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Development, Validity and Reliability of Student Stress Inventory (SSI)

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Abstract: The aim of this study were to develop and validate a self-rating scale, student stress inventory or SSI for the assessment of stress among Malaysian youth. There are four sub-scales measured in SSI. First, physical stress which contains 10 negative items. Second, interpersonal relationship consists of 10 negative items. Third, academic stress with 10 negative items. The last sub-scales is environmental stress which contains 10 negative items. Content validity was valued by 9 experts which are 5 lecturers and 4 practitioners. The 50 respondents from undergraduate students of an educational university in Peninsular Malaysia were involved for the reliability test. SSI obtained high validity for overall which is 8.05 (80.5%) and for sub-scale of physical: 8.07, interpersonal relationship: 7.89, academic: 8.22 and environmental: 8.02. Reliability analysis also showed high level of reliability which is 0.857 while sub-scale analysis showed moderate where physical: 0.680, interpersonal: 0.620, academic: 0.842 and environmental: 0.806. By this finding, it showed that SSI has a high score of reliability and validity, thus, it can be used in Malaysia context to measure the level of stress among university students. SSI would be beneficial in giving information to educators, counselors, psychologists and researchers who are striving in enhancing students' psychological wellness.

Key words: Content validity, reliability, student stress inventory, physical, relationship

INTRODUCTION

Stress, depression, anxiety and mental health are the common issues that has always been highlighted in psychology and counseling. Perceived stress and maladaptive stress management can lead to harmful outcomes including depression, morbidity and mortality. Depression seemed to be one of the categories listed in psychological disorder. Based on a study that have been conducted in the US revealed that an alarming number of undergraduated students has to deal with mental health problems as a consequence of stress and around 85% of the student reported to experience stress on a daily basis. There are 12% of Malaysians aged between 18 and 60 are suffering from some forms of mental illness. All of these were made up of psychosis, 1%, worrying, 1.8% and depression, 2%. The rest is believed to suffering a chronic disease and mild mental diseases which is known as anxiety disorder. The Third National Health and Morbidity Survey that have been conducted in Malaysia indicated that 11.2% of adults in the country have some form of mental disorder or psychological distress at any one time then the same study conducted on adolescents and children (aged between 5 and 16) indicated a higher rate at 20.3% (Zozanizo *et al*., 2013).

As a response to this phenomenon, a prompt action has been taken as an efforts to overcome the problems, Under the Health Ministry, The Mental Health Promotion Advisory Council had recommended that both the Education and Health ministries undertake studies namely "Healthy Mind Programme" to determine the state of mental health of school children aiming to conduct screening for symptoms of anxiety, stress and depression, among students in schools. Rising stress levels whether in school, at the workplace or elsewhere is one of the factors identified to have associated with mental health and could seriously affect one's daily life (Zozaniza *et al*., 2013). University students also are not left in experiencing stress during their study. The proneness of getting stress among university students would be high if only little concern given to their group. Rafidah *et al*. (2009) claimed that due to academic commitments, financial pressures and lack of time management skills, university students might experience high stress. These researchers further explained that students have a fear of failure in relation to their grades and academic research.

However, despite evidence supporting that stress will contribute to the negative outcomes for students there is still a lack of the assessment to measure stress among university students in Malaysia. The construction of the

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Student Stress Inventory (SSI) could be used to identify the level of stress among university students for professional intervention. Due to the lack of inventories concerning stress in the local context in recent years this inventory that comprising four sub-scales which are physical factor, interpersonal relationship factor, academic factor and environmental factor were developed.

Background Of Student Stress Inventory (SSI): Student Stress Inventory (SSI) was developed to measure the level of stress among university students. It has been indicated that campus life is identified as one of the stressful period for many students as they go through the process of adapting to the new educational and social environments (Thawabieh and Qaisy, 2012). University students generally experience stress relating to their study. According to Lazarus and Folkman, stress is perceived as an individual's cognitive interpretation of potentially stressful event (Kadapatti and Vijayalaxmi, 2012). It implies that stress is much related to the way people think and how stressful event is appraised. Besides, Seyle defined stress as the non-specific response of the body to any demand made on it. Stress arousal is implicated in 70-80% of all the visits to physicians based on a review of hundreds of studies over the last three decades and at least 50% of all illnesses also contributed to stress in general (Kausar, 2010). Multiple stressors such as competition with peers, constant pressure to succeed, academic overload as well as concerns about the future is always faced by university students. Stress is more than psychological problem and not only oftens impairs daily functioning, it also involved the disabling of one's physical, emotional and physical well-being (Rafidah *et al*., 2009).

Since, the prevalence of stress and mental health become more serious, there are a number of ways to help students minimize this problems. In Malaysia, a study conducted by Che Rozaniza et al found that the increasing trend of mental health problems among Malaysians is with more people believed to be experiencing some sorts of emotional stress and mental distress (Zozaniza *et al*., 2013). The finding of their research suggested that the govermnment and non-government party should play an important role in tackling this problems. For example, the collaboration between the Ministry of Health and Ministry of Education had launched a pilot study regarding the mental health programme in four secondary schools in Malaysia. There were 6 months school project at SMK Ahmad Badawi in Kepala Batas, Penang; SMK Simpang Bekok in Malacca; SM Sains in Teluk Intan, Perak and SMK St. Michael in Penampang, Sabah. By implemeting this project, selected teachers will be trained to translate the results of student mental health evaluation as well as advise students on ways of reducing stress or depression while students would be subject to a mental health evaluation. The findings of the project could enable the government to gauge the actual state of mental health among students and help to come out with the strategies of action plan. Such project should be widen to the group of young adults especially to the university students ensure that their psychological well-being are also being promoted.

There is a positive effect of a brief stress reduction on medical student's anxiety, stress and depression level during stressful periods. Students had participated in the well-being workshop as the brief stress reduction intervention voluntarily. The intervention was offered as a one-off session for a duration of 3-4 h in a weekend by the Student Affairs and Development Department, Universiti Sains Malaysia. The 25 min were given to the particiants to fill in three inventories which were the Brief Coping Orientation of Problem Experienced (COPE), the Medical Student Stressor Questionnaire (MSSQ) and the 12 item General Health Questionnaire (GHQ-12) to help them identify their individual coping strategies, stress level and stressors respectively. Then, they will be given a time as much as 60 min for discussion on the findings of the inventories with the facilitator. A 30 min mini lecture will be given to participants related to ways of handling stress, followed by a discussion session and sharing of experience between peers and facilitator for 30 min time frame too. The last 20 min was allocated for conclusion and feedback session to consolidate what they have learnt and gained as a result of attending this workshop. The result showed that there were significant reduction of anxiety and depression scores. The data obtained suggested that brief intervention was effective in the enhancement of the psychological well-being of exposed medical students during stressful period. However, the inventory used to measure stress is only applicable for university medical student and cannot be generalize to other student of different courses. Hence, there is a need to have a standardized inventory of stress. The construction of student stress inventory therefore attempts to fit the research gaps by including a more comprehensive list of stress factors among university students due to the lack of the study related to stress inventory used in Malaysia.

Literature review: Kadapatti and Vijayalaxmi (2012) conducted a study on stressors of academic stress among pre university students in India. The study aimed to investigate the influence of socio-economic variables, aspirations, study habit and study problems on academic stress. There were 360 pre university students

participated in the study which comprised of both boys and girl using random sampling method from four co-educational colleges. The instruments used were study habits schedule, study problems schedule, stress event stress, socio-economic status scale and aspiration scale to identify the stressors of academic stress. The findings showed that the factors responsible for to academic stress and become stressors for stress among students is a low socio-economic conditions, change in medium of instruction, high aspiration, more study problems and poor study habits.

The transition from school environment to university environment could also cause a psychological, academic and social shock to university students. A study by Thawabieh and Qaisy (2012) that involved 471 students of Tafila Technical University in Jordan found that the main factor of stress was the social factor. According to them, university students are stressful due to several factors such as they have to face new academic requirements, new methods of teaching, new relations among students themselves and even new type of relations between students and faculties. Another factor that affects student's mental health and causes stress to them was academic factor. Based on the research conducted, students are found to feel unhappy with the university climate and they need more academic counseling to help them throughout. Worrying about their academic progress consequently lead these university students to physical problems such as difficulty of sleeping and feeling tired and pain.

Another research done by Kausar (2010) claimed that academic workloads predicted perceived stress among students. The researcher hypothesized that there was a positive relationship between academic workload and perceived stress among students. The sample of the study included 150 undergraduate's level students from University of the Punjab, Lahore, Pakistan. A coping strategies questionnaire, self-designed academic workload scale and Perceived stress scale were used for assessment. Data were analysed with correlation and regression analysis. The result revealed that positive relationship was found between academic workloads and perceived stress. Thus, it was shown that academic workloads become one of the significant factors of student stress. These findings are consistent with a local study carried out by Yasin and Dzulkifli (2011). These local researchers did a study regarding the differences in stress, anxiety and depression between low and high achieving students. The 120 undergraduate students of the International Islamic University Malaysia (IIUM) were involved in their study. To assess the stress, anxiety and depression level among students, the Depression Anxiety Stress Scale (DASS) was used. While the analyzing of the collected data was done using independent sample t-test. The result showed that there were significant differences between stress, anxiety and depression between low and high achieving students in Malaysia. Therefore, it implies that stress experienced by students is closely associated with their academic workloads and academic achievement.

Another local study conducted by Shamsuddin *et al.* (2013) also have interest to assess the prevalence of depression, anxiety and stress and to identify the correlates among Malaysian university students. A cross-sectional study was conducted on 506 students between the ages of 18 and 24 years from four public universities in the Klang Valley, Malaysia. Through an anonymous, self-administered questionnaire, they were assessed by the Depression Anxiety Stress Scale-21 (DASS-21). Data on socio-demographic, family characteristics and living arrangement were also obtained. t-test and one way ANOVA were used to explore association between these aspects. Result analysis showed that among all students, 5.1% had severe or extremely severe stress scores, 9.7% had severe or extremely severe depression, 18.6% had moderate, 27.5% had moderate depression, 29% had severe or extremely severe anxiety and 34% had moderate based on the DASS-21 inventory. Both depression and anxiety scores were significantly higher among older students (20 and above) and those born in rural areas. The results also indicated that higher stress scores were significantly higher among students who are older (20 and above), female, Malays and those whose family had either low or high incomes compared to those with middle incomes.

Ibrahim and Bohari (2012) conducted a case of Multimedia University students on the empirical study of stressors among Multimedia University students. The main objective of the study was to identify the highest types of stress among students and to explore the relationship between identified stressors with the successful factors. This study used the survey method where 216 respondents have responded to the questionnaires. The study was applied to diploma students of Multimedia University Malacca Campus. One of the finding shows that 89.7% students experienced stress and 10.3% student's not experiencing stress. By using logistic regression test, the findings of the study indicates that there are many other factors influences students' stress such academic, teaching quality or relations with lecturers, time constraint, interpersonal,

social and family relationship, financial and environmental (campus and administrative) of the students which could give impact in students life.

Meanwhile, a research by Abdullah and Dan (2011) suggested that part time students in a higher institution also experienced stress. The study was aim to examine the stress level among part-time students and its relationships to their psychological well-being status. The respondents that agreed to get involved in this study were composed of 92 part time students. The data is collected using a set of questionnaires. This questionnaires comprised of four sub-scales which were psychological well-being, self-efficacy, family stress and work stress. The reliability of the instrument was high since, the Cronbach's alpha values were between 0.708-0.900. Using descriptive statistics, correlation and multiple regressions the data analysis was done. Descriptive statistics revealed that major stressors for family stress were a dealing with difficult people, role conflict, having too much debts and bills to pay, insufficient time with family, money constraint, burdens with household task and family members' health problems issue. While for the work stress, the major stressor were performance demand, long working hours, overwork and deadline, dealing with difficult people and role conflict. The findings of this study revealed that there was a low positive relationship between psychological well-being and family stress, negative correlation between psychological well-being and self-efficacy and no significant relationship between psychological well-being and work stress. For multiple regressions, results showed that only family stress and self-efficacy had a significant relationship on psychological well-being. Thus, it seems that both full time and part time students tend to experience stress depending on their life circumstances, respectively.

In recent years, there has been an increasing interest on academic stress among students and the researchers have identified specified stressors since the university students generally would experience stress relating to their study. Many things interrupt student's ability to focus on their lesson which might lead to stress. The stressors might come from various forms which could be categorized into several aspects walk of life. Special attention to this kind of phenomenon is important because prolonged stress would result harm to students. However, question has been raised about the instrument that could be used in Malaysian context to identify university students who suffers from severe stress so that preventive actions could be taken promptly.

Basic theoretical construction of SSI: The Student Stress Inventory (SSI) was developed based on the combination of two theories which are the General Adaptation Syndrome and the Environmental Stress Theory. Therefore, the fundamentals, principles and main concept of both theories were used to develope the main concept, scales and sub-scales of SSI.

The stress model of the general adaptation syndrome proposed by Hans Seyle as cited by Rice (1998) emphasized the non-specific demand on body that leads to the disturbance of body equilibrium. Seyle's physiological theory attempt to explain the way the body respond to stress. It can be summarized that all biological theories have an innate drive to maintain a state of internal balance or equilibrium. The process that maintains an internal balance is homeostasis. As it turns out, maintaining homeostasis is a lifelong task. Stressors such as germs or excessive work demands disturb internal equilibrium. The body responds to any stressor, whether pleasant or unpleasant with a non-specific physiological arousal. This reaction is defensive and self-protective. Adjustment to stress would occur in stages. The time course and progress through the stages depends on how successful the resistance is in relation to the intensity and duration of the stressor. The organism has a finite reserve of adaptive energy. When depleted, the organism lacks the ability to cope with continued stress and death may follow. Thus, psychological theories attempt to understand the ways in which personality, expectations, and interpretations turn personal or social event into a stressful situation. In relation to that, the environmental stress model that was proposed by Fisher, Bell and Baum as cited by Rice (1998), listed a broad range of variables, from biological to psychosocial and social. The amount of the environment stimulation provides a view of the relationship between the environmental and human behavior.

Hence, the Student Stress Inventory (SSI) is developed through the combination of these two theories. The aspect of fundamentals, principles, concepts and values of both theories develop the SSI which comprising four elements which are physical, interpersonal relationship, academic and environmental as in Fig. 1.

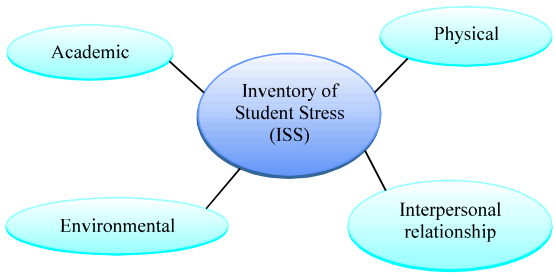

Fig. 1: Element of main scale and sub-scales of SSI each of the sub-scales for SSI

Sub-scale 1 (physical factor): Stressors refer to the factors or stimulators that cause psychological physical stress. When students failed to handle stress effectively or if stress becomes constant part of one's life, stress often manifests as physical illness. Prolonged stress could be result to physical symptoms such as fatigue, physical weakness, headaches, sleep problem, back pain and other physical symptoms.

Sub-scale 2 (interpersonal relationship): It is very difficult to have perfect interpersonal relationship among people. Such broken interpersonal relationship especially with the significant person in life could be one of the students' stress. People with low social connectedness often experience loneliness, anxiety, depression, low self esteem and other negative emotions.

Sub-scale 3 (academic factor): Student's perception of having to master an extensive knowledge base within a time frame that feels inadequate is a common stressor (Thawabieh and Qaisy, 2012). Increased workloads coupled with a new responsibilities, taking and studying for exams, competition over grades become the potential stressor of academic stress.

Sub-scale 4 (environmental factor): Environments refers to surroundings, the physical space that we perceive and in which we behave and the relationship between an organism and the environment is reciprocal an exchange that goes on over several cycles. Daily hassles such as a problematic conditions of computer, queuing, messy living conditions, excess noise, air pollution, traffic jams and commuting are such examples of environmental stress.

Administration, scoring and interpretation of SSI: Student Stress Inventory (SSI) was developed to measure the level of stress among university students. SSI contained of 40 negative items to measure 4 sub-scales (10 items for each sub-scale) which are sub-scale 1: physical (10 items), sub-scale 2: interpersonal relationship (10 items), sub-scale 3: academic (10 items) and sub-scale 4: Environmental factor (10 items). The administration process will approximately take 15-20 min only. The surrounding of the administration location should be in the condusive and comfort place and the respondent should answer the questions honestly. As for scoring, the SSI was designed with ordinal scale of the 'Never', 'Somewhat frequent', 'Frequent' and 'Always'. The value mark given for each choices are 1 for 'Never', 2 for 'Somewhat Frequent', 3 for 'Frequent' and 4 for 'Always'. In terms of score analysis and interpretation, it is suggested that those who obtained the score within 122-160 reflects having severe stress, 81-121 as having moderate stress and those who obtained score within 40-80 reflects having mild stress.

Purpose of the study: The aims of the study were as follows:

- To construct the Student Stress Inventory (SSI) based on the library research
- To investigate the validity of the Student Stress Inventory (SSI) questionnaire
- To investigate the validity of SSI sub-scales
- To investigate the reliability of SSI questionnaire
- To investigate the reliability of SSI sub-scales

MATERIAL AND METHODS

The study employed the descriptive method to obtain the content validity and reliability of SSI. This study involved three phases: phase 1 was the construction of SSI, phase 2 was to obtain the content validity and phase 3 was to obtain the reliability values of SSI.

Phase 1 (construction of SSI): The construction of SSI was based on the library research and based on the past research by reviewing the theory approach that suits for the basic construction of SSI.

Phase 2 (obtaining the content validity of SSI): To test the validity of the SSI, the authenticity method was carried out by experts. The panel of nine experts who were assigned to assess the SSI was selected based on their expertise in the field of education and counseling. The 5 lecturers from an education university in Malaysia and 4 practitioners who are counselor and teachers were involved in this research.

Phase 3 (reliability analysis): Phase 3 was conducted to obtain the reliability of SSI. After obtaining the validity of the content, the SSI questionnaire was given to 50 undergraduate students which were randomly selected at one of the educational universities in the northern part in Peninsular Malaysia.

Location and sampling: Phase 1 and 2 were conducted at one of the educational universities in the northern part in Peninsular Malaysia. Participants in phase 1 were the lecturers and practitioners while in phase 2, participants were 50 undergraduate students from one of the educational universities in the northern part in Peninsular Malaysia.

RESULTS

Results are given based on the phrase of study listed.

Phase 1 (construction of scale and sub-scale of SSI): The construction of SSI was based on review from books, articles and various scientific journals in Malaysia and overseas. The first step taken is comprehending the definition, concept, factors and implications of stress from different perspectives. Then, the basic theoretical for the construction of the SSI's main scale and sub-scale was constructed based on the general adaptation syndrome and The Environmental Stress Theory. This inventory contains of 40 negative items which are divided into four sub-scales to measure the level of stress among university students. The sub-scales are sub-scale 1: physical (10 items), sub-scale 2: interpersonal relationship (10 items), sub-scale 3: academic (10 items) and sub-scale 4: environmental (10 items).

Phase 2 (content validity of SSI): The content validity for SSI are given based on a panel of experts assessment.

Based on Table 1, the results indicated that the SSI questionnaire had good content validity with an overall score of 0.805 (80.5%). The validity of the SSI sub-scales for physical stress is 0.807 (80.7%), interpersonal relationship stress is 0.789 (78.9%), academic stress is 0.822 (82.2%) and environmental stress is 0.802 (80.2%). This indicates that SSI has high value of validity for overall SSI and also for all four sub-scales.

Phase 3 (the reliability of SSI): The findings of the study are as follows. Based on Table 2, the reliability of SSI is found to have a high overall reliability coefficient of 0.857. According to Mark (2010), inter item reliability of Cronbach's alpha coefficient exceeds to 0.70% is considerd as high. The reliability of the sub-scales of two sub-scales are found to be of moderate level which are physical stress and interpersonal relationship stress of 0.680 and 0.620, respectively. However, the reliability of academic stress (0.842) and environmental stress (0.806) are found to be high.

Table 3 indicated the reliability value for each item in SSI to measure the quality of overall item. As for item 1-10 measure physical factor, 11-20 measure interpersonal relationship factor, 21-30 measure academic factor and 31-40 measure environmental factor. The result showed as follow.

Based on the Table 3, the lowest reliability value was found at 0.850 on the item 23, 36 and 37 under the subcsale of interpersonal and environmental factor. Meanwhile the highest reliability value was 0.860 on the item 12 and 14. Both shares in the same sub-scales of interpersonal relationship. Most of the values of Cronbach's alpha for all the items showed acceptable consistency as they were <0.7.

Table 1: The validity of the SSI based on Panel of Expert Assessment (n = 9)

Scale/Sub-scale	No. of items	Validity value (%)	Expert assessment
SSI (overall)	40	8.05 (80.5)	Accepted
Physical	10	8.07 (80.7)	Accepted
Interpersonal relationship	10	7.89 (78.9)	Accepted
Academic	10	8.22 (82.2)	Accepted
Environmental	10	8.02 (80.2)	Accepted

Table 2: Reliability of SSI (n = 40)

Scale/Sub-scale	No. of items	Reliability value
SSI (as a whole)	40	0.857
Physical	10	0.680
Interpersonal relationship	10	0.620
Academic	10	0.842
Environmental	10	0.806

Table 3: Reliability of SSI Item

Bil	Item	Alpha cronbach
1	Headaches	0.851
2	Back pain	0.859
3	Sleep problem	0.855
4	Difficulty in breathing	0.857
5	Excessive worry	0.855
6	Stomach pain/nausea	0.854
7	Constant tiredness/fatigue	0.855
8	Sweating/sweaty hands	0.853
9	Frequent cold/flu/fever	0.854
10	Drastic weight loss	0.855
11	I find difficult to meet my high parent's expectation	0.858
12	My parents treat me as a helpless person	0.860
13	I feel guilty if I fail to fulfill my parent's hope	0.853
14	My parents wish only for my success	0.860
15	I find difficult to get along with groupmates in doing academic task	0.851
16	My friends did not care about me	0.857
17	I feel disturbed when having problem with my boyfriend/girlfriend	0.856
18	My families are not supportive	0.858
19	My lecturers/teachers are not supportive	0.858
20	I feel frustrated by the lack of faculty management	0.852
21	I have a financial problem because of the expenses of the university	0.854
22	I find difficult to allocate my time to study and involve in social activity	0.854
23	I feel nervous delivering the class presentation	0.850
24	I feel stressed as submission deadline neared	0.852
25	I feel stressed to sit for examination	0.853
26	I find difficult to divide my time between study and society involvement	0.851
27	I loss interest in the courses I take	0.857
28	I feel burden with the academic workloads	0.853
29	I feel stressed dealing with difficult subject	0.850
30	I have difficulty in handling my academic problem	0.851
31	I have transportation problem	0.854
32	I feel stressed with bad living condition of my hostel	0.856
33	Surrounding noise distracted me	0.855
34	Pollution make me uneasy	0.853
35	Hot weather avoids me from going out	0.851
36	Messy living conditions distracted me	0.850
37	I feel frustrated of inadequate campus facilities	0.850
38	Crowding make me feel uneasy	0.853
39	Waited in a long line make me feel uneasy	0.853
40	I feel scared being at insecure places	0.854

*All negative items

DISCUSSION

Results of this study have practical implications for counseling practice. Educators, psychologist, counsellor, teachers and university management can use SSI in order to get information regarding stress among university students. Moreover, it is important to have additional instrument to assess stress so that a clearer picture regarding stress among university student. Thus, the inventory of student stress gives a good impact and contribution to the area of education as well as in helping university students towards positive psychological well-being.

Furthermore, the findings of the research contribute a sourceful information about stress. It would be useful for the university management to identify the potential stressor and find the strategies on coping skills and stress management program. For example in the suggestion of press that among the activities that can be implemented in schools include promoting mental health literacy through talks, exhibitions and quizzes that can be held as extra-curricular activities involving parent-teacher associations and school clubs. The educational institutions whether in schools or universities need to have more trained counsellors to guide and help students in handling stress since helping students to manage stressful lives has been a goal of counseling practitioners (Abdullah and Dan, 2011). Lately, most universities or colleges have various tools to aid university students with stress management. There are many intervention programs that have been launched by university counseling centres such as publication of intervention books, peer program, workshop, motivational camps and a lot of activities. The topics may include understanding personality, relaxation techniques, time management, recognizing stress, financial management, relationship, study habits and many more. Research has found that launching such program would help students to know their best stategies in handling stress. For instance, (Chinaveh *et al*., 2010) did the research to examine the effectiveness of Multiple Stress Management Intervention (MSMI) on academic performance and mental health among Iran undergraduate students. Sixty students were randomly assigned to either a stress-management training group or a non-training control group using The General Health Questionnaire (GHQ). During the 8 weeks period, sixteen 2 h session interventions were conducted for the experimental group. Results indicated that there is an increase in the academic performance and mental health measures in the experimental group. Such reduction stress program implies that stress management could be learned and coping skills could be acquired. Therefore, the role of government and non-government institution should take a wise action in facing this problems such as establish more health professionals and increasing more stress intervention programs.

CONCLUSION

This study is an effort to enrich the repertoire in Malaysian counseling related to stress among university students. This is a study that developed SSI, thus investigated the validity and reliability of the instrument to measure stress among Malaysian university students. The development of SSI is based on the combination of two theories. It was apparent that not many local instruments has been developed in despite of the need to identify the level of stress among university students. In summary, the present study provides conceptual and practical contribution to counseling in identifying university students who need further intervention due to their level of stress. Results have proven that SSI is a valid and reliable instrument that can be used in local context. It is hoped that SSI can be used and will also stimulate more research in this area to make it a standardized instrument for not only Malaysia university students but also in other Asian countries.

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