cohen's (1988) guideline (small = 0.02, medium = 0.15, and large = 0.35), the effect size of all the variables were small (< 0.15). The exception was the job workload effect on career commitment with a score of 0.179 and job satisfaction on academic staff performance at 0.822, both of which indicated medium effects. Although the direct relationship between job workload on academic staff performance is significant, we put forth a cautionary note when interpreting this finding because the effect size is meagre at 0.093.

Table 6. Effect size (f^2)

Construct	ASP	CC	JW	JS
ASP		0.005	0.001	0.822
CC				
JW		0.179		0.093
JS				

In addition to R^2 and f^2, the predictive relevance of the structural model was also measured using "Stone-Geisser's Q^2 value" (Woodside & Zhang, 2013). The rule suggests that the Q^2 value for the certain reflective endogenous latent variable if is larger than zero, then the structural model has predictive relevance otherwise not (Hair et al., 2017). The blindfolding results demonstrate that academic staff performance (Q^2= 0.315), career commitment (Q^2=0.078), job workload (Q^2= 0.08), and job satisfaction (Q^2=0.048) have satisfactory predictive relevance (Henseler et al., 2015). We confirmed the overall fit of the PLS structural model when the standardized root-mean square residual (SRMR) value scored 0.06 - much less than 0.10 threshold (Henseler et al., 2015) (see Table 7).

Table 7. The predictive relevance of the structural model

Construct	SSO	SSE	Q^2 (=1-SSE/SSO)
ASP	1,146.00	784.473	0.315
CC	1,337.00	1,232.54	0.078
JW	764	764	0.081
JS	1,337.00	1,272.81	0.048

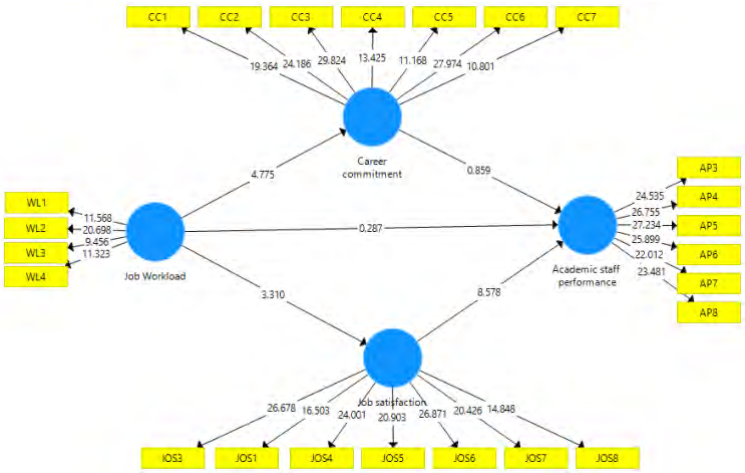

Fig 2. Model for the study.

5. Discussion and Implications

The principal purpose of this study is to provide more detailed investigations regarding workload-related issues currently being dealt by university academic staff. This will inform university managers in developing and/or fine-tuning relevant policy guidelines to resolve serious faculty work issues. The proposed conceptual model provides much-needed discussions on the effects of workload on academic staff performance and the consequences of career commitment and job satisfaction as mediators to this relationship. We attempted to answer the first question of this study by examining and uncovering work overload impacts on the cohort's performance. The next attempt was to identify if career commitment and job satisfaction operated within the relationship mechanism of workload and performance.

The results of the data analysis reinforce the assumption that work overload negates the performance of university academic staff in Malaysia, hence hypothesis 1 was supported. This present finding supports other past investigations, specifically those conducted by Yousefi and Abdullah (2019), and Teater and Mendoza (2018). To reinforce our empirical findings, we invoke the Yarkes–Dodson law (Teigen, 1994) on a stress-performance relationship, which suggests that stress causes diminishing returns in performance; after physiological or mental stimulation/stress increases performance to an optimal point, the capacity to perform gradually decreases when the intensity of stress is constant. When stress becomes unbearable, performance plummets. The results of this study indeed displayed that reasonable workload (as in stress) is imperative to boost performance. Conversely, an excessive amount of workload would impair performance and triggers other undesirable side effects such as burnout and depression.

The results also confirm that job satisfaction mediated the relationship between the workload and academic staff performance, thus hypothesis 2 was supported. This confirmation establishes job satisfaction as a workload-performance mediator in an academic setting which corresponds to previous suggestions that job satisfaction should be considered as an antecedent of academic performance (Tevfik & Ozdem, 2017). The present study further suggests that academic staff's source of stress primarily comes from workload which influences their satisfaction at work and consequently their performance. In response, the review and reduction of excessive workload imposed on academic staff can boost their emotional satisfaction and performance at work. We are convinced that scrutinizing job satisfaction, as a key psychological mechanism, allows an in-depth understanding of the workings of workload-stress-performance among academic staff.

Finally, the findings of this study do not support career commitment as the mediator of the relationship between job workload and academic staff performance. This is, however, contrary to Gaither (1999), who found increased commitment can reduce the negative effects of job stress and improve work-related attitudes. In contrast to our findings, one previous study has shown the workings of a mediating role of organizational commitment between work-family conflict and job outcomes among professionals in the construction industry (Cao et al., 2020). The plausible explanation of this finding is that a high level of job workload does not affect the job performance of committed academic staff.

From a purely theoretical point of view, this study adds more knowledge on the workload-stress concentration of Malaysian faculties, especially those in the MRUs. The uniqueness of this study lies in discussing the role of workload on performance in the context of Malaysian academia, specifically research universities. The comprehensiveness of this study allows for a broad exploration of the role of workload as a potential stressor in faculties. The research model that we suggested and tested is extensive because it informs how workload diminishes the performance of academic staff. The model also explains how the findings can be capitalized as urgent policy reviews in the areas of academic staff management. The most notable contribution of this study is that it revealed the underlying mechanism of workload-to-performance is in the dual-workings of job satisfaction and career commitment. We are convinced that the effect of job satisfaction plays a key role in the said relationship observed among university academic staff.

The results of this study have practical implications for performance of research university academics. Based on our findings, if universities have ambitions in charting national and international performance rankings, their human resource policies should include monitoring and regulating academic staff's stress levels. Besides, the provision of sufficient, relevant, and timely resources to

academic staff is important. If academic staff is imposed with more work but with fewer resources at hand, management should not expect them to perform as well as when they have full resources at their disposal. Achieving a balance in staff workload is of utmost importance because the neglect of it leads to health and psychological consequences at the individual level. At the institutional level, an imbalanced workload unleashes staff performance issues and at worst, staff turnover. Therefore, the strategic management team should not only be concerned about balancing workload against academic staff's perception of it, but proactive efforts should also be carried out to minimize antecedents of staff turnover and productivity. Academic jobs should be designed with the consideration of levelling workload discrepancies across faculty levels. Ideally, this systematic effort in seeking a balanced workload should be conducted with fairness, where feasible. Where the workload gaps between levels are impossible to close, they should at least be significantly minimized.

Interventions should be designed to ensure the alignment between academic job roles and staff competencies and capabilities. The desired outcome is sustained job interest and fulfilment in discharging duties, and eventually not perceiving workload as being imbalanced. The inclusion of psychological tests in recruitment interviews will prove useful in this regard. Another suggested managerial intervention is to review recruitment efforts, specifically the hiring of academic support staff to deal with diverse job roles in the faculties through effective manpower planning. Consequently, overloading and overworking academic staff can be avoided. However, if the staff is obligated or expected to perform duties that are beyond their scope, the provision of adequate compensation should be rolled out, pending such a time that additional staff is recruited.

6. Limitations and further study

This study carries several limitations. Our study is limited by a small sample with cross-sectional data, which restricted further prediction of any cause-and-effect relationship between the key constructs. This study also employed variance-based SEM for data analysis which provided model exploration fitness. Future studies with a larger sample can benefit from covariance-based structural equation modelling (CB-SEM) where researchers could conduct replicated studies for model confirmation. While we substantiated the two mediators of interest (job satisfaction and career commitment) of the workload-performance association, we do not deny the possible existence of additional mechanisms that arbitrate workload towards academic staff performance. It is recommended that future studies could assess other mechanisms, namely the comprehensive range of work environment characteristics.

7. Conclusion

This study set out to explore workload-related issues and problems among academic staff and to comprehend the implications in university policy development and implementation. Our cohort of interest perceives workload to be a point of contention as it creates problems that hinder career commitment and job satisfaction and job performance. Then, investigations on workload effects on the cohort's performance were duly carried out. Finally, we tested the mediating roles of career commitment and job satisfaction in the workload-performance relationship and validated them as the underlying agents of this psychological mechanism, herein lies the novelty of our research. Given this, our research calls on university managers and the top management to prioritize the wellbeing of academic staff when setting performance goals. Measured steps should be taken to address excessive workload that comes hand in hand with steady, chronic, and/or persistent pressures of academia that is particularly prevalent among MRUs.

8. References

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