ORIGINAL ARTICLE

Validation of a Specific Phobia Questionnaire by University Students in Malaysia

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ABSTRAK

Fobia khusus ialah subkategori gangguan kebimbangan yang masih kurang difahami kerana alat pemeriksaan yang tidak mencukupi. Kajian ini bertujuan untuk membangunkan dan mengesahkan soal selidik 'Specific Phobia' (SPQ) yang baharu. Soal selidik ini dibangunkan berdasarkan tinjauan literatur dan input daripada pakar berkaitan untuk kesahihan kandungan. Soal selidik SPQ mengandungi 14 item dan melalui kesahihan kandungan, prosedur ujian kesahihan muka, 12 item telah dipilih untuk soal selidik akhir. Soal selidik itu kemudiannya diedarkan melalui borang Google kepada pelajar universiti di Lembah Klang. Seramai 267 orang pelajar telah menyertai kajian ini dengan 70.8% adalah perempuan dengan min umur 23.28 (Sisihan piawai 4.98) tahun. Analisis kesahihan menggunakan analisis faktor penerokaan daripada kajian akhir menunjukkan bahawa nilai Kaiser-Meyer-Olkin ialah 0.77 dan mengekstrak tiga domain; haiwan, kecederaan suntikan darah dan persekitaran-situasi. Analisis kebolehpercayaan menunjukkan bahawa nilai α Cronbach ialah 0.84, 0.86, 0.78 dan 0.72 untuk jumlah item, haiwan, kecederaan suntikan darah dan domain persekitaran-situasi. SPQ yang baru dibangunkan menunjukkan kebolehpercayaan dan kesahihan yang baik untuk menilai fobia tertentu.

Kata kunci: fobia khusus, saringan, soal selidik

ABSTRACT

Specific phobia is a subcategory of anxiety disorders that remains poor understanding due to inadequate screening tools. This study aimed to develop and validate a new Specific Phobia Questionnaire (SPQ). This SPQ was developed based on literature reviews and inputs from related experts for content validity.

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The SPQ questionnaire consisted of 14 items and after content validity and face validity testing procedure, 12 items were chosen for the final questionnaire. The questionnaire was then distributed via Google form to university students in Klang Valley. A total of 267 students participated in this study with 70.8% were female with mean age of 23.28 (Standard deviation of 4.98) years. Validity analysis using exploratory factor analysis from the final study indicated that the Kaiser-Meyer-Olkin value was 0.77 and extracted three domains; animals, blood injection injury and situational-environment. Reliability analysis showed that Cronbach's α values were 0.84, 0.86, 0.78 and 0.72 for the total items, animal, blood injection injury and situational-environment domains, respectively. The newly developed SPQ showed good reliability and validity for evaluating specific phobia.

Keywords: questionnaire, specific phobia, screening

INTRODUCTION

The literature defines anxiety disorder as an overwhelming fear resulting from a sense of threat and the individual is unable to identify the cause thereof (Dobson 1985; Hong 2014; Marks & Lader 1973). Though it is more frequently episodic and lasts only a few minutes to many hours per day, anxiety may also be chronic. Due to this increased dread, risks may be overestimated, resulting in maladaptive coping mechanisms (Hong 2014). Specific phobia, a subtype of anxiety disorder, has been increasingly studied, since this disorder is associated with significant healthcare expenses and a high disease burden (Eaton & Chilcoat 2018: Comer et al. 2011). This disorder refers to an extreme or excessive fear or anxiety when approaching a specific object or situation, which is persistent and causes significant suffering or impairment in terms of fear. It leads to avoidance of said object due to an intense, irrational fear

that poses little or no actual danger (American **Psychiatric** Association 2013). Although one may realize that the irrationality of the having fear toward specific triggers, the thought of encountering the triggers can bring intense emotions. The labelling of specific phobia may seem to indicate that it is a less invasive psychological disorder, which is misleading; in fact, it can lead to serious impairment (Alpers 2010). This disorder has been classified to five domain areas which include irrational fear and avoidance toward animals (such as spider, cockroaches or snakes), situational objects (airplanes and driving), environment (water, storms or heights), blood-injection injury (BII) or others (such as choking or vomiting) (American Psychiatric Association 2013). The prevalence of this disorder is 19.3%, with 21.1% of females and 16.7% of males (Fredrikson et al. 1996). Older people are more susceptible to having specific phobia than young people in terms of inanimate objects (Fredrikson

et al. 1996). In the literature on specific phobia, the importance of instruments to detect this disorder has been subjected to a considerable discussion (Eaton & Chilcoat 2018). The need to improve diagnostic screening or scale that be used in the community has increased due to high prevalence rates and poor detection (Vermani et al. 2011), as well as misdiagnosis and mistreatment (Ayano et al. 2021; Mayou & Hawton 2018).

While it is generally acknowledged that assessment techniques are a crucial component of comprehending and treating anxiety-based issues, relatively little focus has been placed on creating and researching thorough, evidencebased assessment protocols for anxiety disorders and specifically specific phobia (Hunsley & Mash 2008). More importantly, screening individuals for mental health interventions and assessing their success are significantly hampered by the lack of relevant mental health evaluation tools in specific culture setting (Kaiser et al. 2019). The standard diagnostic interviews commonly include the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) criteria or Mini International Neuropsychiatric Interview (MINI) or the International Classification of Diseases (ICD) 11 (Bandelow 2017; Krawczyk & Święcicki 2020) to diagnose specific phobia (Shankman et al. 2018; Sheehan et al. 1998). While MINI or ICD accurately diagnoses individuals with specific phobia, it can only be used by trained clinicians and requires a lengthy interview time (Ventura et al. 1998). To curb this problem, some researchers

believe that common mental disorders (CMDs), specifically specific phobia, can be identified using a variety of screening techniques (Ali et al. 2016). There are few comprehensive, wellvalidated screening techniques used for identifying a wide range of anxieties based on DSM-5 specific phobia types, despite a plethora of self-report for specific phobia types (Ovanessian et al. 2019). Recent research on the specific phobia questionnaire has been mostly restricted or limited to one specific phobia domain. The Spider Questionnaire (SQ) and Snake Questionnaire (SNAQ) with high psychometric properties (Klorman et al. 1974), have been intensively used to assess specific phobia to spiders or snakes. However, a major problem with these questionnaires is the failure to assess other domains described in the DSM-5 (Zsido 2017). The Fear Survey Schedule (FSS-II) assessment for fear and phobia in general has 51 items on death, illness, live organism, social interactions and social evaluation with a 7-point Likert scale (Geer 1965). Despite this survey scale covers a varied domain of phobia and has high psychometric properties (Bernstein & Allen 1969), it has been found that it is a lengthy questionnaire based on a Western context. Similar to the Fear Survey Schedule, the Specific Phobia Questionnaire (SPQ) is a lengthy questionnaire with 45 items and assesses phobic stimuli, as well as the extent to which fear affects daily living. Although it has quite a number of questions, the author stated that this self-report questionnaire requires less time as compared to administration

by clinician. It is also less expensive and can be used together with interviews (Ovanessian et al. 2019). The Phobic Stimuli Response Scale (PSRS) is another newly created selfreport questionnaire with 46 items to measure cognitive and emotional factors of fears toward social, animals, situational, bodily harm and blood injection fear. It assesses affective responses to many stimuli (Cutshall & Watson 2004). Despite both SPQ and PSRS assess wide specific phobia areas, they have good psychometric properties; however, they are based on the Western context and culture and further investigation is required to determine whether the specific phobia domain can be used in other cultures.

There is scarce information on any culturally adapted self-report or scale that is able to screen specific phobia. In Malaysia, screening questionnaires are commonly adapted or adopted from the West and include the Depression Anxiety Stress 21 Questions (DASS-21), Hospital Anxiety and Depression Scale and General Health Questionnaire-12 item (Khaiyom et al. 2019). This scale is a general measurement for wide range of psychological disorders and unpleasant emotional conditions such as stress, anxiety and depression (Jackson 2007; Oei et al. 2013; Snaith 2003), therefore it does not focus on specific phobia. Information on Generalised Anxiety Disorder (GAD) is easily accessible, while information on the broader category of Anxiety Disorder (AD) is still lacking, making it difficult to identify or treat (Khaiyom et al. 2019). In addition, they also concluded

that not all of the self-report studies follow the guidelines for adapting Western-based measures (Khaiyom et al. 2019). Inappropriate content, lack of construct and criterion validity, as well as semantic inaccuracies in the translations into local languages are common problems in questionnaires, making it difficult to identify a disorder accurately (Başgöz et al. 2016). Misclassifications of questionnairebased screening instruments may also occur due to misinterpretation of the questions or cultural differences in symptom reporting (Başgöz et al. 2016). Thus, specific phobia which falls under anxiety disorders in DSM-5, cannot be assessed with general anxiety screening tool. It is crucial to translate the questionnaire into another language if a specific scale is readily available, or to create a new scale if there is no questionnaire available in the target language (Tsang et al. 2017). The questionnaire should also take into account cultural differences and stereotyped ideas about dangers (Office of the Surgeon, Center for Mental Health, & National Institute of Mental 2001). Therefore, the aim of this study was to develop a scale to measure specific phobia using the Malay language, as well as conduct a preliminary examination of its reliability and validity. This questionnaire should be understood easily in terms of the language used (semantic coherency), content, criterion, and conceptual and technical aspects and applicable to a wide range of people (Kaiser et al. 2019).

DEVELOPMENT OF ITEMS

The terms fear and phobia are often used interchangeably. Fear describes the feeling of unease brought on by the awareness of approaching danger, while a specific type of fear is a phobia (Marks & Mathews 1979). A fear is deemed as a phobia when it prevents a person from carrying out daily activities and the fear becomes intense, persistent and allencompassing (Dobson 1985). The development of specific phobia scale domains followed DSM-5 specific phobia group categories, including animal type, natural environment type, BII type, and situational and other types (American Psychiatric Association 2013). This study incorporated information from a literature review and other questionnaires by Geer (1965) and Marks & Mathews (1979), as well as discussions among a group of psychology students, to determine common fears experienced by healthy people, and situations or things that they are afraid of, in order to support cultural aspects. We had used the term 'fear' as an item for all categories, with a score of 1 to 7 to indicate the intensity and persistence of feelings related to the questions posed. The questions were short, straightforward, concise, and written in everyday language (Demetriou et al. 2014). The process of developing a questionnaire that tapped into culture was conducted through discussions among students and a pilot study with 30 students. It was then given to five students to determine whether the questionnaire could be understood. The respondents rated the questions' reliability based on their perceptions (Nevo 1985). This was done by avoiding the use of words that deviate from the actual meaning of the Malay words used.

Item Generation Phase

An initial of 14 Malay items that consisted of four domains (7 before the pandemic and 7 items during the pandemic) was developed for this specific phobia scale. We opted for a seven-point Likert scale, which offerred seven options for responses to a statement or question, allowing respondents to express their level of agreement or disapproval with a statement or question on a positive-tonegative scale (Joshi et al. 2015). The reliability and validity improve as more scale points are being used (Bishop & Herron 2015: Dawes 2008). All items were developed based on a positive scale, and no reverse score was needed during scoring process (Lam & Stevens 1994).

PILOT STUDY

The questionnaires were distributed to 30 university students in three stages in order to determine the clarity of the item wordings and item stability (Boateng et al. 2018; Tsang et al. 2017). A majority of participants stated that all items were easily understood while items with ambiguous meanings were removed and distributed again to another 30 students as a pilot test to confirm the face validity. Consistent with previous findings, the respondents verified that the questionnaire was easy to answer and was not time-consuming. Each of this processes and

content of instruments were checked and verified by a panel of experts consisting of a clinical psychologist, a public health physician and a medical entomologist (Soundy et al. 2016). The experts not only discussed and decided items pertaining to the constructs and content of specific phobia scale but also involved in a series of meetings in generating items based on the analysis conducted. This was to ensure the construction and adaptation of psychological instrument by experts by measuring the representativeness, clarity and comprehensiveness (Grant & Davis 1997). During this process, reliability items scoring below 0.7 (Tsang et al. 2017) for Cronbach's alpha and factor loading of below 0.3 to 0.5 (Samuels 2017) for construct validity were deleted, and some new items were added based on Cronbach's alpha values of 0.7 for stability and the strength for each domain (Tsang et al. 2017). From an initial 14 items. only 12 items were included. The others were deleted because their Cronbach's alpha values fell below .70 and their factor loading was below 0.5. The four subtypes were still maintained, including animals (6 items-later reduced to 4 items), bloodinjection injury (5 items-later reduced to 4 items), situational (2 items-later increased to 8 items, then reduced to 3 items) and environmental (7 items-later reduced to 3 items and final version 1 item). These 12 items represented three domains, namely animals, BII and situational-environment. Since the situational and environmental items were too small, they were grouped together to achieve good reliability and factor loading. Items with Cronbach's alpha values of 0.7 to 0.84 were retained for specific phobias (Figure 1).

FULL STUDY

This is a cross-sectional study in which total of 267 undergraduate and postgraduate participated in this study. Recruitment was conducted via Google form from May to July 2021. Participants who were unable to read and understand the Malay language were excluded from the study. The respondents completed a consent form prior to answering the questionnaire and information regarding the study was given in the Google form. The email addresses of the researchers were provided to the participants to enable them to ask any questions pertaining to the questionnaire. The Human Research Ethics Committee of Universiti Kebangsaan Malaysia approved this study (Ethics Committee/ Irb Reference Number: UKM PPI/111/8/ IEP-2019-701).

STATISTICAL ANALYSIS

Data were inspected for distribution and showed a normal distribution. Analyses were performed using SPSS statistics version 25 software (IBM Corp., Armonk, NY). Categorical data were described as frequency (n) and percentage (%). Mean and standard deviation (SD) were used to describe normally distributed data. For validity analysis, Exploratory Factor Analysis (EFA) was conducted with orthogonal (varimax) rotation. The Kaiser-Meyer-Olkin (KMO) test and Bartlett's test of

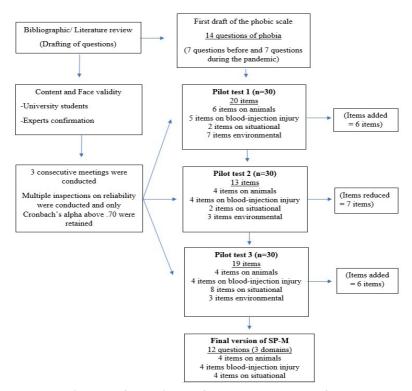


Figure 1: The study flow of the development and content validity for SPQ

sphericity were used to assess sample adequacy, while the Kaiser rule (Eigenvalue >1.0) was employed to determine the number of dimensions extract. Pearson correlation was used to analyse the inter-item correlations between the domains and the total SPQ. Reliability analysis was conducted using internal consistency Cronbach alpha test. Statistical significance was set at p<0.05.

RESULTS

DESCRIPTIVE ANALYSIS

A majority of respondents were female students (70.8%) as compared to males (29.2%) and aged 19 to 58 years, with

a mean age of 23.28 (SD 4.98) years. All were university students, ranging from diploma to PhD candidates, and all participated in this study voluntarily. Most were undergraduate students (82%), Malays (88%) and from a B40 socioeconomic background (57.3%). In Malaysia, B40 refers to the household income in bottom 40%, in which a household earns less than RM4850.00 per month (Othman et al. 2020). Only nine respondents reported having mental illness, while the rest reported as healthy. A total of 13.5% reported having family members with mental illness and demographic background was summarised as shown in Table 1.

CONSTRUCT VALIDITY

Table 1 : Demographic background for the respondents

Factor	n=267	(%)
Gender		
Male	78	29.2
Female	189	70.8
Race		
Malay	235	88.0
Chinese	13	4.9
Indians	4	1.5
Others	15	5.6
Age		
18-27	234	87.6
28-37	29	10.9
38-47	2	0.8
48-57	2	0.8
Education Background		
Diploma	19	7.2
Bachelor degree	219	82
Master's degree	27	10.1
PhD	2	0.7
Items	Mean ± SD	
Total MSPQ	41.11 <u>+</u> 12.16)	
Total Animals	18.40 ± 5.05)	
Total Blood-Injection Injury	9.99 ± 5.68)	
Total Situational- Environment	12.71 ± 5.23	

Exploratory Factor Analysis

Exploratory factor analysis (EFA) is used to reduce the variables into a smaller data set to save time and to produce better interpretation (Cristobal et al. 2007; Yong & Pearce 2013). The EFA factor loading for each item should be not below 0.4 (moderate) and the loadings of nearly 1.0 are more preferable while items that are low (below 0.4) should be removed to allow dimension reduction so that the items are more stable (Tabachnick & Fidell 2001). Based on analysis we found that the Kaiser-Mayer-Olkin (KMO) value is 0.77 with significance value less than <0.001, which is significant after conducting EFA and

Bartlett's test of sphericity. The rotated component matrix revealed three domains with twelve items (Table 2). Based on the scree plot, three components fell above an eigenvalue of 1.0, since it declines below 1.0: hence, there were three final accepted components. These three domains are shown in Table 2. The first domain, blood-injection injury, consists of 4 items (items 1-4: 1. Fear of donating blood, 2. Fear of seeing blood, 3. Fear of looking at an injection needle and 4. Fear of receiving vaccine). The second domain includes animals (items 5-8:5. Fear of insects, 6. Fear of animals, 7. I have a fear of venomous insects and 8. I have a fear of venomous animals). The final domain is related and situationalenvironmental items (items 9-12:9. Fear of lightning and thunder, 10. Fear of boarding an airplane, 11. Fear of heights and 12. Fear of darkness). Factor loading for each domain ranged from 0.77 to 0.86 (component 1), 0.61 to 0.89 (component 2) and 0.59 to 0.71 (component 3).

RELIABILITY

The test of total variance explained using extraction sums of squared loadings had resulted in Factor 1 (items 5-8) explained 71.11%, Factor 2 (items 1-4) explained 60.96% and Factor 3 (items 9-12) explained 54.74%. The Cronbach's alpha values for each domain were 0.78, 0.86 and 0.72, respectively, while the total reliability test value for specific phobia was 0.84. The overall Cronbach's alpha value was 0.84, while the Cronbach's alpha values of the components ranged from

Table 2: Exploratory Factor Analysis (EFA) for MSPQ

Domains	Items		Factors		Item Total	Cronbach's
		1	2	3	Correlation	α
Fobia terhadap kecederaan suntikan-darah – A (Phobia	Takut melihat jarum suntikan - A1 (Fear of looking at the injection needles)	0.86			0.39	
towards blood- injection injury)	2. Takut untuk menderma darah – A2 (Fear of donating blood)	0.84			0.46	0.78
	3. <i>Melihat darah menakutkan</i> saya – A3 (Fear of seeing blood)	0.80			0.47	
	4. Takut menerima suntikan vaksin – A4 (Fear of receiving vaccines)	0.77			0.45	
Fobia terhadap haiwan – BII (Phobia towards animals)	5. Serangga berbisa menakutkan saya – B1 (I have fear of venomous insects)		0.89		0.57	
arminas,	6. Haiwan berbisa menakutkan saya – B2 (I have fear of venomous animals)		0.85		0.54	0.86
	7. Takut serangga – B3		0.66		0.58	
	(Fear of insects) 8. <i>Takut haiwan – B4</i> (Fear of animals)		0.61		0.58	
Fobia terhadap situasi-	9. Takut tempat tinggi – S1 (Fear of the heights)			0.77	0.56	
<i>persekitaran – SE</i> (Phobia towards	10. Takut menaiki kapal terbang – S2			0.71	0.53	
situation- environment)	(Fear of boarding an airplane) 11. <i>Takut kegelapan – S3</i> (Fear of the darkness)			0.66	0.41	0.72
	12. Takut dengan petir dan guruh – S4 (Fear of the lightning and thunder)			0.59	0.48	
Cronbach's α for total items						0.84

0.72 to 0.86 (Table 3). This shows good internal consistency (Table 5), and although certain items were deleted, this resulted in high internal consistency, as the values ranged from 0.818 to 0.833 (Table 4). The minimum value accepted for total correlation was 0.30 (Tavakol & Dennick 2011). The range of item total correlation in this study was between 0.30 to 0.58,

Table 3: Reliability analysis (Internal Consistency) for the phobic scale total score and sub-scale

Domains	Items	Reliability
Total MSPQ	1-12	0.84
Animals	5-8	0.86
Blood-injection Injury	1-4	0.78
Situational-Environment	9-12	0.72

which was acceptable.

DISCUSSION

The present study examined the development of a novel SPQ scale among university students. This scale was written in Malay language, since it is the mother tongue of this country and it can be understood by Malaysians. scale was created without The consideration for cultural standards or religious views, as with the DASS-21, and may therefore be utilised by all Malaysians, who practice at least four major religions. The goal was to create a questionnaire that is cultureneutral in order to address the issue of backward translation (Brislin 1970) that might arise if a Western scale were

used. With respect to the research question, it was found that SPQ in terms of domain, this study found three domains of phobia; phobia toward animals, phobia toward BII and phobia toward situational-environment. These results match those observed in earlier studies where they found three domain and components of situational and environment are clumped together unlike what has been stated in DSM-5 (Muris et al. 1999). This result suggested that this new scale represented multidimensional construct related to the animal, BII and situational domains. Due to this, SPQ is preferable to other uni-dimensional construct in scales such as BIPI (Más et al. 2010) or SNAQ (Klieger 1987) that solely measure blood-injection injury or

Table 4: Item Total Correlation

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
1. Takut serangga	37.39	130.194	0.385	0.406	0.833
2. Takut haiwan	37.70	128.987	0.455	0.388	0.828
3. Serangga berbisa menakutkan saya.	35.58	127.717	0.465	0.729	0.827
4. Haiwan berbisa menakutkan saya.	35.36	129.616	0.447	0.707	0.828
5. Takut untuk menderma darah	38.29	122.702	0.567	0.547	0.819
6. Melihat darah menakutkan saya	38.49	123.296	0.537	0.544	0.821
7. Takut melihat jarum suntikan	38.59	123.604	0.577	0.629	0.818
8. Takut menerima suntikan vaksin	39.07	126.017	0.577	0.560	0.819
9. Takut dengan petir dan guruh	37.70	121.728	0.564	0.364	0.819
10. Takut menaiki kapal terbang	38.58	125.793	0.525	0.412	0.822
11. Takut tempat tinggi	37.41	126.814	0.407	0.307	0.832
12. Takut kegelapan	38.03	126.710	0.479	0.290	0.826

1 2. 3 4. 5. 6. 7. 8. 1. Takut serangga 1.000				Table 5: I	Table 5: Inter-Item Correlation Matrix	Correlation	on Matrix						
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m suntikan 0.188 0.168 0.197 0.133 0.632 0.641 1.000 untikan vaksin 0.141 0.201 0.169 0.148 0.586 0.490 0.691 r dan guruh 0.234 0.341 0.283 0.264 0.368 0.371 0.305 apal terbang 0.128 0.284 0.146 0.168 0.364 0.305 0.347 0.203 igi 0.255 0.262 0.175 0.193 0.271 0.264 0.284 0.284	6. Melihat darah menakutkan saya	0.092	0.158	0.156	0.203	0.645	1.000						
untikan vaksin 0.141 0.201 0.169 0.148 0.586 0.490 0.691 r dan guruh 0.234 0.341 0.283 0.264 0.368 0.371 0.305 0.391 spal terbang 0.128 0.284 0.146 0.168 0.156 0.217 0.203 0.203 gi 0.255 0.262 0.175 0.193 0.193 0.271 0.264 0.284 0.284	7. Takut melihat jarum suntikan	0.188	0.168	0.197	0.133	0.632	0.641	1.000					
r dan guruh 0.234 0.341 0.283 0.264 0.368 0.371 0.305 0.301 ppal terbang 0.128 0.284 0.146 0.168 0.364 0.305 0.347 0.303 0.167 0.193 0.175 0.193 0.271 0.264 0.284 0.284	8. Takut menerima suntikan vaksin	0.141	0.201	0.169	0.148	0.586	0.490	0.691	1.000				
pal terbang 0.128 0.284 0.146 0.168 0.364 0.305 0.347 e.gi 0.167 0.193 0.188 0.199 0.156 0.217 0.203 0.255 0.262 0.175 0.193 0.271 0.264 0.284	9. Takut dengan petir dan guruh	0.234	0.341	0.283	0.264	0.368	0.371	0.305	0.346	1.000			
igi 0.167 0.193 0.188 0.199 0.156 0.217 0.203 0.255 0.262 0.175 0.193 0.271 0.264 0.284	10. Takut menaiki kapal terbang	0.128	0.284	0.146	0.168	0.364	0.305	0.347	0.451	0.431	1.000		
0.255 0.262 0.175 0.193 0.271 0.264 0.284	11. Takut tempat tinggi	0.167	0.193	0.188	0.199	0.156	0.217	0.203	0.220	0.339	0.476	1.000	
	12. Takut kegelapan	0.255	0.262	0.175	0.193	0.271	0.264	0.284	0.329	0.417	0.339	0.376	1.000

snakes (animal) and did not consider other situation, environment objects or things that people fears. This disadvantage makes the clinician unable to detect other specific phobia symptoms, since the scales are very specific to certain subtypes of specific phobia.

In terms of reliability, this study found a total Cronbach's alpha value of 0.84, which denoted good reliability. In addition, Cronbach's alpha values for each domain, including BII (0.78), animals (0.86) and situational-environment (0.72), were also acceptable, and all items were correlated, indicating good internal consistency and validity (Tavakol & Dennick 2011).

One of the potential limitations of this study was that these findings cannot be extrapolated to all ages and clinical populations, this study was conducted among university students. Further study with a greater focus on other clinical populations was therefore suggested to allow the measure to serve in the detection of illness and to compare it with other valid diagnostic interviews. The sample size also should be increased and the ethnic composition should be made at least proportionate to represent the actual population of Malaysians to reduce response bias. Only 13 Chinese, 4 Indians and 15 others responded to this questionnaire, and the rest were Malays, who were overrepresented (Musa & Maskat 2020). Bumiputera (67.4%), Chinese (24.6%), Indians (7.3%) and others (0.7%) should be represented to allow the results to be generalised to the entire Malaysian population. Future studies should include all ethnicities in Malaysia

CONCLUSION

This research had several important implications for developing a new scale which is able to help clinicians in detecting and diagnosing specific phobia efficiently. It also highlighted the importance of having specific questionnaire, which is able to detect specific phobia in the Malaysian context, since no similar study had been conducted in Malaysia previously before the advent of COVID-19. The newly developed scale was short and concise, while offering strong psychometric proprieties. It is able to be used in short time, assisting in effective case management.

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