

## **The Malay Self-Efficacy Questionnaire for School Situations: Development, reliability, and validity among early adolescents in primary school**

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Low perceived self-efficacy (SE) for responding to school-related situations is posited to be associated with school refusal. This study examined the validity and reliability of the Malay version of the Self-Efficacy Questionnaire for School Situations (SEQ-SS) among early adolescents in Kota Bharu. The English version of the 25-item SEQ-SS was translated into Malay. Employing a cross-sectional design, students (10-11 years) from five randomly selected public primary schools were recruited via proportionate cluster sampling. Two hundred and fifteen students, 65% female, mean age of 10.3 years ( $SD=0.5$ ), completed the Malay SEQ-SS. Validity was examined with exploratory factor analysis (EFA). Cronbach's alpha was used to determine internal consistency. Means and standard deviations were used to describe the total and subscale scores. EFA analyses retained 19 items which clustered into four factors: 'SE in socially challenging situations', 'SE in personally challenging situations', 'SE in separation situations', and 'SE in situations of disengagement from school'. Internal consistencies were low, approaching moderate, with Cronbach's alpha values between 0.64 and 0.69. The four-factor solution of the Malay SEQ-SS appears to permit identification of specific domains of low SE which could inform individualized interventions targeting early adolescents in primary school.

*Keywords:* Self-efficacy, instrument development, Malay, validity, reliability.

*El cuestionario de autoeficacia en malayo para situaciones escolares: Desarrollo, confiabilidad y validez entre adolescentes tempranos en la escuela primaria.* La baja autoeficacia percibida (AP) para responder a situaciones relacionadas con la escuela se considera asociada con el rechazo escolar. Este estudio examinó la validez y confiabilidad de la versión malaya del Cuestionario de autoeficacia para situaciones escolares (SEQ-SS) entre adolescentes tempranos en Kota Bharu. La versión en inglés del SEQ-SS de 25 ítems se tradujo al malayo. Empleando un diseño transversal, los estudiantes (10-11 años) de cinco escuelas primarias públicas seleccionadas al azar fueron reclutados a través de un muestreo de grupo proporcional. Doscientos quince estudiantes, 65% mujeres, con una edad promedio de 10.3 años ( $SD=0.5$ ), completaron la SEQ-SS versión malaya. La validez se examinó con análisis factorial exploratorio (AFE). El alfa de Cronbach se utilizó para determinar la consistencia interna. Se utilizaron promedios y desviaciones estándar para describir las puntuaciones totales y subescala. Los análisis de AFE conservaron 19 elementos que se agruparon en cuatro factores: "AP en situaciones socialmente desafiantes", "AP en situaciones personalmente desafiantes", "AP en situaciones de separación" y "AP en situaciones de desvinculación de la escuela". Las consistencias internas fueron bajas, se acercaron a moderadas, con valores alfa de Cronbach entre 0,64 y 0,69. La solución de cuatro factores de la SEQ-SS malaya parece permitir la identificación de dominios específicos de baja AP que podrían informar a las intervenciones individualizadas dirigidas a los adolescentes en la escuela primaria.

*Palabras clave:* Autoeficacia, desarrollo de instrumento, malayo, validez, fiabilidad.

Problematic school attendance is an unremitting major concern worldwide (Heyne, 2019). Chronically poor school attendance negatively impacts academic achievement (Carroll, 2010) and socioemotional outcomes (Gottfried, 2014). Numerous terms have been used in discussions of problematic school attendance. The more common terms are *truancy*, where the absenteeism is intentionally concealed from parents or teachers (Berg, 1997; Kearney, 2008), *school withdrawal* by parents or guardians (Gupta & Lata, 2014; Kearney, 2008; Thambirajah, Grandison, & De-Hayes, 2007), and *school refusal* (Berg, 1997; Hersov, 1960). School-refusing youth have often been misclassified as truants (Thambirajah et al., 2007). However, the severe emotional distress that these youth experience when confronted with school attendance, and the absence of delinquent behavior, helps distinguish these youth from truanting youth (Berg, 1997; Havik, Bru, & Ertesvåg, 2015; Hersov, 1960).

Malaysian data on the specific subtypes of school attendance problems is scarce because all absences are usually categorized as truancy (Abdullah, Salim, & Arip, 2018; Abdul et al., 2013; Nik-Ruzyanei et al., 2013; Yahaya et al., 2010). For example, a recent report from Malaysia by Abdullah et al. (2018) stated that “a student is said to be playing truant if he/she did not come to school or class without any solid reason” (p. 345). This is a broad definition which is problematic (Heyne, Gren-Landell, Melvin, & Gentle-Genitty, 2019) because it can encompass various types of absenteeism, not only truancy characterized by the concealment of non-attendance (Berg, 1997; Kearney, 2008). To date, there are no published Malaysian studies on school refusal. Clinically, there is a pressing need to recognize SR as a school attendance problem separate from truancy because of the higher prevalence of comorbid anxiety and/or depressive disorders among school refusers (Egger, Costello, & Angold, 2003; Inglés, González-Maciá, García-Fernández, Vicent, & Martínez-Monteagudo, 2015). SR has been linked to long-term negative outcomes manifesting as social withdrawal (King et al., 1998), poor social adjustment, and mental health problems in adulthood (Egger et al., 2003; McShane, Walter, & Rey, 2001).

The cognitions of school-refusing youth were argued to be associated with the perpetuation of school attendance problems (Heyne, 2006). Self-efficacy (SE), one type of cognition, has received particular attention in the field of SR (Heyne et al., 1998; Maric, Heyne, MacKinnon, Van Widenfelt, & Westenberg, 2013). Bandura (1994) used the term SE to refer to one’s beliefs about their abilities to attain specific goals or effect certain levels of performance. SE was theorized to strongly affect self-regulation abilities (Bandura, Caprara, Barbaranelli, Gerbino, & Pastorelli, 2003), influence life satisfaction (Vecchio, Gerbino, Pastorelli, Del Bove, & Caprara, 2007), determine the types of coping strategies adopted (Schwarzer, 2014), and promote prosocial beliefs (Caprara, Alessandri, & Eisenberg, 2012).

Measuring youths' SE for the ability to deal with school situations could produce clinically relevant information when working with school-refusing youth. Heyne and colleagues' (1998) Self-Efficacy Questionnaire for School Situations (SEQ-SS) measures 'SE expectations related to academic and social stressors' and 'SE expectations related to separation from parents and facing discipline'. These SE subscale scores could provide information that helps guide treatment decisions. Youths with low SE for facing academic/social situations may require extra support for scholastic/socializing skills, whilst those with low SE for separation/discipline situations may benefit from interventions targeting anxious and fearful responses in threatening situations (Heyne et al., 1998). Cognitive behavioural therapy appears to be effective in helping SR youth who demonstrate such characteristics (Heyne, Sauter, & Maynard, 2015).

Despite the potential value of assessing SE for school situations among SR youth, there is currently no validated assessment tool for use in the Malaysian population. Instruments translated to the Malay language are plentiful, but they assess more general constructs (e.g., Adolescent Coping Scale, Omar et al., 2011; Self-Efficacy Questionnaire for Children, Tan & Chellappan, 2018). The aims of the current study were to develop a Malay version of the SEQ-SS, and to explore its validity and reliability when used among early adolescents in primary schools of Kota Bharu district. Hypotheses were not specified due to the exploratory nature of the study.

## METHOD

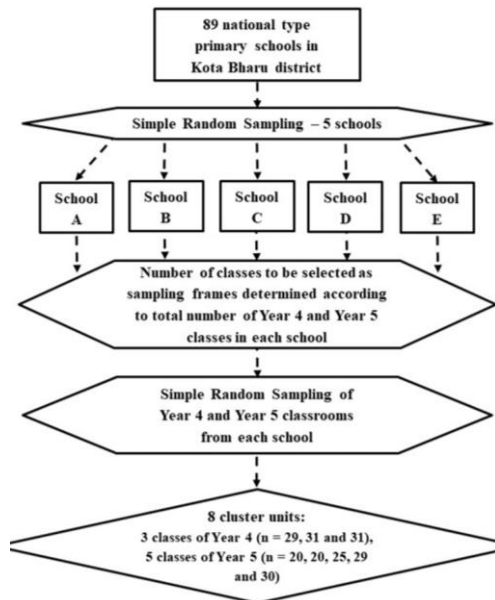
### *Participants*

For this initial evaluation of the Malay SEQ-SS a community sample of school-attending youths was chosen. Participants aged 10 to 11 years ( $M=10.26$ ,  $SD=0.50$ ) were recruited from public primary schools in Kota Bharu district between March and November 2015. Exclusion criteria were visual, hearing, or other physical or mental impairment which would hinder reading and understanding of the Malay language. Data from participants was also excluded from analysis if there was more than one missing item per study instrument.

Sample size was calculated based on the study objectives, with adjustments for potential dropout (up to 30%) and design effect (Naing, 2010). With respect to design effect, it was anticipated that individuals within small clusters of school classes would be somewhat similar to one another. There was a correction factor (multiplication by 1.5) to account for the extent of violation of the assumption that individuals in each cluster were independent of one another (Coupland & DiGuiseppi, 2010). For factor analysis, a ratio of five subjects per item was deemed suitable (Hair, Black, Babin, & Anderson, 2014).

Students were recruited via a two-stage cluster sampling method. First, five public primary schools in Kota Bharu were selected using simple random sampling from a total of 89 public primary schools. The number of classes to be selected from each school was determined based on the school size. Second, simple random sampling was used to identify classes that became the secondary sampling units. This sampling process was carried out as illustrated in Figure 1.

Figure 1. Schematic presentation of sampling procedure



Of the 321 consent forms and demographic questionnaires distributed, 258 sets were returned (80.4% response rate). Of these, 2 consent forms and 41 demographic questionnaires were incomplete, leaving 215 participants to complete the Malay SEQ-SS. No missing data was encountered for items of the Malay SEQ-SS. All 215 participants were of Malay ethnicity. The majority of the participants were 11 years old (58%), female (65%), and living with both parents (92%). There was no significant difference in frequency distribution between age groups (i.e., 10 and 11 years old) and gender ( $\chi^2=0.889, p=0.346$ ). Details of the living situation and history of school attendance problems are presented in Table 1.

*Table 1. Demographic Characteristics of the Study Sample*

Variable	n(%)
Number of siblings	
Only child	6 (2.8)
< 5 siblings	102 (47.4)
5 to 10 siblings	106 (49.3)
>10 siblings	1 (0.5)
Birth order	
Only child	6 (2.8)
Eldest	34 (15.8)
Middle	107 (49.8)
Youngest	68 (31.6)
Parental employment status	
Both employed	87 (40.5)
Only father employed	103 (47.9)
Only mother employed	17 (7.9)
Retiree	3 (1.4)
Guardian employed	3 (1.4)
No permanent employment	2(0.9)
Monthly income of family	
Below RM1000 (218 Euro)	83 (38.6)
RM1000 to RM5000 (218 to 1088 Euro)	65 (30.2)
RM5001 to RM10 000 (1089 to 2177 Euro)	42 (19.5)
Above RM10 000 (2177 Euro)	14 (6.5)
No regular income	11 (5.1)
Family history of significant conditions	
None	189 (87.9)
Chronic physical illness	16 (7.4)
School refusal	8 (3.7)
Chronic physical illness and school refusal	2 (1.0)
History of school absenteeism $\geq$ 2 weeks	6 (2.8)
History of experiencing bad feelings about school on every day for $\geq$ 2 weeks	7 (3.3)

### Measures

The development of the *Malay Self-Efficacy Questionnaire for School Situations* (Malay SEQ-SS) is described in the Procedure. It was based on the 25-item SEQ-SS (Heyne et al., 2007). The original SEQ-SS was a 12-item self-report measure developed by Heyne et al. (1998) to assess the cognitions of school-refusing children and adolescents. It asked respondents to indicate the extent to which they believed they could cope with situations related to school attendance using a 5-point Likert scale (from “*really sure I couldn’t*” to “*really sure I could*”). This was expanded to the 25-item SEQ-SS (SEQ-SS-25) with the addition of thirteen items pertinent to interaction with peers, school staff, and parents. Psychometric validation conducted with 300 school-attending Dutch youth aged between 10 and 18 years indicated good internal consistency with a Cronbach’s alpha coefficient of 0.83 (Duizer, 2007). Four emerging factors included SE related to: special school situations (7 items), normal school situations (6 items), authority (4 items), and uncertainty (6 items), with 2 experimental items (18 and 20) excluded from the final analysis (Van der Leden, 2008). The subscales yielded Cronbach’s alpha coefficients ranging from 0.62 to 0.73 (Van der Leden, 2008).

Another set of questionnaires was also developed to collect demographic data (age, gender, race, number of siblings, birth order, family living arrangement,

parents'/guardian's employment status, and monthly income) and school attendance data (self-reported absence from school lasting 2 weeks or more; experiencing bad feelings about school for 2 weeks or more). Each study participant was given a set of demographic questionnaire to bring home to be completed by the participants with their parents.

### *Procedure*

Attention was paid to achieving adequate cross-cultural adaptation (Beaton, Bombardier, Guillemin, & Ferraz, 2000) because the Malay SEQ-SS was being developed for use in a setting (Asia) that differed in culture and language from the settings in which the SEQ-SS and SEQ-SS-25 were developed (Australia and Europe, respectively). The 3 Malaysian mental health professionals (author MH, and the 2 members of the expert panel, i.e. a child and adolescent psychiatrist, and a clinical psychologist) involved in the translation of the Malay SEQ-SS have an average of 19.3 years of professional experience. Forward translation of the SEQ-SS-25 from English into Malay was conducted by a psychiatrist (author MH), in consultation with a language expert to ensure that the translations were conceptually and grammatically correct. Backward translation of the Malay version was subsequently performed by a lay person and an independent linguist blinded to the aims of the study. The outcomes of the backward translation were then reviewed by the original author of the SEQ-SS-25 (author DH) to ensure that the intended meaning of each item was preserved. There were 3 problematic items which were revised (by author MH) in order to achieve semantic equivalence for all 25 items. A team of experts comprising a child and adolescent psychiatrist, a clinical psychologist, and two school teachers was consulted to assess the content validity of the items. These experts agreed that all items were relevant to the Malaysian school setting. A copy of Malay SEQ-SS can be obtained from the authors by request (NVV or MH).

Piloting of the Malay SEQ-SS was conducted with ten respondents aged 10 or 11 years. This was to ascertain face validity and to gauge if the words and the structure of the sentences could be understood by early adolescents. Piloting also permitted rehearsal of the study procedure such that data collection would be carried out in a standardized manner by research assistants.

Each student was given printed information about the study, consent forms, and the demographic questionnaire to be taken home to their parents or guardians. Completed forms were returned to teacher representatives within a week. Two research assistants then revisited each school to administer the Malay SEQ-SS to all students for whom consent had been received. The research assistants had been trained to give the students a specific set of instructions during data collection (e.g., asking students to answer all 25 questions; advising students that they could ask the assistant for further

clarification as required). The average time taken by the students to answer the Malay SEQ-SS was 10 minutes.

**Ethical Considerations:** Ethical approval was obtained from the Jawatankuasa Etika Penyelidikan (Manusia) of USM (JEPeM Code USM/JEPeM/14100346). Approval was also obtained from the Ministry of Education, the Department of Education of Kelantan State, the District Education Office Kota Bharu, and the principals of the five schools. No payment was offered for students to participate but tokens of appreciation were issued following participation.

### *Data Analysis*

All analyses were conducted using IBM SPSS Statistics Version 22. Exploratory factor analysis (EFA) was conducted using a Principal Axis Factoring extraction method (Costello & Osborne, 2005; Fabrigar, Wegener, MacCallum, & Strahan, 1999). This involved an initial unrotated factor solution which was re-interpreted using the more flexible oblique promax rotated solution. To determine the number of factors to extract, the initial eigenvalues and scree plot were examined (Cattell, 1966). Once the number of factors was identified, EFA was re-run by fixing the number of factors. Items with factor loadings of 0.50 or greater were considered significant (Hair et al., 2014). Items which had relatively poor factor loadings (i.e., <0.4) but which were considered clinically important were retained (Clark & Watson, 1995). Cronbach's alpha coefficient was utilized to test the internal consistency of the entire scale. Values of 0.6 to 0.7 have been deemed the lower acceptable limits in exploratory studies (Hair et al., 2014). Furthermore, the strict use of 0.7 or 0.8 as the criterion for determining an acceptable level of alpha is argued to be problematic (Cho & Kim, 2005). For example, there is a lack of evidence that 0.7 is a better standard than 0.69. Measures of central tendency were based on means and standard deviations for total and subscale scores. Mean scores were divided by the number of items in the scale such that the resultant mean item score ranged from 1 (representing "really sure I couldn't") to 5 (representing "really sure I could"). This was intended to facilitate comparison across subscales with different numbers of items.

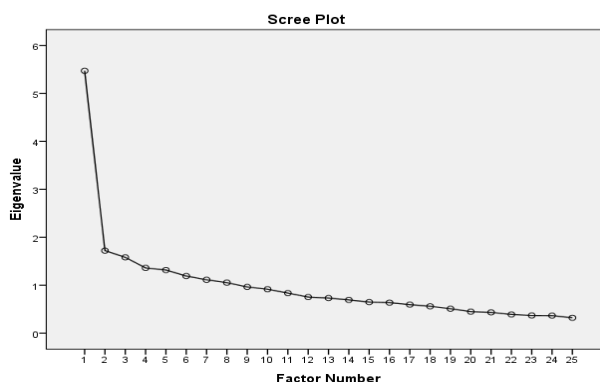
## **RESULTS**

### *Factor Analysis*

Preliminary tests of assumptions for EFA indicated that the Variance Inflation Factor ranged between 1.29 and 1.84, and Tolerance of all items was above 0.1. The appropriateness of factor analysis was further strengthened by a statistically significant Bartlett test of sphericity ( $p$ -value<0.05) and the Kaiser–Meyer–Olkin test (0.804) indicating a meritorious strength of relationship among the variables (Watson, 2017).

An initial unrotated factor solution revealed eight factors with eigenvalues above 1. However, an eight-factor model was not a parsimonious representation that could distinguish major factors from minor ones (Fabrigar et al., 1999). Using the scree test, the inflection point indicated the existence of three important factors (see Figure 2).

Figure 2. Scree plot based on eigenvalues among 25 items



Re-interpretation after successive extractions of four, three, and two factors revealed a higher cumulative percentage of variance for the four-factor solution (46.2%) and a more plausible representation of the greatest number of items. Twenty items remained in this four-factor solution. All 20 items had item-total correlations above 0.3, with the exception of item 3, which was thus removed. The final model for the Malay SEQ-SS consisted of 19 items (Table 2). Five items grouped under factor 1, and they related to contact with others at school that could evoke feelings of social intimidation. This factor was labelled '*Self-efficacy in socially challenging situations*'. Factor 2 comprised items reflecting situations where the youth had to attend school despite experiencing unpleasant emotions triggered by negative events. It was labelled '*Self-efficacy in personally challenging situations*'. Factor 3 comprised items relating to separation concerns while the youth is at school and was labelled '*Self-efficacy in separation situations*'. Finally, factor 4 comprised items reflecting situations of intrapersonal struggles against depressed mood and feelings of disconnection from school. The factor was labelled '*Self-efficacy in situations of disengagement from school*'.

#### *Reliability*

Internal consistency of the 19-item Malay SEQ-SS was 0.82. Cronbach's alpha values for the subscales ranged between 0.64 and 0.69, as presented in table 2.



Table 2. Construct Validity and Internal Consistency of the Malay SEQ–SS

Item	Factor loadings of 8 factor model	Factor loadings of 3 factor model	Final model				$\alpha$
			Factor 1 SE in socially challenging situations	Factor 2 SE in personally challenging situations	Factor 3 SE in separation situations	Factor 4 SE in situations of disengagement from school	
Q6. Being sent to the principal	0.762	0.747	0.759	-0.020	-0.061	0.097	0.69
Q12. Spend nights away; camp or excursion	0.546	0.614	0.600	-0.004	0.214	-0.049	
Q9. Being growled at or punished	0.498	0.569	0.503	0.060	-0.058	0.029	
Q7. Handle questions about being away from school	CL	0.403	0.403	0.102	0.014	-0.136	
Q5. Do things in front of the class or group	CL	0.345	0.317	0.249	-0.052	0.113	
Q18. Go to school if headache/stomachache	0.663	0.509	0.176	0.785	-0.041	-0.128	0.69
Q17. Go to school if anxious/scared	0.615	CL	0.176	0.484	0.050	-0.045	
Q4. Do tests	0.496	0.451	0.008	0.443	0.063	0.036	
Q24. Go to school if things not going well at home	0.3	0.314	0.066	0.394	0.047	0.124	
Q19. Go to school if unmotivated to go	0.467	0.386	0.270	0.364	-0.095	0.043	
Q14. Stay calm if things didn't go your way	0.522	0.318	0.186	0.340	0.038	-0.134	0.67
Q10. Away from parents during school-time	0.744	0.564	0.056	-0.070	0.754	-0.090	
Q1. Separation from parents when going to school	0.5	0.606	-0.141	0.008	0.615	0.085	
Q11. Stay at school once there	0.766	0.506	0.132	-0.017	0.602	-0.030	
Q15. Stay calm if didn't agree with teacher	CL	0.597	0.247	-0.291	-0.010	0.656	
Q21. Go to school if nicer things outside school	0.550	0.535	-0.086	0.029	-0.079	0.545	0.64
Q25. Go to school if don't feel belong	CL	0.486	-0.059	0.183	0.064	0.436	
Q23. Go to school if not satisfied with looks	0.342	CL	-0.219	0.286	0.196	0.401	
Q20. Go to school if sad/depressed	CL	0.373	0.068	0.283	0.006	0.364	
Q2. Approach teacher	<0.3	<0.3					
Q8. Stand up for self if teased or bullied at school	<0.3	0.346					-
Q13. Stay calm if annoyed at school	0.494	<0.3					
Q16. Talk to parents about something bad at school	0.527	0.340					
Q22. Go to school if not close to others at school	0.541	<0.3					
Q3. Do school work	0.704	<0.3	<i>Removed after Reliability Analysis because CITC &lt; 0.3</i>				
Cumulative Variance Explained (%)	59.3	35.1			46.2		
Variance Explained (%) for final model			23.7	8.3	7.7	6.5	

Note: SEQ–SS = Self-Efficacy Questionnaire for School Situations; SE = self-efficacy;  $\alpha$  = Cronbach's Alpha; CL = cross-loading of an item with almost comparable factor loadings in two or more factors; CITC = Corrected Item-Total Correlation

### Measures of Central Tendency

Total scores on the 19-item Malay SEQ–SS ranged from 47 to 94 (out of a possible total score of 95), with a mean total score of 73.6 ( $SD=8.7$ ). Mean subscale

scores are presented in table 3. There were no significant differences between male and female participants on total or subscale scores.

*Table 3.* Means Total and Subscale Scores for the Malay SEQ–SS

	Total sample mean (SD)		Mean values when divided by number of items	
	Males	Females	Males	Females
SEQ–SS	74.4 (7.9)	73.2 (9.1)	3.9	3.9
SE in socially challenging situations	19.4 (3.1)	18.9 (3.1)	3.9	3.8
SE in personally challenging situations	23.1 (3.5)	22.4 (3.6)	3.9	3.7
SE in separation situations	13.4 (2.3)	13.5 (1.8)	4.5	4.5
SE in situations of disengagement from school	18.6 (2.8)	18.3 (3.4)	3.7	3.7

## DISCUSSION

This study involved the development and initial evaluation of the Malay version of the SEQ–SS. The Malay SEQ–SS assesses levels of perceived SE for common school–related situations among Malaysian students. Using an EFA procedure, four interpretable factors were identified. The four factors represent situations that are socially challenging, personally challenging, involve separation, or involve disengagement from school. Internal consistency of the entire scale was high. The alpha values for the subscales were low, approaching moderate.

The four factors of the Malay SEQ–SS differ from the SEQ–SS–25 with respect to item clustering. In view of the fact that the authors of this study aimed for cultural adaptation of a new scale, it was important to employ exploratory factor analytic techniques that do not impose any a priori structure on the outcome (Worthington & Whittaker, 2006). The first factor of the Malay SEQ–SS (‘Self-efficacy in socially challenging situations’) comprised two items from the SEQ–SS–25 factor ‘special school situations’, and two items from its factor ‘normal school situations’, as well as one item from the ‘authority’ factor. The Malay SEQ–SS factor ‘Self-efficacy in personally challenging situations’ comprised three items from the SEQ–SS–25 factor ‘normal school situations’ and one item from each of the ‘special school situations’ and ‘uncertainty’ factors. Two items from the ‘uncertainty’ factor and one item from the ‘special school situations’ factor loaded onto the Malay SEQ–SS factor ‘Self-efficacy in separation situations’. The fourth factor of the Malay SEQ–SS, ‘Self-efficacy in situations of disengagement from school’, comprised two items from the ‘authority’ factor of the SEQ–SS–25, one item from the ‘special school situations’ factor, and one ‘uncertainty’ item.

Cultural differences between the setting in which the SEQ–SS–25 was evaluated (Europe) and the setting in which the Malay SEQ–SS was evaluated (Asia) may have contributed to different interpretations of the items. The high in–group collectivism of the Malay society (Burns & Brady, 1992) is regarded as having influenced three of the factors in the current study. The factors ‘Self-efficacy in socially

challenging situations' and 'Self-efficacy in situations of disengagement from school' may relate to the need to conform to in-group norms so that one can fit into the school institution, rather than maintain one's individualism (Keshavarz & Baharudin, 2009). At the same time, familial collectivism may overpower one's sense of independence, resulting in difficulty dealing with separation (Gardano, 1998), and thus influencing responses to items that loaded on the factor 'Self-efficacy in separation situations'.

The study did not involve across-culture evaluation of similarities and differences in self-efficacy for coping with school. However, a recent validation of the Malay Self-Efficacy Questionnaire for Children (SEQ-C) indicated that self-efficacy was a suitable construct to evaluate social, academic, and emotional competencies of Malaysian adolescents (Tan & Chellappan, 2018). Similarly, Elias, Mahyuddin, Noordin, Abdullah, and Roslan (2009) explored self-efficacy beliefs of adolescents from secondary schools around Peninsular and East Malaysia, with the intent to disseminate the awareness amongst Malaysian teachers and counsellors that academic performance could be improved by modifying faulty efficacy beliefs of at risk students. It thus seems that the different clustering of items in the Malay SEQ-SS relative to the SEQ-SS-25 does not reflect a lack of relevance of the SE construct among Malaysian youth.

An alternative explanation for the different clustering of items relates to the age of the participants. The current sample comprised early adolescents aged 10 and 11 years whereas the SEQ-SS-25 was administered to youths between 10 and 18 years. Early adolescence is a developmental period distinct from late childhood and late adolescence (Urdu & Klein, 1998), spanning the ages of 10 and 14 years. An adolescent's individual functioning matures during late adolescence, shifting from being dependent on others to becoming increasingly individuated and self-sufficient in behavioral, cognitive, and affective domains (Zimmer-Gembeck & Collins, 2003). This may explain why the 'authority' construct was present in the SEQ-SS-25 but could not be clearly delineated in the Malay SEQ-SS. Early adolescents are only beginning to push against the authority of parents and teachers but the influence of adults remains strong (Fleming, 2005). On the other hand, late adolescents aged 15 to 19 years are more likely to openly assert their independence. They may rebel against parents and teachers as authority figures, especially when the increasingly complex opinions and moral principles of late adolescents are incongruent with societal norms (Darling, Cumsille, & Martínez, 2008; Eisenberg, Cumberland, Guthrie, Murphy, & Shepard, 2005).

A noteworthy characteristic of the sample in the current study is the preponderance of females (65.1%). This contrasts with statistics which indicate that equivalent rates of male and female students are enrolled in Years 4 and 5 (Kelantan Education Department, 2015). The sampling bias could be attributable to the random selection of a females-only school, SK Zainab 1. In any case, there were no significant differences between male and female participants with respect to total and subscale

scores on the Malay SEQ-SS. This contrasts with a study of the SEQ-SS-25 in which males were found to report higher self-efficacy for school-related situations relative to females (Sijtsma, 2008). To the extent that gender differences were not found in the current study, it would appear that valid comparisons can be made between scores for males and females completing the Malay SEQ-SS.

A high level of perceived SE was demonstrated in the present sample. The mean item score for the Malay SEQ-SS (3.9) was higher than the mean item score reported in relation to the original 12-item SEQ-SS (3.4; Heyne et al., 1998). This is to be expected, given that the early adolescents in the current study were recruited from a community sample, whereas Heyne et al. (1998) investigated a clinical sample of school-refusing youths. Indeed, when questioned about school attendance, a very low proportion of youth in the current study reported difficulty going to school. However, when compared with a Dutch community sample of students aged between 10 and 18 years (Duizer, 2007), youth in the Malay sample were found to score slightly lower on total self-efficacy for school situations (i.e. 4.1 versus 3.9). This non-tested difference might suggest that early adolescents have lower levels of self-efficacy in dealing with school-related situations. At the same time, when Cheilakou (2012) reduced the SEQ-SS-NL item set to a three-factor, 19-item solution, the mean item score for primary school students was 3.95, which is closer to the mean item score reported in the current study.

At the factor level, the area of highest SE for youth in the current study was in dealing with 'separation situations' ( $M=4.5$ ). This might be explained by the allotment of one teacher for each class, such that students might form more secure attachments with the teacher, helping to lessen anxiety about being away from parents. SE was lowest for 'situations of disengagement from school' ( $M=3.7$ ). Adolescence is a period of transition from childhood dyadic relationships to group affiliations (cliques and crowds; Brown & Klute, 2003; Drolet & Arcand, 2013; Newman, Lohman, & Newman, 2007). One's ability to cope with relationships with school peers and non-family adults could be undermined by feelings of not belonging (item 25 in the Malay SEQ-SS), dissatisfaction with one's looks (item 23), disagreements with school teachers (item 15), and depressed mood (item 20).

### *Limitations*

The results of this study should be interpreted in view of its limitations. First, the overrepresentation of Malays in this study limits the generalizability to the multi-ethnic Malaysian population. However, during the translation process emphasis was placed on using easy-to-comprehend vocabulary and language structure for the items so as to enhance ease of administration across different ethnic groups in Malaysian schools where the medium of instruction is standard Malay. Second, the study was

limited to youth between 10 and 11 years of age. The extent to which the emerging factor structure is relevant for younger and older youth is yet to be determined. Third, an analysis of factorial invariance across ethnic groups (i.e., Dutch and Malaysian youth) was beyond the scope of the current study. Fourth, because participants were drawn from a community sample, the reliability and validity of the Malay SEQ-SS when used with school-refusing youth is unknown.

### *Implications*

The mean scores obtained in this community-based sample can serve as a guide, albeit imprecise, when used in clinical settings to assess youths referred for psychiatric evaluation because of SR. Early adolescents with perceived SE well below the average for the community sample may have an impaired process of personal agency that may be associated with serious conditions like depressive, anxiety, or stress-related disorders. Clinicians may elect to target the areas of low self-efficacy indicated by the Malay SEQ-SS subscale scores. For example, youth scoring low on SE for 'situations of disengagement from school' may benefit from cognitive interventions aimed at unhelpful cognitions associated with the perceived disconnection (e.g., *I can never be as good as my friends; Teachers always blame me for everything*) and/or behavioral and school-wide interventions aimed at strengthening participation and connectedness at school.

The Malay SEQ-SS appears to be easily administered, based on the time taken to complete it and the absence of missing responses. It is also relatively easy to score and interpret, broadening its use beyond mental health professionals to include teachers in non-clinical settings. The four subscales provide information about relatively circumscribed domains related to school attendance. If a student scores low in only one domain (e.g., 'self-efficacy in socially challenging situations'), school staff may be able to provide extra support in that specific domain. On the other hand, when students score low in all domains, more intensive interventions provided by clinical staff may be needed.

### *Future Directions*

Further research ought to focus on recruiting school-refusing youth and establishing the factor structure of the Malay SEQ-SS among this group. It will be helpful to determine whether the factor structure of the Malay SEQ-SS remains stable across school-attending youth and school-refusing youth in Malaysia. It will also permit comparison with the factor structure that emerged when the original SEQ-SS (Heyne et al., 1998) was administered to English-speaking school-refusing youth. Stability of the factor structure across cultural groups would underscore the importance of the constructs measured via the SEQ-SS and permit cross-cultural research on SR.

Future studies should also undertake concurrent validation of the Malay SEQ-SS, correlating total and subscales scores with measures of anxiety and depression such as the validated Malay versions of the Spence Children's Anxiety Scale (Ahmadi, Mustafa, Haghdoost, Khan, & Latif, 2015) and the Children's Depression Inventory (Tan et al., 2013). These questionnaires would be relevant because three of the Malay SEQ-SS subscales ('socially challenging situations', 'personally challenging situations', and 'separation situations') suggest associations with anxiety-provoking situations, and the subscale 'situations of disengagement from school' suggests a possible relationship with depression.

In the current study, the Malay SEQ-SS was validated among 10 and 11 year-old youth. Future validation samples should involve a broader age range and analyses for sub-groups of different ages, to determine the extent to which the factor structure is invariable across developmental level. If age-related differences were found, this might suggest the need for different interventions according to the developmental level of the school-refusing youth.

## CONCLUSIONS

A rigorous translation process was used to develop a culturally relevant Malay version of the SEQ-SS. Initial evaluation of reliability and validity indicated that the 19-item Malay SEQ-SS comprising four domains of SE for school-related situations has potential for use among early adolescents. It could be used to detect domains of low SE with implications for individualized interventions aimed at preventing or treating SR. Overall, early adolescents in Kota Bharu reported relatively high SE for separation situations and relatively low SE for situations of disengagement from school. The latter finding suggests that vulnerabilities in SE may underlie problems in establishing group affiliations in school, which could potentially result in problems with school attendance.

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