

IEBMC 2017
8th International Economics and Business Management
Conference

RELATIONSHIP BETWEEN PSYCHOLOGICAL STRESS AND
MENTAL HEALTH AMONG YOUNG LECTURERS

Mohd Suhaimi Mohamad (a) & Nasrudin Baidi(b)*
*Corresponding author

(a) National University of Malaysia (UKM), 43600, Bangi, Selangor, Malaysia, msuhaimi@ukm.edu.my
(b) The National Energy University (Uniten), 26700, Muadzam Shah, Pahang, Malaysia, nasrudin@uniten.edu.my

Abstract

Mental health is an essential element in ensuring the well-being of each individual. Career as a young lecturer in a university gives no exception but to deal with work stress, particularly in a research university. Work stress brings direct and indirect effects to their mental health. This study aimed to measure the extent of psychological stress levels among young lecturers and its relationship with their mental health. A total of 100 young lecturers were involved in this study, which used a quantitative questionnaire survey method. The study found that two-thirds of respondents had high levels of psychological stress. Almost half of the respondents had a low level of mental health. For mental health subscales, 51 percent of respondents had a high level of anxiety; 23 percent of respondents had high levels of depression; 44 percent of respondents had low behavioural controls and 58 percent of respondents had a low positive feeling. There is a significant correlation between the degree of psychological stress and mental health but only sub-scale anxiety, behaviour control and positive affective have significant relationship with psychological stress at $p < 0.05$. In conclusion, the findings of this study are expected to help the management to ensure the existence of intervention programs at research universities to reduce psychological stress in order to improve the mental health of young lecturers.

© 2018 Published by Future Academy www.FutureAcademy.org.UK

Keywords: Mental health, young lecturer, psychological stress, Research University.



1. Introduction

In the face of globalization and rapid development of education, Malaysia needs a workforce that is highly enterprising, energetic, and productive. These are necessary elements to create a competitive and high-quality human capital. Educators comprising lecturers and teachers are leading exponents of the Malaysian Education Development Plan (Higher Education) 2015-2025, which represents a continuation of the National Higher Education Strategic Plan 2007. The Ministry of Education is developing a new education plan that is more consistent and coherent, and in line with the National Transformation Program as well as the 11th Malaysian Plan.

Presently, lecturing is not an easy profession due to the responsibility that requires lecturers not only to lecture but also to do other tasks such as conducting research work and assignment check, and carrying out administrative work (Azlina & Shiqah, 2010). A career as a lecturer cannot avoid dealing with psychological stress at work. Stress is a part of life and every individual will be at risk of experiencing stress either in term of positive stress (eustress) or negative stress (distress) (Yao, 2008). Stress may adversely affect the health and well-being of an employee either physically, mentally or emotionally. Studies have proven that the field of education is one of the high-risk occupations prone to psychological stress (Dunham & Varma 1998). Blix, Cruise, Mitchell and Blix (1994) conducted a study involving 400 university lecturers with regard to stress problems at the workplace and found that 70 percent of lecturers experienced stress in their workplace due to workload factors, non-conducive workplace conditions and time constraints to complete the syllabus of teaching to be delivered to students.

Peter and Narawi (2002) stated that work stress can lead to a decrease in job performance, absenteeism, early retirement, neglect of responsibility, becoming less flexible and overly firm. Thus, if not attended to adequately, the situation might affect the quality of teaching and the commitment of a lecturer. Recent studies have found that psychological stress has a significant relationship with a lecturer's lifestyle due to the job nature that does not clearly separate between work and rest time. It is common for them to be forced to complete work at home thus causing them to burnout. On top of that, they are pressured to adapt to numerous new requirements that are continuously instructed to them (Abdul Muin Sapidin, 2005; Ali Khomsan, 2004; Eres & Antanasoska, 2011). Kang and Sidhu (2015) stressed that specific emphasis should be given to identify sources of stress in working environments such as; lack of capacity utilization, boredom, heavy workloads, role conflicts, issues of wage increase, unclear working time arrangement, unsuccessful relationships with colleagues and usage of dangerous equipment while performing work tasks. In general, there are four main factors that might contribute to psychological stress, namely: the external environment, working environment, working group and individual factors (Dollard 2014; Tatik & Harry 2001). Cooper (1994) stated that stress is not caused by one factor but by linkage of factors. However, there is a possibility that one out of these stress factors plays a major role in a certain working environment. Wilson and Wilson (2013) argued that there are various causes of stress in an employment such as workplace environment, role in the organization, career development, interpersonal relationships at work, organizational structure and climate, as well as individual factors. Meanwhile, Gyllensten and Palmer (2005) stated that there are three main factors that often lead to high levels of stress at work, i.e. role ambiguity, role conflicts and overloaded tasks. These three factors are seen as synonymous with young

undergraduates (under 40 years old) who are still inexperienced and in the process of adaptation and adjustment of work while undergoing their mid-life crisis phase at the same time (Aldwin & Levenson, 2001; Chang & Edwards, 2014; Lachman, 2001; McAllister et al., 2012; Takizawa et al., 2006).

Young lecturers are at risk of having to face high levels of stress at work in order to meet urgent work demands, especially those of a research university. This makes lecturers more likely to be depressed, disappointed, worried and feel stressed out in their effort to play the roles expected of them (El-sayed, Hanaa Hamdy & Adeyemo., 2013). This condition is triggered by the requirement to perform work or tasks that exceed their actual capabilities. As mentioned earlier, the career of a lecturer requires them to do tasks that are not just to educate, but also to do research, attend courses, evaluate the assignment of students and others that require them to work many extra hours (Azlina & Shiqah 2010). These are the factors that contribute to young lecturers constantly feeling under pressure because they lack the experience in completing tasks and limited availability of mentors who can guide them. Eventually they often feel overwhelmed and dissatisfied with their own work quality, resulting in depression; especially those with weak strategies in dealing with psychological pressure.

Psychological stress is one of the factors that trigger a mental health problem; one of the five major diseases in the world (World Health Organization (WHO), 2002). In Malaysia, 12 percent of the population aged between 18 and 60 years have the possibility of suffering from mental illness. The issue of work stress and mental health are two key issues that must be addressed if discussions on the total health of an individual are to be carried out. This is because stress is the major factor that causes a direct and indirect death (Huda et al., 2004). Many researchers have shown that stress is a contributing factor to the occurrence of various chronic diseases such as cardiovascular disease, musculoskeletal disorders, hypertension, headache, insomnia and psychological disorders (Bamberger et al., 2012; Loretto, Stephen & Popham, 2010; Phoon 1999; Theorell & Karasek, 1996). The effects of stress do not stop only at causing chronic illnesses but also disrupts one's mental health. Excessive and constant stress over a long period can cause a person to suffer from depression or mental illness. Mental illness usually occurs when an individual is in a state of worry, anxiety, emotionally disturbed, feeling helpless about life, and in extreme disappointment (Tribe & Raval, 2003).

2. Problem Statement

Mental health refers to the ability of individuals, groups and environments to interact with one another in order to generate a sense of peace and well-being. It is also an optimum function in the use of cognitive abilities (intellect), affective (emotion) and relationship skills in achieving individual and group goals that are consistent with justice (Akta Kesihatan Mental 2001). The World Health Organization (WHO, 2002) has defined mentally health individuals as individuals who can maintain harmonious relationships with others, participate in community activities and contribute to society. Therefore, it is well understood that health includes different components such as physical, social, mental, environmental and spiritual aspects (WHO, 2005). Wainwright and Surtees (2004) stated that mental health refers to the level of individual functioning; whether individuals feel comfortable with themselves and their way of life or otherwise. Based on this fact, he classified mental health into four categories that could be attributed to interference with individual abilities such as: i) social behaviour that compromises ordinary levels of

socialization or communication skills; ii) emotional behaviour that leads to a state of depression, anxiety, phobia and emotional sexual harassment; iii) health problems such as insomnia, inability to endure pain, weight control failure and bad behaviour such as smoking, alcohol use and drug abuse; and iv) work-related issues including burn-outs, boredom, absenteeism, inability to make decisions, low-quality of work, etc.

Mental illness can also be categorized as a malfunction of the brain that causes confusion to one's feelings, beliefs and motivation (Usturn & Sartorius, 1995). This condition causes individuals to experience a deterioration in interpersonal skills, failure to accept norms and ideas prevailing in daily lives, and failure to independently address problems. Mental illness that occurs to individuals can be divided into several types such as stress, depression, anxiety, eating disorders, schizophrenia and domestic violence (Dollard, 2014; Espejo, 2012). Mental illness does not occur just by itself but is caused by factors present in the individual's surrounding. Maslach and Goldberg (1998) argued that social situation changes such as family structure, occupational status, residence, marital status and income, which contribute significantly to mental and psychological problems among workers. Study on mental health problems among lecturers are less focused as most local studies focus on work stress issues related to job satisfaction and work performance (Baskaran 2004; Tsuey, Mohamd & Er, 2013). In addition, very few studies have touched the relationship between stress and mental health in institutions of higher learning such as universities. In fact, there are still very few researchers who have attempted to make a comparison study between work pressures in research universities compared to other public or private universities. One of the implications of work stress to young academics is that; they are noted to have low-work durability and face the risk of experiencing mental health problems (Azlina & Shiqah, 2010; Baskaran, 2004; Evans et al. 2006). Hence, if this is not investigated and explored, chances are that young lecturers might experience severe employment stress and suffer from mental problems are very likely to occur in many institutions of higher learning. Therefore, the research questions for this study are; 1) what is the status of psychological distress among young lectures in UKM, 2) what is their level of mental health and 3) is there any relationship between the level of psychological stress and level of mental health among young lecturers in UKM?

3. Purpose of the Study

This study aims to explore the mental health status among young lecturers in a research university, namely Universiti Kebangsaan Malaysia (UKM) by looking at their levels of psychological stress and mental health. The objective of the study is to identify the relationship between the level of psychological stress and the level of mental health among young lecturers.

4. Research Methods

This study is quantitative in its nature and a questionnaire method was used to conduct a survey involving 100 young lecturers in UKM. The study used the convenient sampling method whereby all lecturers under 45 years of age attending the new lecturer induction courses, research & publishing courses and teaching & learning courses were recruited to answer a questionnaire comprising: (a) demographic information, (b) General Health Questionnaire (GHQ-12) and, (c) Mental Health Inventory (MHI).

4.1. General health questionnaire (GHQ-12).

GHQ-12 is a measurement tool used to detect levels of psychological stress, especially in the detection of emotional disorders. This instrument has been proven to have a high validity and reliability values in which the Cronbach alpha was 0.88. The psychological stress level was determined based on the overall achievement score of 12 items listed in GHQ-12 according to the 0-0-1-1 count in a 4-point Likert Scale. The score for respondents exceeding 6.0 and more is categorized as a high score while scores below 6.0 are categorized as low scores. High scores reflect high levels of psychological stress among respondents.

4.2. Mental health inventory (MHI).

This tool is used to assess the mental health issues and it covers both a wide range of positive and negative emotions. This instrument had 18 items divided into four mental health subscales such as: anxiety, depression, behavioral control and positive feelings (affective positive).

5. Findings

As shown in Table 01, the demographic profile shows that 54 percent of respondents were male and 46 percent of respondents were female. Based on the ethnicity of the respondents, the majority of young lecturers were Malays (82 per cent). Meanwhile, there were only 10 percent of Chinese respondents and 8 percent of Indian respondents. Most of the young lecturers involved were between the age of 30 and 40 years and most of them were married (81 per cent) and only 19 percent of the respondents were single. For married young lecturers, nearly two-thirds of them had at least two children. In terms of total monthly fixed income, only 23 percent had an income of more than RM5,000 per month while the majority had an income of between RM3,000 and RM5,000 per month.

Table 01. Respondent's demographic distribution

Demography	Category	Frequency (n=100)	Percentage (%)
Gender	Male	54	54
	Female	46	46
Race	Melay	82	82
	Chinese	10	10
	Indian	8	8
Age	<30 years	8	8
	31-35 years	51	51
	36-40 years	33	33
	41-45 years	8	8
Status	Single	19	19
	Married	81	81
Number of Children	1	22	22
	2	29	29
	3	28	28
	<4	21	21
Fixed Monthly Income	RM3,000 and below	11	11
	RM3,001-RM5,000	66	66
	RM5,000 above	23	23

Faculty	Pharmacy	5	5
	Engineering	18	18
	Education	13	13
	Islamic Studies	6	6
	Dentistry	6	6
	Medical	16	16
	Science and Technology	12	12
	Health Science	9	9
Social Sciences	15	15	

There were 9 faculties involved in this study. Based on this demographic profile, it is evident that most of the young lecturers were married and with family responsibilities, and most earned only a modest income. Thus, due to the middle-age life phase they are currently experiencing, it is not surprising that these young lecturers are at risk of experiencing high levels of psychological stress. Previous studies have suggested that most individuals in the mid-life phase are highly inclined to experience mental stress due to physical illness and psychosocial problems encounter (Aldwin & Levenson 2001; Azlina & Shiqah 2010; Mohd. Suhaimi et al. 2012; Takizawa et al. 2006).

5.1. The level of psychological stress.

The level of psychological stress of young lecturer was determined by the score derived from General Health Questionnaire version 12 (GHQ-12). Based on the score of the GHQ-12, most of the respondents (73 per cent) were experiencing a high level of psychological stress, while only 27 percent of respondents had a low level of psychological stress. This shows that more than two-thirds of the respondents had recorded high scores of psychological stress and this illustrates that the majority of young lecturers are depressed with their current situation. Due to the high pressure, most the young lecturers reported that they were less likely to get quality sleep and most of the conditions were beyond their control, thus, causing them to always feel worried and unhappy with the current state of affairs (Azlina & Shiqah 2010; Baskaran 2004; Evans et al. 2006).

5.2. The level of mental health.

The mental health level of young lecturers was measured by the Mental Health Inventory (MHI). Researchers have categorized mental health in two levels, namely low and high levels. Respondents with achievement scores above min are categorized as high level. Table 02 shows the level of mental health among lecturers as a whole. The results of the analysis found that the mental health level of UKM lecturers was at a high side with an indication of a 52 per cent score from 100 respondents. A high level mental health status indicates that the respondents' mental health level is good. This is because the higher the MHI score, the better the individual's mental health level.

Table 02. The level of mental health

	Level	Frequency (N=100)	Percentage (%)
Overall Mental Health (MHI)	Low	48	48
	High	52	52
Anxiety Sub-Scale (MHA)	Low	49	49
	High	51	51
Depression Sub-Scale (MHD)	Low	77	77
	High	23	23
Behavior Control Sub-Scale (MHC)	Low	44	44
	High	56	56
Positive Feeling Sub-Scale (MHP)	Low	58	58
	High	42	42

Yet at the same time, it is found that almost half of the young lecturers involved in the study showed a low score for the mental health level. This proves that almost half of the survey respondents are at risk of suffering from mental health problems. The 4 sub-scale mental health inventory measured certain aspects of the mental health dimension. The sub-scale of “anxiety” and “depression” measured the negative aspect while “behavioral control” and “positive feelings” measured the positive aspects of mental health. Anxiety levels were measured using a sub-scale of anxiety known as Mental Health Anxiety (MHA). This study found that 51 percent of the respondents had a high level of anxiety score. This score indicates that half of the young lecturers in UKM are experiencing anxiety problems. Various causes could be attributed to anxiety problems among young lecturers such as fear of losing jobs, unable to achieve a job performance index specified in research universities, unstable family economic conditions and uncertain health conditions due to working pressure (Azlina & Shiqah 2010; Baskaran 2004).

The level of depression of young lecturers is measured by a sub-scale of depression known as Mental Health Depression (MHD). According to Table 2, only one-third (23 percent) of the young lecturers in this study had high scores on the levels of depression. The figure shows that the majority of young lecturers surveyed in UKM did not have serious depression problems. However, these (23 percent) lecturers need to be taken seriously as they have a high potential to suffer from serious depression in the future. In fact, the percentage obtained from this study was higher than the total percentage of depression in Malaysia which was recorded at 12 percent (Tsuey et al., 2013). However, this is not an accurate indicator that leads to conclude that young lecturers in UKM are depressed as this study is only meant for simple mental health check-ups and very general in its nature, and lecturers were not properly diagnosed by clinical psychiatrists. In addition, the study sample was small and cannot be used to generalize or draw conclusions about the trend of the entire population in Malaysia.

In addition, the behavioral control sub-scale measures the level of control of behaviour of young lecturers as they are faced with stressful situations. The sub-scale is known as Mental Health Control (MHC). 56 percent of the respondents recorded high levels of behavior control and the remaining 44 percent had low levels of behavioral control. This gives an early indication that nearly half of the young lecturers in UKM are at risk of not being able to control their behaviour when confronted with psychological stress. These young lecturers might develop tendencies towards uncontrollable behaviour such as acting

aggressively, being irrational and inflexible if they are continuously exposed to stressful environments (Peter & Narawi, 2002).

A positive feeling sub-scale known as Mental Health Positive (MHP) was used to measure the level of positive feelings of young lecturers working in research universities. Based on Table 2, 42 percent of respondents indicated having high positive feelings while the remaining exhibited low scores on their positive feelings. This shows that nearly 60 percent of young lecturers were expressing negativity about the current situation they were experiencing. This situation necessitates the university management to create a more positive and conducive working environment. Unless serious measures are considered the productivity of the young lecturers will decline due to unpleasant and stressful feelings in their working environment (Azlina & Shiqah 2010; Baskaran 2004). If this situation persists, it could cause fatigue among young lecturers when carrying out tasks and eventually resulting in the difficulty in realizing the mission and vision of the research university.

5.3. The relationship between the level of psychological stress and level of mental health among young lecturers.

Table 03 shows the relations between psychological stress and mental health levels analyzed using the Chi-Square Test. The results show that there is a significant relationship between the level of psychological stress and mental health among young lecturers in UKM at $p < 0.05$. Observation on the mental health sub-scale indicated that only the depression sub-scale had no significant relationship with psychological stress, but the anxiety sub-scale, behavioural control sub-scale and positive feelings sub-scale indicated a significant relationship with value of $p < 0.05$.

Table 03. The relationship between psychological stress levels and mental health levels

	Psychological Stress		Total	X ² Value	Sig (k)
	Low	High			
MHI				4.514	0.034*
Low	45.8% (44)	100% (4)	48% (48)		
High	54.2% (52)	0% (0)	52% (52)		
MHA				4.337	0.037*
Low	46.9% (45)	100% (4)	49% (49)		
High	53.1% (51)	0% (0)	51% (51)		
MHD				1.245	0.265
Low	76.0% (73)	100% (4)	77.0% (77)		
High	24.0% (23)	0% (0)	23.0% (23)		
MHC				5.239	0.022*
Low	41.9% (39)	100% (4)	44.3% (43)		
High	58.1% (54)	0% (0)	55.7% (54)		
MHP				5.754	0.016*
Low	39.6% (38)	100% (4)	42.0% (42)		
High	60.4% (58)	0% (0)	58.0% (58)		

df=1, $p < 0.05$

The Pearson correlation analysis concluded that there was a significant negative correlation between the psychological stress score and mental health score with a $r = -0.258$ value at $p < 0.05$. This shows that

the higher the level of mental health, the lower the level of GHQ. This suggests that young lecturers with high psychological stress levels will have low mental health levels. The findings of this study are similar to previous studies which indicated that the higher the level of psychological stress, the lower the level of mental health (Aldwin & Levenson 2001; Azlina & Shiqah 2010; Baskaran 2004; Evans et al., 2006; Mohd. Suhaimi et al., 2012; Takizawa et al., 2006).

6. Conclusion

The goal of a Research University to produce quality research should start by providing quality life to lecturers, especially young lecturers who are the heirs and future beacons of the university. Based on the findings of this study, it is clear that the level of psychological stress and mental health is interconnected. Mental health is the key area that needs to be addressed by UKM's management as well as by the lecturers themselves. As such, UKM should conduct regular screening of general and mental health of their members at regular intervals in order to monitor their overall health status. UKM should also provide comprehensive mental health services that is not only involves treatment but also emotional and psychosocial support in order to reduce psychological stress among lecturers, especially young lecturers. Numerous previous studies have shown that work environments affect the levels of psychological stress and mental health of workers. Therefore, it is necessary for UKM's management to conduct a field survey that involve these young lecturers and the location they are assigned to, and evaluate the quality of services provided to them, such as internet access, office space, parking facilities, research and publication incentive schemes etc. It is also expected that all young lecturers should not engage in a "I don't care" attitude towards the stress they are experiencing and counter it regularly by doing recreational activities and hobbies; or by seeking professional help from a counselor, psychologist or even a psychiatrist if they experience a high level of anxiety, depression or psychological stress.

Acknowledgments

This research has been sponsored by Universiti Kebangsaan Malaysia, through Young Researcher Incentive Fund, Project Code: UKM-DIPM-090-2011

References

- Abdul Muin, S. (2005). stres guru membimbangkan – Akibat banyak perubahan dan bebanan tugas yang keterlaluan – NUTP. *Utusan Malaysia*, Ogos 18.
- Akta Kesihatan Mental 2001 (Akta 615). Petaling Jaya, Selangor Darul Ehsan: International Law Book Services.
- Aldwin, C.M. & Levenson, M. R. (2001). Stress, coping, and health at mid-life: a developmental perspective. In *The Handbook of Midlife Development*, ed. EM Lachman, 188–214. New York: Wiley.
- Ali, K. (2004). Menggugah komitmen pensyarah di perguruan tinggi badan hukum milik negara. *Harian Kompas*. Isnin 14 Jun 2004.
- Azlina, M.K. & Shiqah, J. (2010). *Tahap Stres dan tahap kepuasan kerja dalam kalangan pensyarah Universiti Teknologi Malaysia*. Fakulti Pendidikan, Universiti Teknologi Malaysia.

- Bamberger, S.G., Vinding, A.L., Larsen, A., Nielsen, P. Fonager, K., Nielsen, R.N., Ryom, P. & Omland, O. (2012). Impact of organisational change on mental health: a systematic review. *Occupational and Environmental Medicine*, 69(8), 592-598.
- Baskaran, S. (2004). *A Study On Occupational Stress Experienced By Lecturers Of The Higher Learning Institutions*. Master Thesis, Universiti Utara Malaysia.
- Blix, A., Cruise, R., Mitchell, B., & Blix, G. (1994). Occupational stress among university teachers. *Journal of Educational Research*, 36(2), 157–169.
- Chang, Y., & Edwards, J. K. (2014). Examining the relationships among self-efficacy, coping, and job satisfaction using social career cognitive theory: An SEM analysis. *Journal of Career Assessment*, 23(1), 35-47.
- Cooper, C. L. (1994). Healthy mind; healthy organization: A proactive approach to occupational stress. *Human Relations*, 47(4),455-471.
- Dollard, M. F. (2014). *Psychosocial factors at work in the Asia Pacific*. <http://dx.doi.org/10.1007/978-94-017-8975-2>.
- Dunham, J. D. &Varma, V. (1998). *Stress in teachers: past, present and future*.London: Whurr.
- El-sayed, S.H., Hanaa Hamdy, A.E. & Adeyemo, D.A. (2013). Relationship between occupational stress, emotional intelligence, and self-efficacy among faculty members in faculty of nursing Zagazig University, Egypt. *Journal of Nursing Education and Practice*, 4(4), 183-194.
- Eres, F. & Antanasoska, T. (2011). Occupational stress of teachers: A comparative study between Turkey and Macedonia. *International Journal of Humanities and Social Science*, 1(7), 59-65.
- Espejo, R. (2012). *Mental illness*. Detroit: Greenhaven Press.
- Evans, S., Huxley, P., Gately, C., Webber, M., Mears, A., Pajak, S., Medina, J., Kendall, T., & Cornelius Katona, C. (2006). Mental health, burnout and job satisfaction among mental health social workers in England and Wales. *British Journal of Psychiatry*, 188, 75-80.
- Gyllensten, K. & Palmer, S. (2005). The relationship between coaching and workplace stress: A correlational study. *International Journal of Health Promotion and Education*, 43(3), 97-103.
- Huda, B. Z., Rusli, B. N., Naing, L., Winn, T., Tengku, M. A., & Rampal, K. G. (2004). Job strain and its associated factors among lecturers in the School Of Medical Sciences, Universiti Sains Malaysia and Faculty of Medicine, Universiti Kebangsaan Malaysia. *Asia-Pacific Journal of Public Health / Asia-Pacific Academic Consortium for Public Health*, 16(1), 32-40.
- Kang, L. S., & Sidhu, H. (2015). Identification of stressors at work: A Study of university teachers in India. *Global Business Review*, 16(2) 303-320.
- Lachman, M. E. (2001). *Handbook of midlife development*. New York: Wiley.
- Loretto, W., Stephen, P. & Popham, F. (2010). Workplace change and employee mental health: Results from a longitudinal study. *British Journal of Management*, 21(2), 526-540.
- Maslach, C. & Goldberg, J. (1998). Prevention of burnout: New perspectives. *Applied and Preventive Psychology*, 7(1), 63-74.
- McAllister, S., Thornock, C. M., Hammond, J. R., Holmes, E. K., & Hill, E. J. (2012). The influence of couple emotional intimacy on job perceptions and work-family conflict. *Family and Consumer Sciences Research Journal*, 40(4), 330-347.
- Mohd. Suhaimi, M., Sheau, T.C., Norulhuda, S., Fauziah, I., Khadijah, A., &Noremy, M. A. (2012). Manifestasi penjaagaan keluarga: Tekanan psikologikal dalam menjaga pesakit mental. *e-BANGI*, 7(1),159-74.
- Peter, S. & Narawi, U. (2002). Tahap dan punca stres kerja di kalangan pengetua sekolah menengah di Sarawak. *Jurnal Penyelidikan Pendidika*, 1(4), 1-17.
- Phoon, W. H. (1999). Some recent developments and concerns in occupational health. *Singapore Medical Journal*, 40(11), 672-4.
- Tatik, S. & Harry, W. (2001). Analisis faktor-faktor yang mempengaruhi tingkat stress kerja pada tenaga edukatif tetap perguruan tinggi swasta di Surabaya. *Jurnal Manajemen Sumber Daya Manusia*, 1-12.
- Takizawa, T., Tsuyoshi, K., Seizou, S., Makoto, A., Naoki, W. & Hirofumi, O. (2006). Stress buffering effects of social support on depressive symptoms in middle age: Reciprocity and community mental health. *Psychiatry and Clinical Neurosciences*, 60(6): 652-661.

- Theorell, T. & Karasek, R. A. (1996). Current issues relating to psychosocial job strain and cardiovascular disease research. *Journal of Occupational Health Psychology*, 1(1), 9-26.
- Tribe, R. & Raval, H. (2003). *Working with interpreters in mental health*. Hove, East Sussex: Brunner-Routledge.
- Tsuey, C, S., Mohamad, M.S. & Er, A.C. (2013). The mental health development in Malaysia: History, current issue and future development. *Asian Social Science*, 9(6), 1-8.
- Usturn, T. B. & Sartorius, N. (1995). *Mental illness in general health care: an international study*. Chichester: Published on behalf of the World Health Organization [by] Wiley.
- Wainwright, N, & Surtees, P. (2004). *Places, people, and their physical and mental functional health*. BMJ Group. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1732722/>.
- Wilson, F. M. & Wilson, F. M. (2004). *Organizational behaviour and work: A critical introduction*. Oxford: Oxford University Press.
- World Health Organization. (2002). *Nations for Mental Health: Final Report*. Geneva: World Health Organization.
- World Health Organization. (2005). *Mental health atlas 2005*. Geneva: World Health Organization. <http://public.eblib.com/choice/publicfullrecord.aspx?p=284779>.
- Yao, A.C.J.(2008). *Emotional intelligence as a moderator of the relationship between occupational stress characteristics and job satisfaction*. Master thesis, Universiti Malaysia Sarawak.