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# Adaptation and Initial Validation of Student Stress Inventory for Use among Malaysian Secondary School Students

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## ABSTRACT

*The paper discusses the process to adapt the Student Stress Inventory (SSI) and reports the finding of its content validation. The process entailed, firstly, forward and backward translation of items to be used in a new population of test takers whose culture is different from that of in the original SSI standardization sample. The translation process was accomplished by subject matter experts (SMEs) who are well-versed in the English and Malay languages. They too understand the nature and extent of culture in the destination and original culture. The second stage was the item verification process in which five SMEs (Clinical Psychologist, Counsellor, Linguist, English teacher and Parent) verified and provided comments on every item before subjecting them to content and face validation stage. 10 SMEs, who were Psychology graduates, have been engaged to judge if the adapted Malay items are essential in measuring the construct-in-question among the Malay test takers. The SME judgments were calculated to obtain the content-validity-ratio (CVR) of each item. Items which did not meet the minimum value of CVR have been further reviewed. Besides, the feedback provided in the validation was used by the adapters to improve the face validity of the items.*

Keywords: *stress, Student Stress Inventory, adaptation, content validation, secondary school students.*

## INTRODUCTION

Stress has been a phenomenon experienced by various groups of individuals including students. Experiencing stress is considered as part of the growing process in all individuals (Yusoff, 2010). Scholars defined it as a feeling of mental pressure and tension which cause burden toward human body and mental processes (Shahsavarani, Abadi & Kalkhoran, 2015). Selye (1956) defined stress as a state of feeling that an individual experiences due to limited personal and social resources in responding to the demands. School related-stress e.g., workloads, examinations, fear of missing out (FOMO) and improper treatment by educators might be one of the stressors which could lead to high stress among secondary school students (Bawens, Jeanne & Jack, 1992; Burnett & Fanshawe, 1997). It was further illustrated by Yusoff (2010) that 26.1% out of 90 students in secondary schools tend to experience high rate of stress due to academic pressure.

Besides an academic related stress, a huge transitional period from childhood to adulthood also could be another stressor among secondary school students. Hassan, Jantan and Fauzi (2017) stated that

secondary school students usually belong to adolescent groups which are believed to face "Identity versus Role Confusion". At this stage, adolescents tend to explore a few roles in order to identify who they are, what they want to be and where they are going in their life. Failing to do so will only lead them to become confused and switch from one role to another (Santrock, 2011).

Though there are different scopes or dimensions in the definitions of stress, Shahsavarani, Abadi and Kalkhoran (2015) believed that there is a need to identify an individual's level of stress so that intervention could be designed in order to increase his or her biopsychosocial health and abilities. In addition, Hassan et al. (2017) found that most of the previous studies pertaining to stress show strong relationships with secondary school students. Proper mechanism to measure assess the prevalence of stress among adolescents is essential, warranting the use of appropriate tools, especially psychometrically sound stress scales. For one, there are many scales which measure the level of stress. Nevertheless, they were developed in settings which are different from the settings in which the scales are used. Such require proper adaptation process so as to ensure the appropriateness of data gathered by the scale.

Review of existing literature shows that there are several tools which have been developed to measure the construct stress, such as Perceived Stress Scale (PSS) and General Health Questionnaire (GHQ). The scales have been developed in language and culture which are different from that of the other places, making them inappropriate to be administered on test takers who belong to different populations. Given there are needs to measure or study stress phenomenon in various populations, there is a need to avail measuring devices to gauge the level of stress, either by developing a new scale or adapting the existing ones.

The adaptation of existing stress measures is mandatory if professionals or researchers want to use it in measuring the level of stress among test takers whose demographic background is different from that of the standardization sample of the original measure. The present study intends to adapt a test that has been developed to measure the level of stress among Malay population so that the measure can be used to measure stress level among secondary school children whose characteristics; culture and language are hypothesized to be different from that of the original test's population (i.e university students).

Secondary school students whose age range from 13 to 17 years old have been engaged to be involved in the test adaptation process. It has been indicated in a survey that has been conducted by the Health Ministry's Institute for Public Health Malaysia in 2017 and found that Malaysians adolescents between that age suffered critically in mental health problems (Lee, Menon & Rajaendram, 2018). The survey portrayed that 50% of 120,420 high school students faced personal problems including exam stress (Lee et al., 2018). Since the prevalence rate of stress among secondary school students is at an alarming level, having appropriate tools to assess secondary school students in Malaysia is important. One of the stress scales used to measure the level of stress is the Student Stress Inventory, a measure which is developed to identify the level of stress among secondary school students.

*Students Stress Inventory (SSI)*

Students Stress Inventory (SSI) which measures stress among university students was developed by Arip, Kamaruzaman, Roslan, Ahmad and Rahman (2015). Upon reviewing relevant literature on stress, the SSI developers defined stress, and subsequently identified four domains in a construct labelled as student's stress (Arip et al., 2015), namely

1. Physical factors of stress, defined as physical symptoms such as fatigue, physical weakness, headache, sleep problems, back pain and other physical symptoms which can lead one to experience prolonged stress.
2. Interpersonal relationship factor of stress, referred to as the extent of social connectedness among people.
3. Academic factor, referred to as the education process which includes extensive workloads coupled with new responsibilities, taking and studying for exams, and competition over attaining good grades.
4. Environmental factor, referred to as surroundings, physical space that one perceives and in which he/she behaves; and the reciprocal relationship between an organism and the environment that goes on over several cycles. This includes daily hassles that a student has to deal with such as problems with computers, queuing, messy living conditions, excessive noise, air pollution, traffic congestion, and commuting.

In the original SSI, the 40 items which were written in English language were adapted into Malay language items to measure the four subscales which correspond to the four domains. The items measure the frequency of occurrence on the statements phrased in the items. SSI employs a selected response format, with response scale of likert scale ranging from 1 = "Tak Pernah" (never), 2 = "Kadang-kadang" (sometimes), 3 = "Kerap" (frequent) and 4 = Sentiasa" (always) will be used as the scaling format. This lead to the attainment of ordinal-level data which scores reflect the different level of stress among test takers.

*SSI Administration*

The adapted SSI is a self-rated questionnaire, using pencil and paper administration. This allows test administrators/researchers to obtain immediate responses from test takers. In addition, the test can be simultaneously administered to a very large number of test takers. The cumulative scoring format is used as scoring methods in which the responses on Likert scale will be summed and interpreted based on maximum and minimum scores with reference to norm. The Likert scale that will be used in the adapted version is similar with the original version.

The administration of SSI involves the processes of giving the instructions and monitoring the administration procedures. The administration of SSI must be conducted by test users who must have fulfilled certain qualifications and received special training. They could be, but not limited to, educators, psychologists and counselors. All these test users must obtain a bachelor's degree level in college or university, majoring in Psychology, Counseling and other related fields that equip them with knowledge in psychometrics, and statistics as well as prepare them with the ability to conduct test administration, scoring and interpretation. Besides, test users must also have obtained a specific license which must be obtained from the SSI publisher (Psychological Assessment Resources, 2019). Test takers might require response assessment accommodations which allow them to respond to the items in various ways by using any type of assistive device or organizer. This is important to accommodate students with special disabilities without which the students might be unable to respond to SSI (American Psychological Association, 2000). This includes modifying the way of presenting the test, methods of responding, test setting and time allocated for the test (Ysseldyke, Thurlow, McGrew & Shriner, 1994).

The Student Stress Inventory has been adapted to measure the level of stress among secondary school students. The score obtained via the Malay adapted SSI can help schools identify students who require assistance to deal with stress, and in turn, increase their psychological well-being (Arip et al.,

2015). The targeted students are secondary school students who understand Malay language, hence not limited to Malay student only as the non Malays in Malaysia also converse well in the language. The other group of beneficiaries are parents, in that the level of stress identified via the inventory can alert them of the psychological condition of their children, and therefore help them improving their parenting style and family interactions. The result of this test could be used to create awareness on the importance of minimizing the level of stress among students via appropriate parenting style and family interactions (Tay & Tam, 2011) as well as other suitable interventions. Besides, the adapted SSI could also benefit teachers, in that the information about students' level of stress could help them to plan and execute intervention programmes to overcome high levels of stress among students. The information about students' stress scenarios may inform the general population on suitable aspects of prevention programmes that may be designed to safeguard the community from harmful effects of stress.

## ADAPTATION OF STUDENT STRESS INVENTORY

Given there is a need to measure stress among university students, the authors have embarked on the adaptation of SSI into a version which can be used to measure stress among secondary schools in Malaysia. Permission to adapt SSI has been sought from the original developer. The adaptation process is described the subsequent sections.

*Domains and Items*

Like in the original version, the adapted inventory covers the four domains that account for the 'student stress' construct. Each subscale consists items which were originally constructed to measure the related conditions, described below;

1. Physical: In this test, the physical domain consists items that measures physical stress such as headaches, back pain, fatigue, stomach pain and others
2. Interpersonal relationships: For this domain, it consists of the items that constitute relationships between students and their parents, friends, school and teachers that will lead to stress.
3. Academic: In this academic domain, the items have been constructed to identify the academic factors that contribute to stress such as having excessive homework, academic problems, preparation for examinations and lack of interest in the subjects.
4. Environmental factor: In the environmental domain, it consists of the items that lead to stress for students through the surrounding and physical space that is perceived as having the relationship between organism and environment. For example, having a messy living conditions, excess noise, air pollution, traffic jams and commuting are among environmental factors that lead to stress.

*Item translation*

1. *Procedure.* The translations have been done in two ways; forward and backward translations. The test adapter has performed forward translations by translating the items to suit the targeted population, who is secondary school student. The items have been translated from the original inventory which is in English language into the Malay language. The translated items

use words of correspondingly appropriate meaning which could be understood by secondary school students'; and suit their context. Then, it was followed by conducting backward translations. This process was done by engaging several independent translators whose mother-tongue is English language. They were not informed or have no knowledge about the test, and were requested to translate the items from Malay into English language. This was to check whether the translated items have the same meaning with that of the original items.

***2.*** *Translation Report.* Forward translation was used in this study to make sure that the final product of the translation preserves the same meaning as the original test (Hall et al, 2017). In addition, backward translation method was used because this method aims to highlight gross discrepancies and conceptual errors as well as to serve as a quality check of the test items (Thammaiah, Manchaiah, Easwar & Krishna, 2016). The translated items were reported in Appendix A. The appendix shows that there are some discrepancies occurred for certain items after the backward translations, necessitating the adapters to work with the translators to revise the translated items.

***Verification process***

1. *Procedure.* Verification process was conducted after obtaining the translated items that represent the meaning from original items. Subject Matter Experts (SMEs) or panel of experts (Clinical Psychologist, English Teacher, Linguist, Counselor and Parents) have been selected based on their specialization have been engaged to involve in the verification process.

2. *Criteria of SMEs.* The Clinical Psychologist, Counselor and educators fulfilled certain qualifications and received special training that make them suitable to verify the translated items. In addition, the linguists were involved in this process due to their proficiency in English language. Their judgement is important to verify the appropriateness of words used in the items. As for parents, they would verify the suitability of translated items to the secondary school students' context because parents could understand the words better than others on the words that their children frequently used in their daily lives.

3. Responses. The forward and backward translation form was passed to the SMEs via email. The five SMEs provided comments and suggested amendments on the translated items by replying to the test adapters' email.

## INITIAL VALIDATION

Given the Student Stress Inventory is adapted to a different culture and language, there is a need for the new form to undergo quality evaluation including validation and reliability estimation. The former, which is the focus in this study, can be categorised into face validity and content validity. Both refer to the degree in which the elements of items are relevant and representative of the targeted construct that is being measured (Haynes, Richard & Kubany, 1995).

In the initial validation process, Content Validation was conducted to determine if the items in the adapted SSI are essential in measuring the construct 'student stress' in the setting the test is adapted for use. In this process, test adapters utilized a judgment stage which is based on quantitative evidence. In this stage, the experts have made judgments regarding the degree of relevance for the items in measuring the construct-in-question (Yaghmale, 2003). In addition, Yaghmale (2003) stated that it could be useful to include 5 to 7 Subject Matter Experts (SMEs) or panel of experts to make judgments on the content domains.

*Procedure of Content Validation*

1. *Participants*. 10 Subject Matter Experts (SMEs) have been engaged to assist the content validation process. There were Psychology graduates that were chosen due to their background of study that are well-versed in the constructs that are being measured.

2. *Procedures of Content Validation.* The SMEs indicated if the items were 'essential', 'useful but not essential' or 'not necessary' in measuring the construct 'student stress'. All responses from SMEs were gathered in order to determine the number of 'essential' items. Content Validity Ratio (CVR) for each item was calculated to determine if the items could be accepted, revised or rejected. Using Lawshe's (1975) formula, the following table (Table 1) reports the CVR for each item.

3. *Additional Feedback*: The SMEs also assessed if the Malay translated items are suitable in the cultural context of school children in Malaysia. The comments and suggestions given by the SMEs on each item were taken into account by the adapters in harmonising the items before subjecting them for conducting subsequent validation.

*Result of Content Validation*

In content validation, Lawshe (1975) mentioned that panelists make judgement on the essentiality of an item by assessing every item in the test. They are to indicate wether the items are 'essential', 'useful but not essential' or 'not necessary' in measuring the construct-in-question. Lawshe (1975) suggested the formula of Content Validation Ratio (CVR) to obtain a value which is used to determine if an item could be accepted or rejected. The formula of CVR involves this operation; CVR = $(N_e - N/2)/(N/2)$, $N_e$ = number of panelists indicating "essential" and N= total number of panelists.

In this exercise, 10 Psychology graduates have been engaged to serve as panelists. They were asked to content-validate the items in the adapted SSI. Based on the number of panelists, the minimum value of CVR for an item to be accepted is .62. The items that do not meet the required minimum value must be rejected or revised. The items' CVR value, and their judgment on acceptance or rejection are reported in the following table.

Table 1: Content Validation of Students Stress Inventory (SSI)

| Domain | Items | CVR | Remark |
|---|---|---|---|
| Fizikal | Sakit Kepala | .80 | Accepted |
| | Sakit belakang | .80 | Accepted |
| | Masalah untuk tidur | .40 | Rejected |
| | Sukar untuk bernafas | 1 | Accepted |
| | Bimbang yang berlebihan | .80 | Accepted |
| | Sakit perut/mual | .60 | Rejected |
| | Keletihan yang berterusan/lesu | 1 | Accepted |
| | Berpeluh/ Tangan berpeluh | .20 | Rejected |
| | Kerap sejuk/selsema/demam | .40 | Rejected |
| | Pengurangan berat badan secara mendadak | .80 | Accepted |
| Hubungan Sesama Manusia | Saya mendapati sukar untuk memenuhi harapan tinggi yang diletakkan oleh ibu bapa saya | .60 | Rejected |
| | Ibu bapa saya menganggap saya sebagai orang yang tidak berguna | .60 | Rejected |
| | Saya rasa bersalah jika saya gagal untuk penuhi harapan ibu bapa saya | .60 | Rejected |
| | Ibu bapa saya hanya mengharapkan kejayaan saya | .60 | Rejected |
| | Saya mendapati sukar untuk bergaul dengan ahli kumpulan dalam menyiapkan tugasan akademik | .80 | Accepted |
| | Rakan-rakan tidak mempedulikan saya | .80 | Accepted |
| | Saya berasa terganggu apabila ada masalah dengan rakan-rakan saya | 1 | Accepted |
| | Keluarga saya tidak memberikan sokongan kepada saya | .60 | Rejected |
| | Guru-guru saya tidak memberikan sokongan kepada saya | .60 | Rejected |
| | Saya berasa kecewa dengan kekurangan pengurusan sekolah | -.20 | Rejected |
| Akademik | Saya mempunyai masalah kewangan disebabkan oleh perbelanjaan sekolah | -.20 | Rejected |
| | Saya berasa sukar untuk membahagikan masa di antara belajar dan aktiviti sosial | .80 | Accepted |
| | Saya berasa gementar jika diajukan soalan di dalam kelas | .40 | Rejected |
| | Saya berasa stres jika tarikh untuk menghantar kerja sekolah semakin hampir | .60 | Rejected |
| | Saya berasa stres untuk menduduki peperiksaan | .60 | Rejected |
| | Saya berasa sukar untuk membahagikan masa antara belajar dan penglibatan dalam aktiviti kokurikulum | .60 | Rejected |
| | Saya hilang minat untuk mempelajari beberapa mata pelajaran di sekolah | 1 | Accepted |
| | Saya berasa terbeban dengan kerja sekolah | 1 | Accepted |
| | Saya berasa stres belajar mata pelajaran yang susah | 1 | Accepted |
| | Saya berasa sukar untuk menyelesaikan masalah akademik | 1 | Accepted |
| Persekitaran | Saya menghadapi masalah pengangkutan untuk ke sekolah | 0 | Rejected |
| | Saya berasa stres dengan keadaan tempat tinggal yang tidak selesa | .40 | Rejected |
| | Persekitaran yang bising menyebabkan saya berasa terganggu | .80 | Accepted |
| | Pencemaran menyebabkan saya berasa tidak selesa | .60 | Rejected |
| | Cuaca panas menyebabkan saya tidak ingin keluar | 0 | Rejected |
| | Keadaan tempat tinggal yang bersepah menyebabkan saya berasa terganggu | .60 | Rejected |
| | Saya berasa kecewa dengan kemudahan di sekolah yang serba kekurangan | .20 | Rejected |
| | Berada di khalayak ramai menyebabkan saya berasa tidak selesa | .60 | Rejected |
| | Saya tidak selesa menunggu di barisan yang panjang | -.20 | Rejected |
| | Saya berasa takut berada di tempat yang tidak selamat | .60 | Rejected |

## DISCUSSIONS AND CONCLUSIONS

The original form of SSI is found to be less appropriate for use because certain items in the inventory appear to be not reflective of the secondary school settings in Malaysia. In secondary school settings, students encounter different environment; 1) tight and fixed schedule 2) compulsory extra-curricular activities involvement and 3) social circles which may pose them to situations that lead to

stress. The situations are different from that of the ones encountered by university students (Sin, 2018). For language settings, the original form of SSI uses English, causing some issues with understanding the items because the students' native language is Malay Language *(Bahasa Melayu)*. The differences in language used will affect the process to appropriately measure the level of stress among secondary school students in Malaysia. Schools in Malaysia use Malay language as medium of instruction in teaching and learning process (Asmah, 2016). Thus, the secondary school students may be able to comprehend the inventory well, and therefore provide appropriate responses if they were given the Malay adapted SSI.

In this exercise, the Student Stress Inventory has undergone translation, verification and initial validation process. In the item translation process, the forward translation was conducted by test adapters to suit the targeted population- the secondary school students. Test adapters have translated the items from English into Malays language. Backward translation was conducted after the forward translation has been completed, in which several independent translators have back-translated the items from Malay to English to see if there were equivalent meaning and effect of items in the original and translated items.

The demonstration of content validity of a measure is important to provide evidence on the extent to which an item adapted is essential in measuring the construct -in-question; and its suitability in the targeted culture. The content validation exercise in the adaptation of Student Stress Inventory has helped the test adapters to identify the items which should be improved in order to have better adaptations. The content was assessed through the Content Validation exercise in which ten subject-matter experts (SMEs) were engaged to indicate whether or not an item is essential in measuring student stress among Malaysian secondary school students. The judgments from the SMEs are then used to compute the CVR. The judgment on items' essentiality by the SMES has provided evidence for the content validity and clarity of the adapted Student Stress Inventory. Based on the results of this process, 15 out of 40 items in the four domains recorded acceptable CVR value in that the 15 items meet the minimum requirement value of .62. The high number of items with low CVR values may indicate that the items are not essential in measuring the construct 'students stress' among Malaysian students. This initial validation necessitates the adapters to work with the translator to translate the items so as to make them functional in measuring the construct by taking the local context into account. In other words, the items should be representative of stress-related behaviours in the Malaysian secondary-school context. Future work on the adaptation may also include the estimation of SSI reliability and construct validation exercises, that is after the adapted SSI be administered to the try-out sample.

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**REFERENCES**

American Psychological Association. (2000). Report of the task force on test user qualifications. Retrieved from https://www.apa.org/science/programs/testing/qualifications.pdf

Arip, M. M. A. S., Kamaruzaman, D. N., Roslan, A., Ahmad, A., & Rahman, A. M. R. (2015). Development, validity and reliability of student stress inventory (SSI). *The Social Sciences, 10*(7), 1631-1638.

Asmah, H. O. (2016). *Languages in the Malaysian education system: Monolingual strands in multilingual settings*. Routledge.

Bawens, Jeanne, H., & Jack, J. (1992). School-based sources of stress among elementary and secondary at-risk students. *School Counselors, 40* (2), 97-103.

Burnett, P. C., & Fanshawe, J. P. (1997). Measuring school-related stressors in adolescents. *Journal of Youth and Adolescence, 26*(4), 415-428.

Yusoff, M. S. B. (2010). Stress, stressors and coping strategies among secondary school students in a Malaysian government secondary school: Initial findings. *ASEAN Journal of Psychiatry, 11*(2), 1-15.

Hall, D. A., Zaragoza Domingo,S., Hamdache, L. Z., Manchaiah, V., Thammaiah, S., ... Evans, C. (2017). A good practice guide for translating and adapting hearing-related questionnaires for different languages and cultures, *International Journal of Audiology*, *57*(3), 161-175, DOI: 10.1080/14992027.2017.1393565.

Hassan, A. A., Jantan, R., & Fauzi, M. A. R. M. (2017). Level of stress and anxiety and sources of stress among secondary school students. *Science International (Lahore), 29*(4), 959-963.

Haynes, S. N., Richard, D. C. S., & Kubany, E. S. (1995). Content validity in psychological assessment: A functional approach to concepts and methods. *Psychological Assessment, 7*(3), 238-247.

Lawshe, C. H. (1975). A quantitative approach to content validity. *Personnel Psychology, 28*, 563-575.

Lee, C., Menon, S., & Rajaendram, R. (2018, Oct 12). Too many teens suffering from stress. *The Star*. https://www.thestar.com.my/news/nation/2018/10/12/too-many-teens-suffering-from-stress-examoriented-culture-not-only-affecting-students-but-teachers-a/#:~:text=PETALING%20JAYA%3A%20A%20national%20survey,suffering%20from%20stress%20(9.6%25).

Psychological Assessment Resources. (2019). Qualification levels. Retrieved from https://www.parinc.com/Support/Qualification-Levels

Selye, H. (1956). *The Stress of Life*. New York: McGraw-Hill.

Shahsavarani, A. M., Abadi, E. A. M., & Kalkhoran, M. H. (2015). Stress: Facts and theories through literature review. *International Journal of Medical Reviews, 2*(2), 230-241.

Sin, N. (2018, Aug 20). *8 major differences between secondary school and college you absolutely need to know.* Retrieved from https://eduadvisor.my/articles/major-differences-between-secondary-school-and-college-you-absolutely-need-to-know/

Thammaiah, S., Manchaiah, V., Easwar, V., & Krishna, R. (2016). Translation and Adaptation of Five English Language Self-Report Health Measures to South Indian Kannada Language. *Audiology research*, *6*(1), 153. doi:10.4081/audiores.2016.153

Tay, E. L., & Tam, C. L. (2011). Relationship between parenting styles and coping capability among Malaysian secondary school students. *International Conference on Social Science and Humanity (ICSSH 2011) Institute of Electrical and Electronics Engineers, 1*, 20-24.

Yaghmale, F. (2003). Content validity and its estimation. *Journal of Medical Education, 3*(1), 25-27.

Ysseldyke, J. M., Thurlow, M. L., McGrew, K. S., & Shriner, J. G. (1994). *Recommendations for making decisions about participation of students with disabilities in statewide assessmen programs* (Synthesis Report 15). Minneapolis: University of Minnesota National Center on Educational Outcomes.

## APPENDIX A

### Forward and Backward Translation of Student Stress Inventory (SSI)

| | Original Items | Forward Translation | Backward translation |
|---|---|---|---|
| | Directions: This inventory measures the stresses you have experienced in your study and everyday life in your campus. There are no right and wrong answers. Read each statement and circle the best describes your experiences. | Kaji selidik ini bertujuan untuk mengukur tahap tekanan yang dihadapi dalam proses pembelajaran dan kehidupan seharian disekolah. Tiada jawapan betul atau salah di dalam kaji selidik ini. Anda dikehendaki untuk membaca setiap ayat dan bulatkan skala yang bersesuaian dengan diri anda. | The purpose of this study is to measure the level pressure in learning process faced by students and in their daily school routines. No correct or wrong answers in this study. You are required to read all sentences and circle a scale that most represents you. |
| | 1= never (N)<br>2= Somewhat frequent (S)<br>3=Frequent (F)<br>4=Always (A | 1= Tidak pernah<br>2= Kadang2<br>3= Kerap<br>4= Sentiasa | 1= never<br>2= sometimes<br>3= frequently<br>4= always |
| | Below is a list of the ways you may have felt or behaved over this semester. Please circle one answer in each box: | Di bawah ini terdapat jenis-jenis tekanan yang pernah anda rasai dan lalui sepanjang tempoh setahun persekolahan. Sila bulatkan skala yang bersesuaian di kotak berkenaan. | There are few types of pressure that you might face during your one year in school. Please circle the scale that is applicable to you in the box given. |
| | Subscale 1= Physical | Subskala 1= Fizikal | Subscale 1 = Physical |
| 1 | Headaches | Pening kepala | Headache |
| 2 | Back Pain | Sakit belakang | Back pain |
| 3 | Sleep Problem | Masalah untuk tidur | Problem of sleeping |
| 4 | Difficulty breathing | Sukar untuk bernafas | Difficult to breathe |
| 5 | Excessive Worry | Bimbang yang berlebihan | Extra anxious |
| 6 | Stomach pain/ Nausea | Sakit perut/ loya | Stomach pain/nausea |
| 7 | Constant tiredness/ fatigue | Keletihan yang berterusan/ lesu | Continuous exhaustion/ tired |
| 8 | Sweating/ Sweaty hands | Berpeluh/ Tangan berpeluh | Sweating / sweating hand |
| 9 | Frequent cold/ flu/ fever | Kerap sejuk/selsema/demam | Always cold/flu/fever |
| 10 | Drastic weight loss | Pengurangan berat badan secara mendadak | Drastic weight loss |
| | Subscale 2= Interpersonal Relationship | Subskala 2= Hubungan sesama manusia | Subscale 2 = Interpersonal communication |
| 11 | I find difficult to meet my high parent's expectation | Saya mendapati sukar untuk memenuhi harapan tinggi yang diletakkan oleh ibu bapa saya terhadap saya. | I find it hard to reach my parents high expectations. |
| 12 | My parents treat me as helpless person | Ibu bapa saya menganggap saya sebagai seorang yang tidak berguna | My parents find me as someone that is helpless person. |
| 13 | I feel guilty if I fail to fulfill my parent's hope | Saya berasa bersalah jika saya gagal untuk penuhi harapan ibu bapa saya. | I feel guilty if I cannot fulfill my parents hope |

| | | | |
|---|---|---|---|
| 14 | My parents wish only for my success | Kedua ibu bapa saya hanya menginginkan kejayaan saya. | My parents only want my success |
| 15 | I find difficult to get along with group mates in doing academic task | Saya mendapati sukar untuk bergaul dengan ahli kumpulan dalam menyiapkan tugasan akademik. | I feel difficult to communicate with group members regarding academic work |
| 16 | My friends did not care about me | Rakan-rakan tidak peduli akan saya | My friends do not care about me |
| 17 | I feel disturbed when having problem with my boyfriend/girlfriend | Saya berasa terganggu apabila ada masalah dengan rakan rakan saya | I feel distracted if i have problems with my friends. |
| 18 | My families are not supportive | Keluarga tidak memberi sokongan kepada saya. | My family does not support me |
| 19 | My lecturers/ teachers are not supportive | Guru-guru tidak memberi sokongan kepada saya | My lecturers does not support me |
| 20 | I feel frustrated by the lack of faculty management | Saya berasa kecewa dengan kekurangan pengurusan sekolah | I feel frustrated with the lack of school management. |
| | Subscale 3= Academic | Subskala 3= Akademik | Subscale 3 = Academic |
| 21 | I have a financial problem because of the expenses of the university | Saya berasa duit belanja harian saya tidak mencukupi. | I think my pocket money is insufficient for my daily spending |
| 22 | I find difficult to juggle time between study and social activity | Saya berasa sukar untuk membahagikan masa di antara belajar dan bermain. | I find it difficult to allocate time between studying and playing |
| 23 | I feel nervous delivering the class presentation | Saya berasa gemuruh jika diajukan soalan di dalam kelas. | I find it nervous to ask questions during class |
| 24 | I feel stressed as submission deadline neared | Saya berasa tertekan jika tarikh untuk menghantar kerja sekolah semakin hampir. | I feel stressed when my homework's submission due date is approaching |
| 25 | I feel stressed to sit for examination | Saya berasa tertekan untuk menduduki peperiksaan. | I feel pressure to sit for an examination |
| 26 | I find difficult to juggle time between study and society involvement | Saya berasa sukar untuk membahagikan masa di antara belajar dan kokurikulum. | I find it difficult to divide time between studying and co-curriculum |
| 27 | I loss interest towards courses | Saya berasa hilang minat terhadap mata pelajaran di sekolah. | I have lost interest in school's subject |
| 28 | I feel burden of academic workloads | Saya berasa terbeban dengan dengan kerja sekolah. | I feel burdened with my homework. |
| 29 | I feel stressed dealing with difficult subject | Belajar mata pelajaran yang susah membuat saya rasa stres. | Learning difficult subjects make me feel stressed |
| 30 | I feel difficult in handling my academic problem | Saya berasa sukar untuk menyelesaikan masalah akademik. | I find it difficult to solve academic problems |
| | Subscale 4= Environmental | Subskala 4= Persekitaran | Subscale 4 = Environment |

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| 31 | I have transportation problem | Saya menghadapi masalah pengangkutan untuk ke sekolah. | I have trouble getting transport to school. |
| 32 | I feel stressed with bad living condition of hostel | Saya berasa tertekan dengan keadaan tempat tinggal yang tidak selesa. | I feel depressed to live in uncomfortable place |
| 33 | Surrounding noise distracted me | Bunyi bising disekeliling membuat saya berasa terganggu. | Noise around make me feel distracted. |
| 34 | Pollution make me uneasy | Pencemaran membuat saya berasa tidak selesa. | Pollution make me feel uncomfortable. |
| 35 | Hot weather make me avoid to go out | Cuaca panas membuatkan saya berasa tidak ingin keluar. | Hot weather makes me avoid being outside |
| 36 | Messy living conditions distracted me | Keadaan tempat tinggal yang bersepah membuat saya berasa terganggu. | Living in a messy condition make me feel distracted. |
| 37 | I feel frustrated of inadequate campus facilities | Saya berasa tertekan dengan kemudahan di sekolah yang serba kekurangan. | I feel disappointed of insufficient school supplies |
| 38 | Crowding make me feel uneasy | Berada di khalayak ramai membuat saya rasa tidak selesa. | Being in public make me feel uncomfortable |
| 39 | Waited in a long line make me feel uneasy | Beratur panjang membuat saya berasa tidak selesa. | Being in long queues make me feel uncomfortable. |
| 40 | I feel scared being at the insecure place | Saya berasa takut berada di tempat yang tidak selamat. | I feel scared when being in unsafe place |