THE RELATIONSHIP BETWEEN PSYCHOSOCIAL STRESSORS AND WORK ATTITUDES: THE MEDIATING EFFECTS OF PSYCHOLOGICAL STRAIN

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─Abstract ─
Growing number of research indicated that psychosocial stressor are dominant predictor of work attitudes. Yet, the literature regarding the mediation effect of psychosocial strain in relationship of stressors and work attitudes is limited. The present research aims to determine the relationship between psychosocial stressors and work attitudes. In addition, this research also investigated the mediating effect of psychological strain in the relationship between psychosocial stressors and work attitudes. Online survey has been utilized to collect the data. 267 respondents responded to the survey producing 20% response rate. PASW18 and AMOS SPSS were used to analyze the data. The findings showed that all psychological stressors (i.e. job demands, job control, managerial support, peer support and role clarity) have direct effect on job satisfaction, affective commitment and turnover intention. Psychological strain is found to mediate the relationship between job demands and turnover intention. This study also discusses the practical implication of the findings to the organizations.

Key Words: Psychological strain, psychosocial stressors, job satisfaction, affective commitment, turnover intention
JEL Classification: 123 Higher Education and Research Institutions

1. INTRODUCTION

Psychosocial stress and strain at work have been extensively studied since the last few decades (Cooper & Marshall, 1976; Hammer, Saksvik, Nytro, Torvatn, & Bayazit, 2004). The effects of psychological and social factors of stress such as job demand, job control, social support and role clarity on strain were empirically proven by previous findings (O'Driscoll & Brough, 2010). The researches on the association of psychosocial stress and strain are guided by theoretical models (Karasek, 1979; Johannes Siegrist, 1996; J. Siegrist, 1999). Job demand-control model (Karasek, 1979) is the leading model that has been utilized as the foundation of occupational stress research. This model postulates that the combination of high demand and low control at work will lead to job strain among employees.

Stress exists in various types of profession whenever there is a mismatch between work demand and employees' ability to cope with that demand. Academicians are one of the working populations who are exposed to high level of stress (Winefield, et al., 2003). One of the prominent sources of academicians' stress is career development (Archibong, Bassey, & Effiom, 2010). The academicians have to perform based on their Key Performance Indicator (KPI). The KPI accounts a multi-tasking role of an academician. Academicians are not only dealing with the students such as delivering lecture and supervising (Ariffin, Ramli, Abdul, Husain, & Wahab, 2011), but they also have to conduct research, provide consultation service and involve in faculty or university activities. In addition, they have to perform administrative tasks from time to time. Therefore, academician is classified as a high work load profession nowadays.

The workload increases when Malaysian university is moving towards research universities. As a staff of a research university, the academicians are required to conduct more research. They also have to publish their research in high impact journal and present their findings in international conferences (Ariffin, et al., 2011). Additionally, the transformation into a research university requires a few changes in the university system. Such changes might alter academician's tasks and roles. This will affect their role clarity where they are not clear about their roles and responsibilities in the university.

Job demand, job control, social support and role clarity are known as potential stressors that influence academicians' well-being such as psychological strain. Psychological strain is prominent to indicate well-being in organizational research (Kenny & McIntyre, 2005). Psychological strain is a reaction of emotional distress caused by stressors that threaten a person's well-being. The example of the most prevalent psychological strain is headache and sleep difficulty. As

mentioned previously, theoretical models have been established to describe the stressors-strain relationship. This relationship has been extended to affect work attitudes such as job satisfaction, affective commitment and turnover intention (Panatik, 2010).

Thus, the present study makes several contributions to the literature on stressors-strain relationship. First, the study extends the stressors-strain perspective by investigating work attitudes variables as the final outcomes of strain. Therefore, the present research highlights the role of psychological strain as the mediator in the relationship between psychosocial stressors and work attitudes. Second, the study investigates role clarity as one of the stressors in addition to stressors postulated in JDC model (i.e. job demand, job control, peer support and managerial support). Finally, the study investigates the stressors-strain effects on academicians in Malaysia which are substantially different from Western communities. Most research on JDC model has been conducted among Western populations. Thus, the present study might contradict the previous findings.

Literature indicated that work attitude is widely studied since it contributes significantly to organizational performance and productivity (Addae, Parboteeah, & Velinor, 2008; Pomaki, AnitaDeLongis, DanielaFrey, KathyShort, & TrishWoehrle, 2010; Saari & Judge, 2004). To increase organizational benefits by improving work attitudes, the factors that influence work attitudes need to be identified. The psychosocial stressors were found to be dominant predictors of work attitudes (Saari & Judge, 2004). The source of psychological stressors is the psychosocial environment at the work place. Psychosocial environment involves person's cognitions, emotions and behaviours while interacting with his/her social environment (J. Siegrist, et al., 2004). When the interaction leads to the feeling of strain, it is also known as psychosocial stressors (Ganster, 2008). High level of stressors at work will negatively influence the work attitudes (Verquer, Beehr, & Wagner, 2003). The present research investigated three types of potential work attitudes that might be affected by psychosocial stressors specifically job satisfaction, affective commitment and turnover intention.

H1: Psychosocial stressors will be negatively related to job satisfaction
*H2:*Psychosocial stressors will be positively related to turnover intention
*H3:*Psychosocial stressors will be negatively related to affective commitment

Additionally, the study determined the role of psychological strain in mediating the relationship between psychosocial stressors and work attitudes. As mentioned earlier, theoretical models have supported the association between psychosocial stressors and psychological strain. The JDC model proposed three dimensions of psychosocial stressors namely job demand, job control and social support. For

social support, this research included two types of social support at work, namely managerial support and peer support. In addition, the present research also investigated the effect of role clarity on psychological strain. The stressors-strain relationship can be extent by including the work attitude variables as the final outcome. According to Lazarus' transactional theory, strain among employees describe the pain resulted from environmental stressors at work which will then affect their work attitudes (Idris, 2011). This stress-strain-work attitude highlights the mediating role of strain.

*H4:*Psychological strain will mediate the relationship between psychosocial stressors and work attitudes

2. METHODOLOGY

2.1. Sample and data collection

Academic staffs from three research universities in Malaysia: University Teknologi Malaysia, Universiti Sains Malaysia, and Universiti Kebangsaan Malaysia participated in this study. The quantitative data were collected through online survey. 267 from 1300 distributed questionnaires were returned, representing an overall response rate of 20 percent. From the total respondents, 51 percent of them identified themselves as female and 49 percent as male. In regards to their ethnicity, majority of the respondents are Malay (79%), followed by Chinese (10%), and Indian (3 %).

2.2. Measures

Psychosocial stressors. The present research investigated psychosocial stressors in terms of several dimensions specifically job demands, job control, managerial support, peer support and role-clarity. All the dimensions were measured using the items adopting from the UK Health and Safety Executive's Management Standart Work-related stress (HS ME indicator). The items applied a 5-point response scale from 1= Never to 5 = Always). The alpha cronbach value for each of the dimension ranged between 0.80 until 0.90.

Psychological strain. Psychological strain was measured by the *General Health Questionnare-12 (GHQ-12*) (Goldberg & Williams, 1988). GHQ-12 consists of six negative items (e.g. Felt you are playing useful parts in things) and six positive items (e.g. Been able to face up your problem). The items were rated using 6-point response scale from 1= Never to 6= All the times). The reliability of the items is moderate where the alpha cronbach value was 0.51.

Work attitude:

Job satisfaction. Job satisfaction refers to the feelings towards job (Spector, 2003) whether the academician are happy or not doing their job. In this research, job satisfaction was measured by adopting Copenhangen Psychosocial Questionnaire version 2003 [22]. The items involve 5-point response scale from 1= Not relevant to 5= Very satisfied. The value of cronbach alpha for this scale was 0.89.

Affective commitment. According to Allen and Meyer (Allen & Meyer, 1990)], affective commitment refers to the employee's emotional attachment and involvement in the organization. Seven items on affective commitment were utilized from the Allen and Meyer (1990) organizational commitment scale. A 6-point response scale ranged from 1=strongly disagree to 6= strongly agree was used. The value of the alpha cronbach was 0.90.

Turnover intention. Burke [24] defined turnover intentions as the situation where the workers had a thought to leave the current organization. We measured the turnover intention through the 3-items of Michigan Organizational Assessment Questionnaire [25]. A 7-point response scale were provided rated from 1=strongly disagree to 7=strongly agree. The alpha cronbach value for the items was 0.92

3. RESULTS

3.1 Correlations

Table 1. Mean, standard deviations and correlations between the study variables (n=267)

	1	2	3	4	5	6	7	8
1Job Demands								
2Job control	-.31**							
3Managerial support	-.22**	.42**						
4Peer support	-.28**	.35**	.48**					
5Role clarity	-.26**	.60**	.37**	.33**				
6Psychological strain	.13*	.07	.13*	.13*	.10			
7Job satisfaction	-.27**	.50**	.42**	.30**	.47**	.10		
8Affective commitment	-.20**	.28**	.34**	.24**	.33**	.13*	.41**	
9Turnover intention	.14*	-.23**	-.26**	-.32**	-.21**	.08	-.34**	-.49**

*p<.05, **p<.01

We first conducted correlation analysis to identify the relationship between variables. As demonstrated in Table 1, almost all variables correlated significantly with each other. Job demands, managerial support and peer support were positively correlated to psychological strain with (r=.131, p<.05), (r=.130, p<.05)

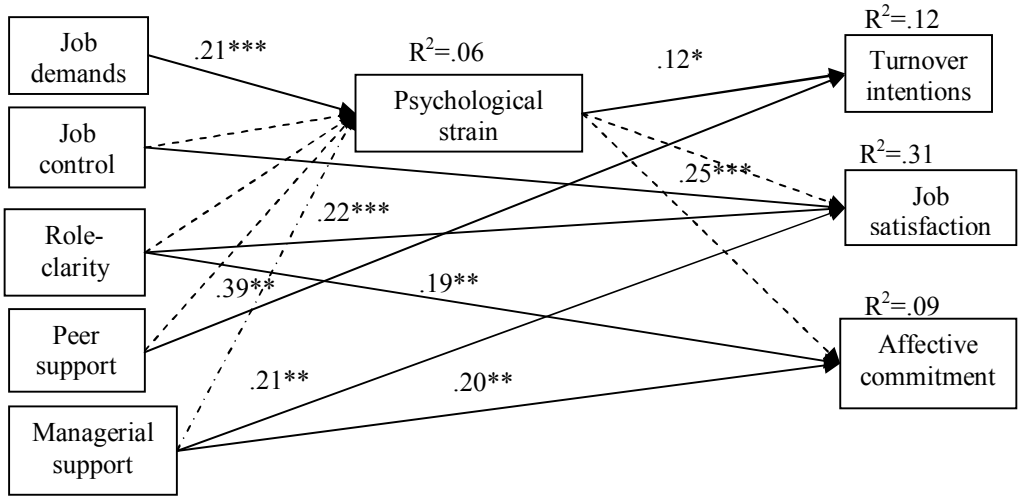
and (r=.129, p<.05) respectively. All the dimensions of psychological stressors correlated significantly with job satisfaction, affective commitment and turnover intention. Job control, managerial support and role clarity showed moderate correlations with job satisfaction with (r=.497, p<.01), (r=.419, p<.01) and (r=.469, p<.01). The other dimensions of role stressors indicated low correlation with the three types of work attitudes. Meanwhile, psychological strain only showed a significant correlation with affective commitment (r=.129, p<.05) compared to the other two types of work attitudes.

3.2 Testing of the hypothesis

Path analysis of structural equation modeling (SEM) were conducted to assess the mediating effects of the psychological strain in the relationship between psychosocial stressors (i.e. job demands, job control, role-clarity, peer support, managerial support) and work related attitude (i.e. affective commitment, job satisfaction, turnover intention). The fit indices showed that the model yielded a good fit where χ^2 (9, N=267) = 1.95, p<0.05, RMSEA=.06, CFI= .98, RMR=.04. Final model of the current research is represented in Figure 2.

Overall, psychosocial stressors altogether explained around 6% of the variance in psychological strain. Job control, role clarity peer support, and managerial support did not significant related to psychological strain. In addition, psychological strain was found to give significant effect to turnover intention (β=.12, p<.001), but not to job satisfaction and affective commitment. Specifically, psychological strain was found to explain turnover intention with 12% (R^2=.12, p<.001).

Fig. 2: Final Model



The results indicated that psychological strain mediates the effect of job demands on turnover intention. However, psychological strain did not mediate the effects of job control, managerial support, peer support and role clarity on the work attitude variables. The results showed that job control, managerial support, peer support and role clarity were directly influence the work attitude variables. Referring to the result, only some of H2 and H4 were accepted while H1 and H3 were rejected.

4. DISCUSSION

Psychosocial work characteristics have become dominant stressors that influence employees' well-being and attitudes (Hammer, et al., 2004). This is also true among academician in Malaysian universities. In order to achieve university's goals, the academicians are required to perform various tasks such as lecturing, supervising and involving in certain committees. In addition to the increasing levels of job demand, they also faced problems in their roles as an academician (Ariffin, et al., 2011). This is because they have to play the role as a lecturer, researcher, supervisor, consultant and even administrator at the same time. When the academicians are pressured with their tasks and role, they will feel dissatisfied and lack of attachment in their job. This will decrease their affective commitment towards the job and finally develop an intention to leave their current job (Anton, 2009). In addition to job characteristics, social support at work was also found to predict work attitudes (Pomaki, et al., 2010). Managerial support and peer support are the two types of social support in the organization. Since Malaysia holds a collectivist culture (Ahmad & Aafaqi, 2004), high level of social support might increase academicians' job satisfaction and affective commitment and decrease the turnover intention.

The finding showed that job demands are significant predictors of academicians' psychological strain. Based on the JDC model, high job demands is associated with health complaints including psychological strain (Karasek, 1979). This study suggests that job control have no direct effect on psychological strain. However, job control did not significantly related to psychological strain. We presumed that job control did not affect psychological strain directly, but it buffers the relationship of job demands and strain. The JDC model also emphasized that job control moderates the effect of job demands on psychological strain (Karasek, 1979). The moderator role of job control might explain the insignificant relationship between job control and psychological strain.

The current study also found that both of social support at work (i.e. managerial support and peer support) did not have direct effect towards

psychological strain. The extension of JDC model which is the Iso-Strain model posits that social support also act to moderate the interaction of job demands and psychological strain. However, in addition to the moderating effect, social support has also found to have a direct effect on health related outcomes (Cox & Griffith, 2010). Interestingly, job control, role clarity, managerial support and peer support has a direct effect to the work attitude variables without via psychological strain as proposed in the conceptual model of this study. This means that those stressors directly influence job satisfaction, affective commitment and turnover intentions.

Psychological strain is only found to mediate the relationship between job demands and turnover intention. This finding is supported by the models that suggest that work demand is an important determinant of psychological strain which in turn affect turnover intentions among the respondents. Besides the JDC model, the Effort-reward Imbalance (ERI) model also emphasized job demands as the main predictors of psychological strain (J. Siegrist, 2001). In the ERI model, job demand is known as effort contributed by the employees. High job demand among academician will contribute to psychological strain. Then, such strain will impair their feeling and attachment at work (Ganster, 2008).

4.2 Study strength and limitation

One of the strength in our study is we included role clarity as another predictor of psychological strain in addition to job demands, job control and social support which has been suggested in established theoretical model (Karasek, 1979). Furthermore, the present research investigated the mediating effect of psychosocial stressors on work attitudes specifically job satisfaction, affective commitment and turnover intention. Although we found only one significant result in the mediating interaction where psychological strain mediates the relationship between job demands and turnover intention, it is an important finding. By conducting this research among Malaysian academician, the findings provide new knowledge to the organizational health literature in the Eastern context. Despite the strength of this study, a limitation is found sin respect to its methodological design. This cross-sectional research did not allow the researchers to draw any causal conclusion from the finding. Therefore, future research should be conducted in longitudinal design to identify the causal relationship between psychosocial stressors, strain and work attitudes.

4.3 Implications for practice

The present research provides several practical implications. Academician's well-being and attitudes might be improved by considering the contributing psychosocial factors. The management of the university could take an action regarding job demands and roles assigned to the academicians. Such action might reduce academicians' psychological strain and lead to a better work attitudes

including reducing their turnover intention. Less intention to leave the organization contribute helps to reduce the actual turnover. Therefore this research finding is significant for an organization to improve well-being in the workplace in addition to knowledge contribution on well-being research at the workplace.

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