Stress and Work Engagement: A Conceptual Study on Academics in Malaysian Private Universities

Sheikh Muhamad Hizam Sheikh Khairuddin¹, Firdaus Hilmi Nadzri²

¹²Universiti Kuala Lumpur
sheikhmhizam@unikl.edu.my, firdaus.hilmi@unikl.edu.my

Abstract—There is an abundance of studies on work engagement found in the literature. However, there is a lack of grounded research framework to be based on relating stress to work engagement of Malaysian private academics. Therefore, this study is aimed at 1) reviewing the literature on stress and work engagement; 2) applying the ASSET model of stress to work engagement; 3) hypothesizing the relationships among these variables, and 4) deriving a conceptual framework. Based on the literature review on psychological literature and the application of the ASSET model of stress, the paper proposes a model of the relationship between stress and work engagement through commitment and health. Suggestions for practice and future research are also presented.

Keywords— ASSET, Malaysian private academics, stress, work engagement.

I. INTRODUCTION

This study revolves around the study of stress at the workplace, commitment, health, and work engagement of the academics in Malaysian private universities. Stress is the general organism’s response made by any demand [1]. To measure this stress level, an Organizational Stress Screening Tool or ASSET is used [2]. This is a well-known tool for measuring the level of stress and has been used in many organizations [3]; has good construct validity [4]; and a shortened test in order to get easy and higher response rate [5]. According to the ASSET model of stress, the common workplace stressors are work relationships, work-life balance, overload, job security, control, resources and communication, aspects of the job, and pay and benefits. The effects of stress according to this model consist of commitment and health [2]. Finally, work engagement will be measured through vigor, dedication, and absorption behavior [6]. Academics in this study are referred to lecturers in Malaysian private universities. According to the Ministry of Education of Malaysia [7], there are approximately 24,476 academic staffs in all Malaysian private universities.

Stress can have multiple impacts or consequences. From the literature review conducted, academic staffs are faced with stress issues such as poor performance and turnover intention [8], [9]. Stress among academics in Malaysian private universities has been neglected. Being ignorant will not solve anything. Therefore, there is a need to fill up this knowledge gap in order to assist the academics by reducing their stresses at the workplace and subsequently improve their commitment and health, and finally, their work engagement.

The study aims to review the literature on stress and work engagement; apply the ASSET model of stress, hypothesize, and derive a model concerning this relationship. Highlighting the issues of stress and its effect on the commitment, and health, and subsequently, the work engagement of the academics in Malaysian private universities is essential. With that, we have the knowledge to recommend to universities and academics on how to reduce stress in the workplace. Intervention strategies at the primary, secondary, and tertiary levels, and at least stress management training for academics are the possible recommendations.

II. LITERATURE REVIEW

2.1. Theories of Stress

There are three ways in which stress can be defined [10]. The first one is based on stimulus theory. The environment stimulates stress. Meanwhile, the second stress definition is based upon the response theory. This definition of stress refers to the physiological or psychological response from the environment by the stimulus that has just occurred for a moment. The third or final definition of stress is the most acceptable. Based on the interational theory, this definition combines both of the above definitions. This can be seen from the stressor-strain relationship in stress research. The superiority of this theory is compared to other theories stamped from its holistic and subtleties vision of stress [11]. Theories underpinning the study are based on this third type of the definitions of stress. This is depicted in the General Theory of Stress [12], Model of Occupational Stress [13], and ASSET Model of Stress [2]. According to the General Theory of Stress, there are seven features of stress. They are: Personal, Environment, Process, Human Consequences, Organizational Consequences, Adaptive Response,
and Time. Furthermore, according to the Model of Occupational Stress, stressor like work relationship, etc. from the environment facet will interact with strain, for example, commitment and health in the Human Consequences Facet to form the Organizational Consequences Facet like individual work performance. The stressor in this study utilizes the eight common workplaces found in the ASSET Model of Stress.

III. HYPOTHESIS DEVELOPMENT

3.1. Stressor and Commitment

According to the General Theory of Stress [12], the Environment Facet consists of workplace stressors. Using ASSET Model of Stress, eight common workplace stressors are examined in this study. Work Relationships – Work relationships at the workplace can be defined as among colleagues or superiors. Working with people as part of the job today is demanding. So, this is a source of stress when supports from colleagues, subordinates, and bosses are not available [2]. In the context of academic staffs, they might face poor relationships with their customers, in this case, the students. Work-Life Balance - The demands of Work-Life Balance is different at work and at home. Thus, this is potential to affect one another [2]. Academic staffs might experience poor work-life balance if they work extra hours. Overload - Overload in this study is defined as high workloads and datelines. Hence, this is a likely source of stress [2]. The increase in new workloads such as research could overload the academics. Job Security - Expectations about a job for life is defined for job security. This is a source of stress when employees are afraid of losing their job [2]. The academics in private universities depend upon the student numbers in order to keep their job safely. Control - The employee will lose control if they are unable to perceive the environment well. This might include the way the job is organized and performed. This is also a potential source of stress [2]. As an academic, he/she is not in a position to argue at all since all the key performance indicators are all standardized. Resources and Communication - Sufficient training, equipment, and resources, as well as good communication, are defined as resources and communication. Employees will do well when they are equipped with these resources which are well-informed and valued [2]. The academics in private universities are tightened-up with budget constraints. Therefore, this could put them under stress. Aspects of the Job – Physical working environment, nature of the task, and level of satisfaction can be the aspects of the job. The potential sources of stress can be related to the fundamental nature of the job itself. The above reducing factors can be the sources of stress [2]. Due to budget constraints, academics might not have the luxury of better working conditions. Finally, Pay and Benefits – Employees are financially rewarded at the performance of the working day as defined in pay and benefits. This is imperative for their lifestyle, self-worth as organizational value towards them [2]. In the case of private academic staffs, they might not have better benefits compared with their counterparts in the public universities.

Commitment in the study is represented by organizational and individual commitment. Organizational commitment here refers to how employers are committed to employees. Respect, trust, and worthwhile of going to the fullest extent of the organization are the expectations of the employees of their employers [2]. A number of studies have shown that stress affects negatively the perceived commitment of the organization to the employee. A number of stressors such as control and resources and communications influence low organizational commitment [3]. Meanwhile, individual commitment refers to how employees are committed to their organizations. Employees are expected to excel in their job and be loyal and dedicated to their employers [2].

A more generally accepted theory of stress is the interactional theory [10]. This is the stressor-strain approach. As the response to stressor, individuals will feel the strain psychologically, physically, and behaviorally [14]. Strain in psychology is commonly studied in relation to job attitudes such as organizational commitment [15] [16]. According to the ASSET Model of Stress, one of the outcomes of stress is poor commitment. Academicians will be less committed as a result of it.

Stress is found to affect the commitment of the employee to the organization in a number of studies. Overload, control, aspects of the job, and pay and benefits lead to low individual commitment of employees in a technology university [3]. Also, anxiety influences career commitment significantly [17]. Using ASSET, poor work relationship, poor job security, poor work-life balance, and poor resources and communication are found to be negatively related to commitment [18][19][19][3]. Academics suffering from stress will affect their commitment. Therefore, from the above discussion, we hypothesize that:

H1: Stressor will predict negatively the commitment of the academics in Malaysian private universities
3.2. Stressor and Health

Physical health and psychological well-being is defined as health in this study. The mental and physical well-being of a worker is affected by occupational stress [20]. Evidence of numerous in nature pointed to significant levels of occupational stress [21][22], if ignored, will affect individual physical and mental health as well as poor organizational outcomes, for example, job dissatisfaction, and turnover. This has been demonstrated in coordinators and administrators where poor physical health is prevalent. Irritability and always being tired are some of the symptoms shown in poor physical health. [3]. Prolonged distress may lead serious diseases such as hypertension and depression.

According to Stress General Theory [12], there are seven features of stress found in most stress studies. This includes Environment and Human Consequences. In this environment, elements, such as job insecurity, play a part in the prevalence of job stress. Meanwhile, all aspects of physical and mental health such as depression can be found in Human Consequences features, that will lead to job stress. The linkage among these facets can be seen from a more specific model of stress such as the Occupational Stress Model [13]. In this model, the Environment is linked-up to the Human Consequences. This form, that is the core relationship of stressor-strain, is found in most stress studies. Furthermore, the source of stress from the ASSET Model posite health as the outcome of stress. Stressor and health are theorized as having a negative relationship between them in this study. Interns who suffered from stress at the workplace will suffer from poor health.

Health is negatively related to work-life balance [8], overload [23], job insecurity [3], poor job control [18], poor resources and communication [19], poor aspect of the job [3], and poor pay and benefits [19]. Academic staff who suffers from stress will affect their health. From the above discussions, we can hypothesize that:

H2: Stressor will predict negatively of the health of the academics in Malaysian private universities

3.3. Stressor and Work Engagement

Vigor, dedication, and absorption are the characteristics of work engagement that are positive, fulfilling, and work-related state of mind [3]. Not focusing on any particular subject, work engagement is an affective-cognitive state that is more pervasive and persistent compared with a momentary and specific state. The characteristics of vigor are demonstrated in high energy level and resiliency of mental when at work, including investing in work efforts as well as persisting when facing difficulties. Meanwhile, dedication is related to the high individual involvement in his or her work and felt the sense of importance, challenge, inspiration, and pride. Finally, absorption means high concentration and being happy in the job. Time quickly passes by, and the individual is having difficulty separating himself from the job.

Beehr’s Model of Occupational Stress [13] states that stressor from the Environment Facet could interact with the Organizational Consequences Facet such as work performance or engagement. Recently, the ASSET model of stress [2] posits that level of productivity is related to the source of stress [8]. Yerkes-Dodson Law of Arousal [24] states that performance increases as arousal (stressors) increase but only to a point. Beyond the optimum point, performance decreases. There is also evidence from previous studies showing that work stressors are directly related to performance. Private academics who suffer from stress will affect their work engagement. There are a number of studies showing the negative effects of stressors upon work engagement. For example, role ambiguity, job rigidity, and job insecurity show a significant negative relationship with work engagement [25]. From the above discussion, we can conclude that stressor will impact the work engagement of the academics in Malaysian private universities negatively. Then, the hypothesis will be as follows:

H3: Stressor will predict negatively the work engagement of the academics in Malaysian private universities

3.4. Commitment and Work Engagement

According to the Model of Occupational Stress [10], Environment and Human Consequences interact to form stressor-strain. This in turn leads to Organizational Consequences. All important aspects that make the organization effective can be inflicted by job stress, for example work engagement comprised in these Organizational Consequences. Due to stress, private academics’ commitment will suffer, and this will lead to poor work engagement. Affective commitment predicts work engagement positively [26]. Most studies point out the positive relationship between commitment and performance. However, the causes of stress such as job demands are posited to lead to psychological strain and in turn, resulted in poor job performance of individuals [27]. Empirically,
these are also evidenced. In another development, employees who are committed to their supervisors are found to be positive in their performance [28]. Using ASSET, organizational commitment and measures of performance are positively correlated [8]. In addition, perceived commitment to organization positively predicts performance using the standard stepwise regression method in the study. The private academics who suffer from stress will affect their commitment and this will affect their work engagement. Therefore, from the discussion above we can hypothesize that:

**H4: Due to stress, poor commitment will lead to poor work engagement of the academics of Malaysian private universities**

3.5. Health and Work Engagement

Similarly, using the Model of Occupational Stress [13], the core relationship of stressor-strain is linked up to the Organizational Consequences Facet. Therefore, we can theorize that private academics who suffer from stress (measured through the level of stressors) will suffer from poor health and subsequent poor work engagement. Psychological well-being is positively related to work engagement [29]. The negative relationships between health and productivity are demonstrated in absenteeism due to sickness and presenteeism [30]-[33]. The costs of this productivity that loss due to health are four times larger than the costs of medical and pharmacy [34]. Health risks also have been associated with the loss of productivity [35]. Using ASSET, performance is associated with good physical health [8]. In other study, the psychological well-being is found to be highly correlated with performance measures [22]. To conclude, stress will impact upon health and in turn, will result in work disengagement of the private academics. Therefore, H5 will be as follows:

**H5: Due to stress, poor health will lead to poor work engagement of the academics in Malaysian private universities**

3.6. The Role of Commitment in the Relationship

From the Model of Occupational Stress [13], the Environment Facet (i.e. stressors) impacts upon the Human Consequences Facet (i.e. commitment) that subsequently leads to Organizational Consequences Facet (i.e. work engagement). Therefore, commitment is theorized as being the mediator to the stressor-work engagement relationship of the internship students. Career support perception and work engagement are mediated significantly by affective commitment [26]. Meanwhile, the role of commitment is used as the mediator in the study of role anxiety and turnover [36]. The strongest model is when anxiety is in predicting organizational commitment, and in turn, affecting intention to leave. Finally, the relationship among strain, organizational commitment, and turnover is examined in Malaysian public universities [9]. This longitudinal study shows evidence to support the mediation effects of organizational commitment on strain and intention to leave. The partial mediation of commitment in the relationship of stressor and individual productivity is discovered [37]. Private academics who suffer from stress will affect their commitment level and subsequently, will impact their work engagement level.

**H6: There will be a mediation of commitment between stressor and work engagement of the academics in Malaysian private universities**

3.7. The Role of Health in the Relationship

Similarly, using the Beehr’s Model of Occupational Stress [13], the core relationship of stressor-strain will lead to organizational consequences. Therefore, health will become the mediator to the stressor-work engagement relationship of the private academics. Health as the mediator in stress studies has also been demonstrated in studies [38]. Somatic and psychological illness are found to mediate stressor-absence relationship. Elsewhere, physical and psychological strain mediate job demands and performance [27]. Stressors types of challenge and hindrance and outcomes of behaviors of organizational citizenship and job performance are partially mediated through physical symptoms of strains [39]. Health partially mediates the relationship between stressor-individual productivity relationships [40]. Private academics, that have had negative effects of stressors, will affect their health and in turn affect their work engagement subsequently. Therefore, the final hypothesis will be as follows:

**H7: There will be a mediation of health between stressor and work engagement of academics in Malaysian private universities**

IV. CONCEPTUAL FRAMEWORK

The conceptual framework (Fig. 1) of this study consists of eleven variables. Eight were the stressors from the ASSET model. Meanwhile, others are commitment, and health. The independent variable is work engagement. The commitment will be measured through perceived organizational commitment and individual commitment. Physical health and psychological well-being represent health. Work
engagement is represented by vigor, dedication, and absorption. The relationships between the stressors and commitment, stressors and health, stressors and work engagement, commitment and work engagement, health and work engagement, commitment as the mediator, and health as the mediator had been hypothesized.

| Stressors                  | Work Relationships                  | Commitment                          |
|---------------------------|-------------------------------------|-------------------------------------|
| Work Relationships        |                                      |                                     |
| Work-Life Balance         |                                      |                                     |
| Job Security              |                                      |                                     |
| Overload                  |                                      |                                     |
| Control                   |                                      |                                     |
| Resource & Communication  |                                      |                                     |
| Aspect of the Job         |                                      |                                     |
| Pay & Benefits            |                                      |                                     |
|                           |                                      |                                     |
| Health                   |                                      |                                     |
|                           |                                      |                                     |
| Work Engagement           |                                      |                                     |

Fig. 1 Conceptual framework of the relationship between stress and work engagement in Malaysian private universities

V. CONCLUSION

This study has managed to conceptualize the relationship between stress and work engagement through literature reviews and the application of ASSET model of stress. The framework provides support to research within the context of Malaysian private academics. The framework also encourages extensions to this model such as new mediators (e.g., job satisfaction) or stressors (e.g., role stressors) in the future to be tested.

Practice-wise, policy makers particularly in the private universities, if the results support the hypotheses, need to review their policies on the significant stressors as well as promoting commitment and health to their academics in order to enhance their work engagement to their job and company.

ACKNOWLEDGMENT

Authors thank colleagues from University Kuala Lumpur Business School for their help in culminating this paper.

REFERENCES

[1] H. Selye. The Evolution of the Stress Concept. *Scientist* 61 November. 1973. 692-699.
[2] S. Cartwright, C. L. Cooper, *ASSET: The Management Guide*. Manchester: Robertson Cooper 2002.
[3] J. P. Viljoen, S. Rothmann, S. Occupational Stress, Ill Health and Organizational Commitment of Employees at a University of Technology. *SA Journal of Industrial Psychology/S Tydskrif vir Bedryfsielkunde*, vol. 35, no. 1, pp. 1-11, 2009.
[4] S. Johnson, C. Cooper. The Construct Validity of the ASSET Stress Measure. *Stress and Health*, vol 19, pp. 181-185, 2003.
[5] E. B. Faragher, C. L. Cooper, S. Cartwright. A Shortened Stress Evaluation Tool (ASSET). *Stress and Health*, vol. 20, pp. 189-201, 2004.
[6] W. Schaufeli, A. Bakker. *UWES Utrecht Work Engagement Scale: Preliminary Manual*. http://www.beanmanaged.com/doc/pdf/arnoldbakker/articles/articles_arnold_bakker_87.pdf [November 27, 2014].
[7] Ministry of Education Malaysia. *National Education Statistic: Higher Education Sector 2013*. Putrajaya: Ministry of Education Malaysia First Edition.
[8] P. A. Jacobs, M. Y. Tytlerleigh, C. Webb, C. L. Cooper. Predictors of Work Performance among Higher Education Employees: An examination Using ASSET Model of Stress. *International Journal of Stress Management*, vol. 14, no. 2, pp. 199-210, 2007.
[9] Mohd Kamel Idris. Occupational Stress in Academic Life: A Study on Academics of Malaysian Public Universities. PhD Thesis. The University of Waikato, 2009.
[10] T. A. Beehr, T. M. Franz, The Current Debate about the Meaning of Job Stress. In J. M. Ivancevich, D. C. Ganster (Eds). *Job Stress: From Theory to Suggestion*, p. 5-18. New York: Haworth Press, 1987.
[11] J. Arnold, C. L. Cooper, I. Robertson. *Work Psychology: Understanding Human Behavior in the Workplace*. London: Financial Times Pitman Publishing. 1998.
[12] T. A. Beehr, J. E. Newman. Job Stress, Employee Health and Organizational Effectiveness: A Facet Analysis, Model, and Literature Review. *Personnel Psychology*, vol. 31, pp. 665-699, 1978.
[13] T. A. Beehr. *Psychological Stress in the Workplace*. New York: Routledge.1995.
[14] C. L. Cooper, P. J. Dewe, M. P. O’Driscoll. *Organizational Stress: A Review and Critique of Theory, Research, and Applications*. California: Sage Pub, 2001.
[15] S. M. Jex, T. A. Beehr. Emerging Theoretical and Methodological Issues in the Study of Work-related Stress. *Research in Personnel and Human Resources Management*, vol 9, pp. 311-365, 1991.
[16] L. Sulsky, C. Smith. *Work Stress*. Belmont, USA: Thomson, 2005.
[17] Y. F. Wang, M. H. Chiang, Y. J. Lee. The Relationships amongst the Intern Anxiety, Internship Outcomes, and Career Commitment of Hospitality College Students. *Journal of Hospitality, Leisure, Sport & Tourism Education*, vol. 15, pp. 86-93, 2014.
[18] L. Jackson, S. Rothmann. Occupational Stress, Organizational Commitment, and Ill-health of Educators in the North West Province. *South African Journal of Education*, vol. 26, no. 1, pp. 75-95, 2006.

[19] M. Y. Tytherleigh, C. Webb, C. L. Cooper, C. Ricketts, Occupational Stress in UK Higher Education Institutions: A Comparative Study of All Staff Categories. *Higher Education Research & Development*, vol. 24, no. 1, pp. 41-61, 2005.

[20] R. L. Kahn, P. Byssiere. Stress in Organizations. In Dunnette, M.D. (Ed.), *Handbook of Industrial and Organizational Psychology*, Chicago: Rand McNally, pp. 571-648, 1992.

[21] O. L. Siu, Occupational Stressors and Well-being among Chinese Employees: The Role of Organizational Commitment. *Applied Psychology: An International Review*, vol. 5, pp. 527-544, 2002.

[22] A. H. Winefield, N. Gillespie, C. Stough, J. K. Dua, J. Hapuarachchi, *Occupational Stress in Australian Universities: A National Survey*. Melbourne: National Tertiary Education Union, 2003.

[23] F. F. Mostert, S. Rothmann, K. Mostert, K. Nell. Outcomes of Occupational Stress in a Higher Education Institution. *Southern African Business Review*, vol. 12, no. 3, pp. 102-127, 2008.

[24] R. M. Yerkes, J. D. Dodson. The Relation of Strength and Stimulus to Rapidity of Habit Formation. In Sulsly, L. and Smith, C. *Workstress* p. 154-157. Wadsworth: Thompson, 1908.

[25] M. Coetzee, M. De Villiers. Sources of Job Stress, Work Engagement Career Orientations of Employees in a South African Financial Institution. *Southern African Business Review*, vol. 14, no. 1, pp. 27-58, 2010.

[26] J. M. L. Poon, Relationships among Perceived Career Support, Affective Commitment, and Work Engagement, *International Journal of Psychology*, vol. 48, no. 6, pp. 1148–1155, 2013.

[27] J. Lang, J. L. Thomas, P. D. Bliese, A. B. Adler. Job Demands and Job Performance: The Mediating Effects of Psychological and Physical Strain and the Moderating Effect of Role Clarity. *Journal of Occupational Health Psychology*, vol. 12, no. 2, pp. 116-124, 2007.

[28] T. E. Becker, R. S. Billings, D. M. Eveleth,N. L. Gilbert. Foci and Bases of Employee Commitment: Implications for Job Performance. *Academy of Management Journal*, vol. 39, no. 2, pp. 464-482, 1996.

[29] O. Kanste, Work Engagement, Work Commitment and Their Association with Well-being in Health Care. *Scandinavian Journal of Caring Sciences*, vol. 25, pp. 754–761, 2011.

[30] G. Aronsson, K. Gustafsson, M. Dallner, Sick but yet at Work: An Empirical Study of Sickness Presenteeism. *Journal of Epidemiol Community Health*, vol. 54, pp. 502-509, 2000.

[31] W. B. F. Brouwer, M. A. Koopmanscap, F. F. H. Rutten, Productivity Losses without Absence. *Health Policy*, vol. 48, pp. 13-27, 1999.

[32] S. G. V. D. Heuval, G. A. Geusken, W. E. Hooffman, L. L. J. Koppes, S. N. J. V. D. Bossche, Productivity loss at work: Health-related and work-related factors.