

## Impact of Work-related Stress on Well-being among Academician in Malaysian Research University

Siti Aisyah Binti Panatik<sup>1+</sup>, Azizah Rajab<sup>2</sup>, Roziana Shaari<sup>1</sup>, Ishak Mad Shah<sup>1</sup>, Hamidah Abdul Rahman<sup>1</sup>, and Siti Khadijah Binti Zainal Badri<sup>1</sup>

<sup>1</sup> Faculty of Human Resource and Management, Universiti Teknologi Malaysia, 81310 Johor Bahru, Malaysia

<sup>2</sup> Language Academy, Universiti Teknologi Malaysia, 81310, Johor Bahru, Malaysia

**Abstract.** Work-related stress had been widely identified as the source of stress among working population, including academician. Work-related stress was related to the level of job satisfaction and turnover intentions. Thus, this study aims to investigate the relationships between work-related stresses with the job outcomes in Malaysian context, specifically among academic staff. A survey method using questionnaire was implemented to obtain the data for this study. A total of 267 respondents participated in this study, giving the return rate of 20% from the entire of population. Work-related stress was measured using UK Health and Safety Executive's Management Standard Work-Related Stress scale. Job satisfaction was measured using Copenhagen Psychosocial Questionnaire version 2003, and turnover intentions using Michigan Organizational Assessment Questionnaire. Correlation and multiple regressions were performed using PAWS 18 to analyze the data. The result indicated that work-related stresses are significantly related to both job satisfaction and turnover intentions. Job control, role clarity violence relationship, and change were related to job satisfaction. However, only peer support was related to turnover intentions.

**Keywords:** Job satisfaction, Turnover intentions, Work-related stress

### 1. Introduction

Universities play an important role in economic and social life of Malaysia. In order to fulfill this role successfully they need to attract and retain high quality staff. The university also needs to provide a supportive working environment to enable their staff to conduct high quality teaching and research. Previous literatures stated that universities no longer provide a comfortable working environments for their staff (e.g., [1]). Research from across the globe has indicated that government cuts to university funding, and associated increases in university staff workloads, have been accompanied by a widespread increase in occupational stress [1]. There have been major reductions in government funding of public universities in most developed countries. Reports are growing of stress in university staff because the increase of work pressure and reduced social support [1]. For example, a research in the California State University indicated that most of the lecturers feels stress when dealing with the research-related works [2]. Issues like budget, time, and resource constrains were among the factors that influence stress. Many of researchers had already proven the significant relationship between the work-related stresses with employees' well-being [3-5]. The indicators of well-being that had been frequently highlighted are job satisfaction, general health, and burnout [2, 6]. Therefore, this study investigates the impact of work-related stress on academic staffs' well-being, such as job satisfaction and turnover intentions in Malaysia Research University.

### 2. Literature Review

---

<sup>+</sup> Corresponding author. Tel.: +607-553-5114; fax: +607-556-6911.  
E-mail address: sitiaisyah@fppsm.utm.my

According to Blix [2] stress can lead to unwanted consequences to physical, behavioral and organizational aspects of the workers. Lazarus [7] stated that stress is a complex and dynamic process. Stress can be defined as the imbalance between people’s perceived environmental demands and their perceived ability to cope with these demands [7]. It is well documented that high levels of occupational stress undermine employees’ well-being. Research has also established that high levels of occupational stress result in substantial costs to organizations through lost of productivity and turnover [7]. In specific to the university work environment, a large number of studies had proven the relationship between occupational stresses to job related outcome and well-being [8-9]. According to Blix [9], most of the university staff were highly exposed to burnout because their direct relationship with large numbers of students, staff and administrators. Thus, the frequent exposure makes them to be easily stressed out by their works. Moreover, most of the lecturers nowadays were required to be proactive and innovative in order to contribute to the development of the university itself. It been supported by Gmelech, Lovrich and Wilke [10] where they reported that 60 percent of the lecturers are stressed out by their university works. In addition, Goldenberg and Waddell [11] reported that heavy workload and role ambiguity were identified as the stressor in the academic university. Most of the study also suggested that job strain can impaired the life satisfaction and lead to the withdrawal behavior [12-13].

In conclusion, it is clearly important for universities to manage and protect their staff from increasing stress levels to preserve staff well-being. In order to do this, this study identifies academic staff’s experience of stress and their relationship with well-being, such as job satisfaction and turnover intentions. This study also explores the impact of work-related stress on job satisfaction and turnover intentions among academic staff in Malaysian Research University.

### 3. Proposed Conceptual Framework

Figure 1 illustrates the proposed conceptual framework of this study. The predictor variables were the work-related stress components consisted of job demands, job control, managerial support, peer support, violence relationship, role clarity, and change. Meanwhile, the criterion variables are job satisfaction and turnover intentions.

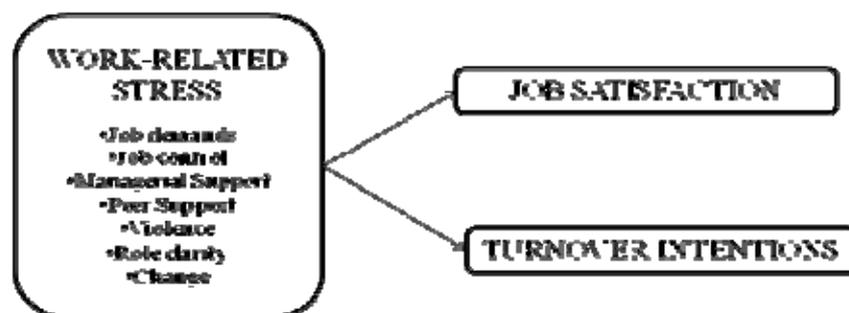


Fig. 1: Proposed theoretical framework

## 4. Methodology

### 4.1. Sample and procedures

This study consists of academic staff of three research universities in Malaysia, which are Universiti Teknologi Malaysia, Universiti Sains Malaysia, and Universiti Kebangsaan Malaysia. In total 1300 questionnaires were circulated through online in the above mentioned universities. Overall, only 267 filled questionnaires were returned, providing the response rate of 20%. 51% of the respondents were female and 49% were male. Majority of the respondents are from the Malay ethnic (79%), followed by Chinese (10%), and Indian (3 %).

### 4.2. Measures

Work-related stress was measured using UK Health and Safety Executive’s Management Standard Work-Related Stress scale [14]. Job satisfaction was measured using Copenhagen Psychosocial

Questionnaire version 2003 [15], and turnover intentions was measured using Michigan Organizational Assessment Questionnaire [16]. All the measures have a good reliability (see Table 1).

## 5. Result

### 5.1. Descriptive statistics and correlation

Table 1 shows mean, standard deviation and correlation for all the variables used in this study. Overall, work-related stress demonstrated a significant relationship with job satisfaction and turnover intentions. In specific, job demands ( $r=-0.27$ ,  $p<0.01$ ) and violence ( $r=-0.39$ ,  $p<0.01$ ) showed low negative relationship with the job satisfaction. This means that increasing of job demands and violence relationship at workplace will decrease the level of job satisfaction. Job control ( $r=0.50$ ,  $p<0.01$ ), managerial support ( $r=0.42$ ,  $p<0.01$ ), peer support ( $r=0.30$ ,  $p<0.01$ ), role clarity ( $r=0.47$ ,  $p<0.01$ ), change ( $r=0.45$ ,  $p<0.01$ ) were positively correlated with job satisfactions. These results are consistent with previous research.

For turnover intentions as the criterion variable, the results indicated that job demands ( $r=0.14$ ,  $p<0.01$ ) and violence relationships ( $r=0.23$ ,  $p<0.01$ ) showed positive relationship with turnover intentions, where high levels of job demands and violence relationships will increase the level of turnover intentions. Job control, managerial support, peer support, role clarity, and change demonstrated negative relationship with turnover intentions.

Table 1. Correlations among variables

Variable	Mean	S.D.	1	2	3	4	5	6	7	8	9
1. Job Demands	3.06	0.58	(.80)								
2. Job Control	3.75	0.66	-.31**	(.87)							
3. Managerial Support	3.12	0.85	-.22**	.42**	(.90)						
4. Peer Support	3.42	0.80	-.28**	.35**	.48**	(.91)					
5. Violence	1.90	0.69	.35**	-.37**	.29**	.35**	(.83)				
6. Role clarity	4.07	0.59	-.26**	.60**	.37**	.33**	-.32**	(.90)			
7. Change	2.97	0.85	-.20**	.38**	.57**	.38**	-.29**	.45**	(.90)		
8. Job Satisfaction	3.77	0.57	-.27**	.50**	.42**	.30**	-.39**	.47**	.45**	(.90)	
9. Turnover Intention	2.31	1.32	.14*	-.23**	-.26**	-.32**	.24**	-.21**	-.22**	-.34**	(.93)

Note. \* $p < 0.05$ ; \*\*  $p < 0.01$ ; Cronbach Alpha coefficients are in the bracket on the diagonal.

As a conclusion, all the dimensions of work-related stress have significant relationship with both job satisfaction and turnover intentions.

### 5.2. Regression analysis

Table 2 shows the results of multiple regression analysis of work-related stress on job satisfaction and turnover intentions.

Table 2. Regression Analysis for work-related stress and work attitudes

Predictor	Job satisfaction		Turnover intentions	
	$R^2$	$\beta$	$R^2$	$\beta$
Job Demands		0.05		-0.01
Job Control		0.22**		-0.06
Managerial Support		-0.12		-0.08
Peer Support		0.03		-0.20*
Violence		-0.16*		0.10
Role-clarity		0.16*		-0.04
Change		0.19*		-0.03
	0.38***		0.14***	

\*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$

The results indicated that work-related stress explained 38% of the variance in job satisfaction and 14% of the variance in turnover intentions. Specifically, job control ( $\beta=0.22$ ,  $p<0.01$ ), violence relationships ( $\beta=-$

0.16,  $p < 0.05$ ), role-clarity ( $\beta = -0.16$ ,  $p < 0.05$ ) and change ( $\beta = 0.19$ ,  $p < 0.05$ ) significantly predicted job satisfaction. However, job demands, managerial support and peer support did not significantly influence job satisfaction. Only peer support significantly predicted turnover intentions ( $\beta = 0.20$ ,  $p < 0.05$ ).

In summary, this study suggests that all the components of work-related stress affect job satisfaction and turnover intentions. However, only job control, violence, role-clarity and change were related to job satisfaction and only peer support contributes to turnover intentions.

## 6. Discussion and Conclusion

The results of this study are in line with past research regarding work-related stress [8-10, 12, 17]. The study indicated that all the dimensions of work-related stress (i.e., job demands, job control, managerial support, peer support, violence relationship, role clarity, and change) have significant impact on both job satisfaction and turnover intentions. Job control was the strongest predictor of job satisfaction among academic staff in the Malaysian research universities. This finding is supported by Harrison [18] that emphasize on good match between the worker's needs and the demands of their task. The 'good fit' between the needs of the workers and the demands of their task will moderate the effects of the stress experience by them. Thus, in order to have a good combination of both of needs and demands, they must be able to control their job properly.

In addition, this study suggests that peer support plays an important role in contributing to turnover intentions. This study found that high perceived peer support can decrease turnover intentions among academician. This finding supports the Job Demands-Support model that highlighted the role of social support to reduce stress. Karasek [19] argued that unbalance relationship between job demands and social support can lead to stress. Moreover, previous research argued that insufficient amount of support will lead to the occurrence of stress that can affect other elements of the human life [20].

This study has implication for human resource management practitioners. The results of this study suggest job control, role clarity, violence, and change were related to job satisfaction. Thus, the managers need to provide more tangible direction and guidance as a possible effective way to enhance job satisfaction among academic staff. This study also indicated that peer support is one way to reduce turnover intentions. The manager should strive to enhance employees' relationship in the organization to reduce the intention of quitting from the organization.

To conclude, this research adds new knowledge in relation to the impact of work-related stress on job satisfaction and turnover intentions among academician in Malaysian setting. Job control, violence relationship, role clarity, and change can function as predictors of job satisfaction. Only peer support plays an important role in affecting turnover intentions among academic staff.

## 7. Acknowledgements

The author would like to express appreciation to the Ministry of Higher Education and Universiti Teknologi Malaysia for providing funding for this research. This study was supported by the following grant sponsors; Research University Grant (GUP) Funding, Vote No. Q.J130000.7141.02J21.

## 8. References

- [1] Winefield, A.H., et al., Job stress in university staff: An Australian research study. . 2008, Bowen Hills, Qld: Australian Academic Press. 197.
- [2] Blix, A.G., Occupational stress among university teachers Educational Research 1994. 36(2): p. 157-169.
- [3] Griva, K. and K. Joeke, UK teachers under stress: Can we predict wellness on the basis of characteristics of the teaching jobs? Journal of psychology and health, 2003. 18(4): p. 457-471.
- [4] Mearns, J. and J.E. Cain, Relationship between teacher's occupational stress and their burnout and distress: Roles of coping and negative mood regulation expectancies. Anxiety, Stress and Coping, 2003. 16(1): p. 71-82.
- [5] Mohd. Awang, I., M.F. Dollard, and A.H. Winefield, Lay theory explanations of occupational stress: the Malaysian context. Cross cultural Management: An International Journal, 2010. 17(2): p. 135-153.

- [6] Van Der Doef, M. and S. Maes, Teacher-specific quality of work versus general quality work assessment: A comparison of their validity regarding burnout, psychosomatic well-being and job satisfaction. *Anxiety, Stress and Coping*, 2002. 15(4): p. 327-344.
- [7] Lazarus, R.S., Psychological stress in the workplace, in *Occupational stress: A handbook*, R. Crandall and P.L. Perrewe, Editors. 1995, Taylor & Francis: Washington, DC. p. 3-14.
- [8] Doyle, C. and P. Hind, Occupational stress, burnout and job status in female academics. *Gender, work and organization*, 1998. 5(2).
- [9] Blix, A.G., et al., Occupational stress among university teachers *Educational research* 1994. 36(2).
- [10] Gmelech, W.H., N.P. Lovrich, and P.K. Wilke, Sources of stress in academic: a national perspectives. *Research in higher education*, 1984. 20(4): p. 47-90.
- [11] Goldenberg, D. and J. Waddell, Occupational stress and coping strategies among female baccalaureate nursing teachers. *Journal of Advances in Nursing* 1990. 15(5): p. 531-43.
- [12] Blackburn, R.T., et al., University teacher and administrator responses to job strain. *Research in higher education*, 1986. 32(3): p. 289-302.
- [13] Watts, W.D. and A.P. Short, Teacher drug use: A response to occupational stress. *Journal of Drug Education* 1990. 20(1): p. 47-65.
- [14] Edwards, J.A., et al., Psychometric analysis of UK Health and Safety Executive's Management Standards work-related stress Indicator tool. *British Academy Annual Conference* 2008.
- [15] Kristensen, T.S., et al., The Copenhagen Psychosocial Questionnaire (COPSOQ). A tool for the assessment and improvement of the psychosocial work environment. . *Scand J Work Environ Health*, 2005. 31: p. 438-49.
- [16] Cammann, C., et al., The Michigan Organizational Assessment Questionnaire. Unpublished manuscript. 1979, University of Michigan.
- [17] Kittel, F. and F. Leynen, A study of work-related stressors and wellness/health outcomes among Belgian school teachers *Psychology and Health*, 2003. 18(4): p. 501-510
- [18] Harrison, R.V., *Person-environment fit and job stress*. 1978.
- [19] Karasek, R.A., Job demands, job decisions latitude and mental strain: Implication for job redesign. *Administrative Science Quarterly*, 1979(24): p. 285-308
- [20] Verhoeven, C., et al., The job demands-control-social support model and wellness/health outcomes: An European study *Psychology and Health*, 2003. 18(4): p. 421-440.