Mediation effect of job insecurity on the relation between leadership practices and job stress in Malay academic staffs

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Abstract

Job stress is a universal problem for many academic staff, but there is still few study considers the existence of mediating factor of job insecurity on job stress, especially in Malay academic staff. This study aims are to examines the effect of leadership practices, the mediating effects of job insecurity on job stress among Malay academic staff. Survey design with quantitative approach was used. 124 questionnaires were completed. First step, data is analyzed to examine the reliability and validity of measurement. Second, the structural model is tested to examine relationship between job insecurity practices as mediator variable to job stress. All data was processed using SPSS 15 and Amos 18. The result of path analysis using structural equation modeling showed that job insecurity significantly mediated leadership practices to job stress (r = 0.199, p = .017 < .05). Leadership practice has a direct effect to job stress, and has indirect effect but mediated by job insecurity.

Keywords: leadership practices; job insecurity; job stress; Malay; academic staff

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1. Introduction

Job stress is widely accepted phenomena in many employees, in various organizations. Many factors cause and create a stressful situation among employees. These strains are not only damage employee's quality of work life, but also affect the effectiveness of the organization to reach their vision and mission goals (Sulksky & Smith, 2005). Wang (Crampton, Hodge, Mishra, & Price, 1995) described that financial loss caused by job stress in American companies range from 100 to 300 million US per year. According to Stewart (Crampton, Hodge, Mishra, & Price, 1995) it can be calculated between 75% to 90% employee that seeking medical treatment were caused by job stress and it made higher absenteeism. One shocking study finding reported that in 16 day for every year, many employees experienced stress, fatigue, emotional depletion and serious depression.

In education organization, especially at higher education setting, many studies concluded that lecturer, staff or administration personnel reported from middle level to a higher level of job stress (Donders et al., 2003; Boscolo et al., 2008; Leung, Siu, & Spector, 2000; De Nobile & McCormick, 2007; Blix & Lee, 1991; Assadi, 2003; Jing, 2008). Ahsan et al. (2009) stated many university academic staff in Malaysia now face more stress than past few years, because the increasing of pressure and competitiveness among universities in Malaysia.

In Malaysia, several past studies confirmed the phenomena of job stress in the educational setting. Aeria (1998) conducted a comparative study on the level of burnout among 264 Petaling Jaya teachers with other studies sample and showed increasing level of burnout experienced by Petaling teachers. Mean score for emotional exhaustion of Petaling teachers is 3.8, and it have proven higher than other studies sample (Hartford Connecticut teachers = 3.5; Victoria Australia teachers = 3.2; Massachusetts teachers = 3.4; Alberta Canada teachers= 3.4). Mean score for depersonalization of Petaling teachers is 2.3 and showed higher than other studies sample. Whereas, the mean score for personal accomplishment of Petaling teachers is 2.6, and it was the highest among other above studies. Based on several studies in the past, it can be concluded that incident of job stress among academic professions (teachers and lecturers) in Malaysia is high and it will continually increase in the future. Rosnita's (2006) research finding showed that stress of mathematics teacher in Kelantan region is 2.7 percentages for high value. The dominant source that caused stress among teachers was student problem and teacher's work load.

Several factors were found associated with stress in the workplace. Two factors that have a relationship with job stress are leadership style and job insecurity (Probst & Lawler, 2006; Sosik & Godshalk, 2000; Webster & Hackett, 1999). Many previous studies suggest the important factor of leadership style to subordinate performance, emotional, and stress reaction (Yukl, 2008). Leaders can often be a central source of positive change or source of stress among theirs employees (Sosik & Godshalk, 2000). Leader who promote supportive relationships, elicit motivation among subordinates, facilitate more positive and less negative emotion among subordinates, and engender more benign evaluations of stressful tasks among subordinates. For example, transformational leaders influence employees through positive emotional appeals (Yulk, 2008). Subordinate accepts and reframes stressful situations as opportunities for growth, because the supportive style of their leader (Bass, 1998; Sosik & Godshalk, 2000).

Related to correlation between job insecurity with job stress, it is clear that job insecurity will induce uncomfortable work situation for employees. Job insecurity manifest in terms of threats to the job itself, unsecure about the progress of career in the future, powerlessness of the job itself, and threats to valued job features (Greenhalgh & Rosenblatt, 1984). While, Hellgren et al. (2006), argued that there are two different aspects of job insecurity: quantitative and qualitative insecurity. Quantitative job insecurity is perceived as a

threat about the progress and existence of the job. Qualitative job insecurity is perceptions of potential loss of quality in the employment relationship.

Probst and Lawler (2006) found job security was a significant predictor (all p < .01) of employee job attitudes (β =.34), negative affective reactions (β = -.32), and job stress (β = -.29). The study of Boscolo et al. (2008) showed that employees (over 40 years old) in a library showed higher values of job strain, anxiety and subjective symptoms and lower blood natural killer activity than the controls. The young employees with temporary employment showed high job insecurity and reduced blood NK activity, while the young sanitary staff with temporary position showed normal immune response. Natural killer cytotoxic activity of the recruited men was negatively correlated with anxiety, workload and job insecurity. Feijoo (2004) found that age, gender, educational level, occupational level and socio-economic status had an effect on job stress. Meanwhile, job insecurity predicts the level of job stress.

Kouzes and Posner (2007) has identified five leadership practices (actions and/or behaviors) employed by effective leaders: (1) Challenging the Process. Leaders search out challenging opportunities and they take an experiment for it. Leaders eager to find new good things for organization, they thrive on and learn from adversity and difficult situations. They are also early adopters of innovation. They seek out things that appear to work and then insist that they are improved. They challenge 24 hours/7 days. (2) Inspiring a Shared Vision. Leaders envision future and enlist others to pursue it. Kouzes and Posner (2007) found in their research that people are motivated most, not by fear or reward, but by ideas that capture their imagination. Note that this is not so much about having a vision, but communicating it so effectively that others take it as theirs. (3) Enabling Others to Act. Leaders foster collaboration and empower others to act in the right path. Leaders do not seek to achieve it all themselves. They achieve results through others. Nevertheless, they achieve through others, not by simply repeating the vision or case mantra-encouragement and exhortation is not enough. People must feel able to act and then must be supported to put their ideas into action. (4) Modeling the Way. Leaders set the example and achieve small wins that build commitment. Modeling means being prepared to go first, living the behaviors that leaders want others to adopt before asking them to adopt them. This is leading from the front. People will believe not what they hear leaders say but what they see their leaders consistently do. (5) Encouraging the Heart. Leaders recognize individual contributions and celebrate accomplishments regularly. Finally, Kouzes and Posner established in their research that people act best of all when they are passionate about what they are doing.

Leaders unleash the enthusiasm of their followers with stories, and use the stories to increase the passions of their own. In this study, the operational definition of leadership is the practices of leader to influence others by challenging the process, inspiring a shared vision, enabling others to act, modeling the positive way and encouraging the heart of others.

Greenhalgh and Rosenblatt (1984) suggested a theoretical framework that there are many antecedent variables increase job insecurity. Job insecurity is a mediation variable, which if it not manages effectively, will create many negative outcomes. The antecedent variables of their model intended or unintended organizational change that will create high job insecurity among employees. This situation will cause negative reaction to job insecurity such as lower motivation and effort, resistance to change and intention to leave the organization. However, their theoretical model is not yet tested empirically, so this study wants to test it empirically. This study wants to test the applicability of Greenhalgh and Rosenblatt (1984) theory of job insecurity as mediator variable, especially in Malaysia culture. This study differs from past study above in context of using job insecurity as mediating factor to job stress (Sosik & Godshalk, 2000; Feijoo, 2004; Probst & Lawler, 2006; Boscolo et al., 2008). Moreover, few studies have been investigated the effect of leadership practices to job stress, especially using Kouzes and Posner (2007) leadership practices theory.

The purpose of the present study is to examine some part of Greenhalgh and Rosenblatt (1984) whether job insecurity has a central role to mediate the effect of leadership toward job stress. In other word the effects of leadership do not directly affect the emergence of job stress but mediated by job insecurity. Based on theoretical

discussion above, we stated several hypothesis of this study namely:

- ➤ H1: There is a significant negative relationship between leadership practices and job stress.
- ➤ H2: There is a significant positive relationship between job insecurity and job stress.
- > H3: Job insecurity significantly mediates the effect of leadership practices toward job stress.

2. Method

2.1 Sample and procedure

We conducted the study from December 2009 to May 2010 in one of Universities in Pahang, Malaysia. We provided a covering letter explaining the purpose of the study and providing assurance that the confidentiality of responses in each questionnaire. Two weeks later, we sent the questionnaire and a follow-up letter to non-respondents, stressing the value of the survey and the importance of their participation. We collected the questionnaires in respondent's faculty office. Table 1 presented the frequencies for the respondent's demographic.

We used random sampling technique to collect the data. Non-respondent is pre-selected participant based on random, but do not fill out a questionnaire yet and must be followed up again with follow-up letter. We distributed 200 questionnaires, yielding a usable 124 questionnaires (62% response rate) from 200, and 76 questionnaires from 200 were not valid due to the following reasons: incomplete data was provided for the study's main variables, and omission of demographic data. The sample of this study was 63 (50.8%) men and 61 women (49.2%). Frequencies for the respondent's demographic are presented in Table 1.

 Table 1

 Frequency and percentage of respondent's demographic data

Variables	Content	Frequency	Percent
C 1	Male	63	50.8
Gender	Female	61	49.2
	20-25	30	24.2
	26-30	47	37.9
Age	31-35	37	29.8
-	36-40	5	4.0
	41-45	3	2.4
	50	2	1.6

2.2 Research instrument

2.2.1 Leadership Practices

Leadership practices variable will be measured using Leadership Practices Inventory (LPI) by Kouzes and Posner (2007, 1993). Empirically LPI has good internal reliability, as measured by Cronbach's alpha, continues to be strong with all scales above the .75 level. However, in this study, we just used five items in every dimension of LPI in order to get fewer items. Therefore, we test the LPI adaptation with internal consistency method again. The result of LPI Cronbach's alpha $\alpha = 0.890$, with corrected item-total correlation range 0.351 to 0.684.

The LPI rates a leader's effectiveness on five factors: (a) Challenging the Process; (b) Inspiring a Shared Vision; (c) Enabling Others to Act; (d) Modeling the Way; and (e) Encouraging the Heart. Following are the indicator and a sample item for each: (a) Challenging the process—"my leader expresses high expectations about

what people are capable of accomplishing, "(b) Inspiring a Shared Vision—"my leader clearly communicates his/her standards to everyone on the team," (c) Enabling Others to Act —"my leader pays more attention to positive things people do than to the negative," (d) Modeling the Way—" my leader shows others, by example, how people should be recognized and rewarded," (e) Encouraging the Heart—" my leader gets to know, at a personal level, the people with whom him/her work." However, in this study, we just used five items in every dimension of LPI in order to get fewer items.

2.2.2 Job stress

Job Stress Scale (JSS) was adapted from Stress Indicators Scale (SIS) (2007) and revised by researcher. Because SIS did not report their reliability result and intended for measuring life stress, and not specifically measured work-related stress, then we totally revised SIS become Job Stress Scale (JSS). Before JSS was used, the reliability and validity was analyzed with internal consistency technique by Cronbach alpha. The result of JSS Cronbach's alpha $\alpha = 0.920$, with corrected item-total correlation range 0.369 to 0.708. Job stress scale has four indicator responses to measure the level of job stress responses that experienced by participants. Following are the indicator and a sample item for each. (a) Behavioral responses—" If there is an opportunity, I like to go out in working time," (b) Emotional responses—" I feel bored with my job now," (c) Cognitive responses—" In recent time I easily forgot something," (d) Physiological responses—" All of my body muscles feels fatigue." A 4-point Likert-type scale is used to assess each participant's perceived job stress level. These response choices on this continuous scale include: 1 (never), 2 (seldom), 3 (sometimes), and, 4 (frequently).

2.2.3 Job insecurity

Job insecurity questionnaire based on Hellgren, Sverke, and Isaksson (1999) theory, and then researcher made several refinements on the items will measure Job insecurity. Before job insecurity questionnaire is used, the validity and reliability of the questionnaire will be analyzed with internal consistency technique. The Cronbach alpha of job insecurity scale $\alpha = .873$ with corrected item-total correlation range 0.580 to 0.752. Job insecurity scale has two subscales to measure the level of insecurity that experienced by participants. Following are the indicator and a sample item for each: (a) Income security—"my income is likely to be unstable and uncertain" (b) Career security—"I worry about the improvement of my income in the future." A 4-point Likert-type scale is used to assess each participant's perceived job insecurity level. These response choices on this continuous scale include 1 (never), 2 (seldom), 3 (sometimes), and, 4 (frequently). Before job insecurity questionnaire is used, the reliability of questionnaire was analyzed using internal consistency technique.

2.3 Data analysis

Baron and Kenny (1986) recommended examining the inter-correlations among variables in mediation models to determine if all variables were significantly related. Significant correlations among all model variables are necessary to proceed with mediation analyses. Pearson correlations among the variables in the hypothesized mediation model are presented in Table 3. All correlations were significant (r = -.193 to .314, p < .01) thus, meeting criteria for testing mediation.

Data is analyzed using the Statistical Program for Social Sciences (SPSS for window 15) and Amos 18. Several tests of the normality of data are performed. We checked the symmetry, looking at the mode, median and mean, and then used the Shapiro-Wilks test and various graphical tests (box plot, stem and leaf, and normal probability plot). Several tests of the normality of data were performed. We checked the symmetry, looking at the mode, median and mean, and then used the Shapiro-Wilks test and various graphical tests (box plot, stem and leaf, and normal probability plot p > .05). Based on these several tests, a normal distribution data were achieved in variables. Then structural equation model was used to examine the mediation relationship between job insecurity, leadership practices with job stress. The reliability, means, and standard deviations for all variables presented in Table 2.

 Table 2

 Reliabilities, means, and standard deviations of variables

Variable	α	M	SD
Leadership Practices	.890	48.31	6.19
Job stress responses	.920	43.78	10.38
Job insecurity	.873	13.92	3.66

3. Results

The result of correlation analysis showed a significant relationship between job insecurity, leadership, and job stress. Job insecurity had a positive association with job stress (r = .314 p < .00). With addition leadership had a negative relationship with job insecurity (r = -. 193 p < .01), while leadership practice had a negative association with job stress (r = -. 232 p< .01)

 Table 3

 Correlations between variables in the structural model

		Y	X1	X2
Y	Job stress	1.000	232**	.314***
X1	Leadership practice	232**	1.000	193**
X2	Job insecurity	.314***	193**	1.000

Note. Significantly greater (p < .05)

p*<.05; *p*<.01; ****p*<.001

The propose model that we tested as described below. Leadership had an indirect effect on job stress, which it is mediated by job insecurity, while, job insecurity had a direct positive relationship to job stress. Besides that, we also assumed that leadership had a direct relationship with job stress. See Figure 1.

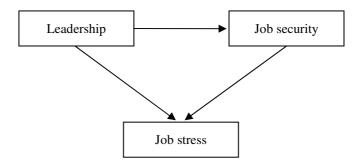
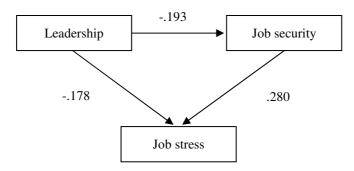


Figure 1. A propose model between job insecurity, leadership and job stress

The results of study through a structural equation model analysis shows that job insecurity had an indirect relationship with job stress. Leadership variable had a significant relationship to job insecurity with r = -.193 p<.05, While the direct effect of leadership to job stress was significant with r = -.178 p<.01. The direct effect of job insecurity toward job stress was significant with r = .280 p<.01. The propose model had a satisfactory result with chi-square = .000, p = .999 > .05.

The maximum likelihood (ML) method of covariance structure analysis was used in this study. To examine overall model fit, the Root mean squared error of approximation (RMSEA), chi-square/degree of freedom (CMIN/DF), Tucker-Lewis index (TLI), and normed fit index (NFI) was used. Satisfactory model fit was indicated by RMSEA values less than or equal to .08 and by TLI and NFI values greater than or equal to .90. Moreover, CMIN/DF values less than or equal to 5 was adequately reasonable for a model (Ghozali, 2008; Byrne, 2001). The propose model had a satisfactory model fit with all criteria said above. Figure 2 describes the final model of this study. For the model fit criteria is described in Table 4 for more detail.



 χ^2 =.000, p=.999>.05, NFI=.000, TLI=1.160, RMSEA=.000

Figure 2. The structural final model between job insecurity, leadership, and job stress

Table 4
Fit indices for structural models

χ^2	Prob	CMIN/DF	NFI	TLI	RMSEA
.000	.999	.000	1.0	1.160	.000

The final model had chi-square (.000), p = .999 with CMIN/DF = .000, NFI = 1.000, TLI =1.160, and RMSEA = .000. With all result we can concluded that our model has a satisfactory model fit. The summaries of standardized direct effect and indirect effect are described in table 5, and table 6 for detail.

 Table 5

 Summary of path coefficient of standardized direct effect

	Job insecurity	Leadership
Leadership	193*	.000
Job stress	.280**	178**

Note. Significantly greater (p < .05)

Table 6

Summary of path coefficient of standardized indirect effect

	Leadership
Job insecurity	.000
Job stress	054*

Note. Significantly greater (p < .05)

Because the mediation relationship was significant, the post-hoc probing analysis was needed to examine whether the association between predictor and outcome was significantly reduced when the mediator was introduced into the model. According to Holmbeck (2002) conducting post hoc analyses of mediation is important because it prevents the investigator from drawing false positive or false negative conclusions about the relationships among the variables. It is important to keep in mind that the "drop to non-significance" criterion is flawed and may result in incorrect conclusions about the data. Holmbeck (2002) stated that false negative conclusions may be due to limited power or poor reliability of measures (Type II errors), of course. But both false negatives and false positives can be a result of the "drop to non-significance" criterion. This strategy assumes that there is mediation when the A-C relationship drops from significance to non-significance with the addition of the mediator. This is a flawed strategy, however, because it is possible that no mediation is present even when the relationship changes from significant to non-significant. Moreover, it is also possible that mediation has occurred even when there is no drop to non-significance.

^{*}p<.05; **p<.01

^{*}p<.05; **p<.01

Boostrapping method was used to examine post-hoc probing analysis of mediation (Shrout & Bolger, 2002). The result was the association between predictor and outcome is significantly reduced when the mediator is introduced into the model. The result showed job insecurity had significant mediation effect with lower bound = -.199, and upper bound = -.014, with p = .017 < .05. Table 7 shows the result of probing analysis in detail.

 Table 7

 Summary of Post hoc analysis using bootstrap

	Lower-bounds Leadership	Upper-bounds Leadership	Two-tailed Sig
Job stress	119	014	.017*

Note. Significantly greater (p < .05)

p*<.05; *p*<.01

4. Discussions

The results showed that the existence of mediating the relationship between leadership practices with job insecurity is significant. While, there is also a direct relationship between leadership practices toward job stress. This suggests that the role of job insecurity is very important in the organization as mediator variable. While, a direct relationship between leadership practices toward job stress decreased when job insecurity controlled. This suggests that the role of job insecurity is important in the organization as mediator variable. The theoretical explanation is as follows, Yukl (2008) stated that leaders could influence employees through positive emotional appeals. Subordinate who leads by supportive leader style will accept and reframe stressful situations as opportunities and challenge for growth, instead of perceived stressful work situation as threat (Bass, 1998; Sosik & Godshalk, 2000).

In leader-member exchange theory (Yukl, 1994) stated that leader is a reciprocal process in which leader and follower exist in a mutual relationship. This means that leader does not exist without follower; either leader or follower has mutual influences in dynamical process. When a leader uses a negative approach, and unsupported practices toward subordinates, this condition will create anxiety and insecurity. This insecurity feeling will cause subordinates feel insecurity related to the sustainability of promotion, career, and work itself. This insecurity finally will create a strain and distress among subordinates, so when the condition of distress that experienced by subordinates keep going on, this condition will increase the occurred possibility of job stress among subordinates.

The present study's result confirms other studies that examine the relationship between leadership with job stress. Study by Webster and Hackett (1999) concluded that leadership practice had influence on burnout of mental health professional. The results of their study indicated a significant, although had weak relationship between the leadership practice and emotional exhaustion, and between the majority of the leadership practice with depersonalization. Studies of leadership consistently reported that leadership can directly influence subordinate performance, theirs behaviors, and reactions to the job, such as job satisfaction, positive mood, greater commitment to the organization, reduced turnover, improved work performance, pursuit of more challenging goals, perseverance, greater adversity to stress, and value of progress (Lyons, & Schneider, 2009: Yukl, 2008).

Other study by Littrell, Billingsley, and Cross (1994) confirmed that school leader affected how teachers feel, value, and perceived about themselves and their work. Teachers who characterized their leaders as supportive finds work more rewarding; enjoyed a productive performance, motivating work environment; demonstrated lower attrition rates and experienced less job-related stress and burnout. Previous studies have shown that job insecurity had an effects to job attitudes such as satisfaction (Probst & Brubaker, 2001), organizational attitudes such as organizational commitment and trust, and psychological and physical well-being outcomes (Hellgren & Sverke, 2003; Kivimaki, Vahtera, Pentti, & Ferrie, 2000). A few studies have identified additional work-related behaviors such as increased job search behavior (Adkins, Werbel, & Farh, 2001; Reisel & Banai, 2002) or safety

behavior (Probst & Brubaker, 2001).

Many past studies have a conclusion that work stressor likes job insecurity will cause unfavorable consequences for employees (Cheng et al., 2005). For example, job insecurity creates powerless, uncertain, and anxiety feeling, which then cause to poor well-being (De Witte, 1999). As Borg and Elizur (1992) noted, a causal relationship exists, with job insecurity causing various phenomenon, such as lower trust in management, and not vice-versa. While, Lee et al. (2004) described that during 4 years, they found coronary heart disease deaths cases of myocardial infarction (MI), and 41 coronary heart disease (CHD) deaths. After adjustment for a wide array of potential confounders, the relative risk of total CHD over 2-year follow-up was 1.35 (95% CI, 0.78–2.34) and 1.04 (95% CI, 0.69–1.57) over 4-year follow-up. Job insecurity appeared significantly increase the risk of nonfatal MI in the short term.

5. Conclusions

The conclusions of this study showed that the relationship between leadership practices with job stress mediated by job insecurity was significant. In addition, the hypothesis stated that leadership practices had a direct relationship with job stress was also significant. The implication of this study for university leader is as follow. Academic leader should apply a positive leadership practices in order to create supportive climate for their subordinate. Leaders who apply supportive style will create more positive climate in their department. This positive climate that characterizes by open and empathic communication, inspiring their subordinate, and more encouraging their subordinate will strengthen and motivate their academic staff in performing optimal effort to reach the university's goals. This positive climate will also reduce stressful work-situation, and this condition will directly diminish job stress among academic staff. According to the result of empirical analysis, the conclusions are generated as followings. Job insecurity had a positive significant relationship with job stress. Job insecurity usually creates psychological and physical discomfort, and this condition will increase the possibility of job stress among academic staff.

The study also indicated that leadership practices have a negative relationship with job stress. Job insecurity had higher indirect effect on leadership practices and job stress than the direct effect. Therefore, job insecurity had mediation effect on the relationship between leadership practices and job stress. However, the mediated effect of job insecurity was small, and it indicated that the role of job insecurity as mediator variable was weak on the relation between leadership practices and job stress. The effect size becomes a limitation in this study, and it should be taken with caution. Moreover, the generalization of this study is just applied to Malaysia, especially in Pahang region. Further research needs to verify the role of job insecurity as mediator with other sample.

6. References:

- Adkins, C. L., Werbel, J. D., & Farh, J. L. (2001). A field study of job insecurity during a financial crisis. *Group & Organization Management*, 26, 463–483. http://dx.doi.org/10.1177/1059601101264004
- Aeria, L. A. (1998). Burnout among senior high school teachers in Petaling [in Malaysian]. *Jurnal Pendidikan Tiga*, 2(2), 79-91.
- Ahsan, N., Abdullah, Z., Gun Fie, D.Y., & Shah Alam, S. (2009). A study of job stress on job satisfaction among university staff in Malaysia: Empirical study. *European Journal of Social Sciences*, 8(1), 121-131.
- Assadi, H. (2003). Evaluation of job stress factors (organizational and managerial) among heads of physical education organization. *Acta Univ. Palacki. Olomuc. Gymn, 33*(1), 47-55.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173-1182. http://dx.doi.org/10.1037/0022-3514.51.6.1173
- Bass, B. M. (1998). Transformational leadership: Industrial, military, and educational impact. Mahwah, NJ: Erlbaum.
- Blix, A. G., & Lee, J. W. (1991). Occupational stress among university administrator. Research in Higher

- Education, 32(3), 289-302. http://dx.doi.org/10.1007/BF00992893
- Borg, I., & D. Elizur. (1992). Job insecurity: Correlates, moderators and measurement. *International Journal of Manpower*, 13, 13–26. http://dx.doi.org/10.1108/01437729210010210
- Boscolo, P., Di Donato, A., Di Giampaolo, L., Forcella, L., Reale, M., Dadorante, V., Francesca Alparone, F., Pagliaro, S., Kouri, M., Magrini, A., & Fattorini, (2008). Blood natural killer activity is reduced in men with occupational stress and job insecurity working in university. *International Archives Occupational Environmental Health*, 82, 787-794. http://dx.doi.org/10.1007/s00420-008-0374-5
- Byrne, B. M. (2001). Structural equation modeling with Amos basic concept, application, and programming. New Jersey: Lawrence Erlbaum Associates.
- Cheng, Y., Chen, C. W., Chen, C. J., & Chiang, T. L. (2005). Job insecurity and its association with health among employees in the Taiwanese general population. *Social Science and Medicine*, 61(1), 41–52. http://dx.doi.org/10.1016/j.socscimed.2004.11.039
- Crampton, S. M., Hodge, J. W., Mishra, J. M., & Price, S. (1995). Stress and stress management. *SAM Advanced Management Journal*, 60, 10-21.
- De Nobile, J. J., & McCormick, J. (2007). *Occupational stress of catholic primary school staff: Investigating biographical differences*. A paper presented at the Annual Conference of the Australian Association for Research in Education, Fremantle, November 25-29.
- De Witte, H. (1999). Job insecurity and psychological well-being: Review of the literature and exploration of some unresolved issues. *European Journal of Work and Organizational Psychology*, 8(2), 155–177. http://dx.doi.org/10.1080/135943299398302
- Donders, N. C. G. M., van der Gulden, J. W. J., Furer, J. W., Tax, B., & Roscam Abbing, E. W. (2003). Works stress and health effects among university personnel. *International Archives Environmental Health*, 76, 605–613. http://dx.doi.org/10.1007/s00420-003-0461-6
- Feijoo, N.R. (2004). Job insecurity and stress level. *Interdisciplinaria*, 3, 249-257.
- Ghozali, I. (2008). *Structural equation model: Application using AMOS 16.0* [In Indonesia]. Semarang: Badan Penerbit Universitas Diponegoro.
- Greenhalgh, L., & Rosenblatt, Z. (1984). Job insecurity: Toward conceptual clarity. *Academy of Management Review*, *3*, 438-448.
- Hellgren J., Sverke M., & Isaksson, K. (1999) A two-dimensional approach to job insecurity: consequences for employee attitudes and well-being. *European Journal Work Organization Psychology*, 8, 179–95. http://dx.doi.org/10.1080/135943299398311
- Hellgren, J., & Sverke, M. (2003). Does job insecurity lead to impaired well-being or vice versa? Estimation of cross-lagged effects using latent variable modeling. *Journal of Organizational Behavior*, 24, 215–236. http://dx.doi.org/10.1002/job.184
- Holmbeck, G. N. (2002). Post-hoc probing of significant moderational and mediational effects in studies of pediatric populations. *Journal of Pediatric Psychology, Special Issue on Methodology and Design*, 27(1), 87-96.
- Jing, L. (2008). Faculty's job stress and performance in the undergraduate education assessment in China: A mixed-methods study. *Educational Research and Review*, *3*(9), 294-300.
- Kivimaki, M., Vahtera, J., Pentti, J., & Ferrie, J. E. (2000). Factors underlying the effect of organizational downsizing on health of employees: Longitudinal cohort study. *British Medical Journal*, 320, 971–975. http://dx.doi.org/10.1136/bmj.320.7240.971
- Kouzes, J. M., & Posner, B.Z. (1993). *Leadership Practices Inventory (LPI): A self-Assessment and analysis*. San Diego, CA: Pfeiffer & Company.
- Kouzes, J. M., & Posner, B.Z. (2007). The leadership challenge (4th ed.). San Francisco, CA: Jossey-Bass.
- Lee, S., Colditz, G.A., Berkman, L.F., & Kawachi, I. (2004). Prospective study of job insecurity and coronary heart disease in us women. *Annual Epidemiology Journal*, *14*, 24–30. http://dx.doi.org/10.1016/S1047-2797(03)00074-7
- Leung, T., Siu, O., & Spector, P.E. (2000). Faculty stressors, job satisfaction, psychological distress among university teachers in Hong Kong: The role of locus of control. *International Journal of Stress*

- Management, 7(2),121-138. http://dx.doi.org/10.1023/A:1009584202196
- Littrell, P. C., Billingsley, B. S., & Cross, L. H. (1994). The effects of principal support on special and general educators' stress, job satisfaction, school commitment, health, and intent to stay in teaching. *Remedial and Special Education*, *15*, 297–310. http://dx.doi.org/10.1177/074193259401500505
- Lyons, J.B., & Schneider, T.R. (2009). The effect of leadership style on stress outcomes. *The Leadership Quarterly*, 20, 737-748.
- Probst, T., & Brubaker, T. L. (2001). The effects of job insecurity on employee safety outcomes: Cross-sectional and longitudinal explorations. *Journal of Occupational and Health Psychology*, *6*, 139–159. http://dx.doi.org/10.1037/1076-8998.6.2.139
- Reisel, W. D., & Banai, M. (2002). Comparison of a multidimensional and a global measure of job insecurity: Predicting job attitudes and work behaviors. *Psychological Reports*, *90*, 913–922. http://dx.doi.org/10.2466/pr0.2002.90.3.913
- Rosnita, M. Z. (2006). Facet and stressors among mathematics teachers using English language: Study in Kelantan's State Senior High School [In Malaysian]. Unpublished Masteral thesis, Fakulti Pendidikan Universiti Teknologi Malaysia.
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and non-experimental studies: New procedures and recommendations. *Psychological Methods*, 7, 422-445. http://dx.doi.org/10.1037/1082-989X.7.4.422
- Sosik, J. J., & Godshalk, V. M. (2000). Leadership styles, mentoring functions received, and job-related stress: A conceptual model and preliminary study. *Journal of Organizational Behavior*, 21, 365-390. http://dx.doi.org/10.1002/(SICI)1099-1379(200006)21:4<365::AID-JOB14>3.0.CO;2-H
- Sulksky, L., & Smith, C. (2005). Work stress. California: Thomson Wadsworth.
- Wang, P., Springen, K., Schmitz, T., & Bruno, M. (2002). A cure for stress? Newsweek, October 12, 64-65.
- Webster, L., & Hackett, R. L. (1999). Burnout and leadership in community mental health systems. Administration and Policy in Mental Health, 26(6), 387-399. http://dx.doi.org/10.1023/A:1021382806009
- Yukl, G. (1994). Leaderships in organization (3rd ed.). Englewood Cliffs, NJ: Prentice Hall.
- Yukl, G. (2008). How leaders influence organizational effectiveness. *The leadership quarterly, 19*, 708-722. http://dx.doi.org/10.1016/j.leaqua.2008.09.008

Appendix

Questionnaire

Section B: Stress Responses

	9	Frequency
1	I have little motivation to achieve higher performance of my job	1 2 3 4
2	I like playing game computer during working time to release stress	1 2 3 4
3	My productivity is lower in recent time	1 2 3 4
4	If there is an opportunity, I like to go out during working time	1 2 3 4
5	I feel depressed in handling my job	1 2 3 4
6	I feel unmotivated to do my job now	1 2 3 4
7	I feel bored with my job now	1 2 3 4
8	I feel fatigue to handle my job now	1 2 3 4
9	I cannot make a decision in doing my job	1 2 3 4
10	I cannot concentrate on my job recently	1 2 3 4
11	My thought easily distracted when I am working	1 2 3 4
12	I cannot think clearly when I am doing my job	1 2 3 4
13	I feel a loss of energy	1 2 3 4
14	My stomach does not feel well recently	1 2 3 4
15	I get severe or chronic headaches	1 2 3 4
16	My body feels tense all over	1 2 3 4
17	I have a hard time feeling really relaxed	1 2 3 4
18	I have trouble falling asleep	1 2 3 4
19	No matter how much sleep I get, I awake feeling tired	1 2 3 4

Section E: Job Insecurity

		Frequency
1	I am worried about my job security.	1 2 3 4
2	My income is likely to be unstable and uncertain.	1 2 3 4
3	I am worried that my career will be stagnated.	1 2 3 4
4	I am worried about my career in the future.	1 2 3 4
5	I am afraid about the stability of my income in this organization.	1 2 3 4
6	I am worried about the improvement of my income in the future	1 2 3 4

Section J: Leadership practice

		Frequency
1	My leader expresses high expectations about what people are capable of accomplishing.	1 2 3 4
2	My leader pays more attention to positive things people do than to the negative.	1 2 3 4
3	My leader shows others, by example, how people should be recognized and rewarded.	1 2 3 4
4	My leader personally acknowledges people for their contributions.	1 2 3 4
5	My leader finds ways to make the work place enjoyable and fun.	1 2 3 4
6	My leader clearly communicates his/her standards to everyone on the team.	1 2 3 4
7	My leader lets people know that he/she has confidence in them.	1 2 3 4
8	My leader spends a good deal of time listening to the needs and interests of other people.	1 2 3 4
9	My leader personally congratulates people for a job well done.	1 2 3 4

10	My leader finds opportunities to let people know the <i>why</i> behind whatever we are doing.	1 2 3 4
11	My leader makes it a point to give people feedback on how they are performing against our agreed-upon standards.	1 2 3 4
12	My leader gets to know, on a personal level, the people with whom his/her work.	1 2 3 4