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Content Validation and Content Validity Index Calculation of B40 Household's Financial Literacy

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Abstract: The purpose of this paper is to describe a systematic approach to measure content validity using a Content Validity Index (I-CVI) established by evidence and best practices on financial literacy among B40 households (low-income group) in Malaysia. Content validity represents the extent of a measured construct and is considered important to support the validity of research tools like questionnaires and consists of five sources of evidence specifically content, reaction process, internal structure, relationships with other variables, and consequences. Thus, B40 household financial literacy consisting of financial knowledge, financial behaviour, and financial attitudes were tested and analysed using the I-CVI.This study involved five economics education expert panels in Malaysia and the choice of the scale was made based on the best adaptation considerations and the collected data were analysed using I-CVI.I-CVI determined the content validity of each item where I-CVI value of 0.6 to 1 indicated very high content validity and is suitable to measure the construct while I-CVI value less than 0.6 were dropped. Based on the findings, the financial literacy constructs consisting of financial knowledge, financial behaviour, and financial validity had high content validity to measure the level of financial literacy of B40 households.The calculation of I-CVI in this study is done using empirical data from the expert scores and it is recommended that researchers use Exploratory Factor Analysis (EFA) to ensure the validity and reliability of the instruments.

Keywords: *Content Validity Index (I-CVI), Financial literacy, B40 households*

Introduction

Financial literacy is important for all walks of life and governments around the world are keen to find effective approaches to increase the financial literacy levels of their populations through the creation or improvement of national strategies for financial education (Atkinson & Messy, 2012). According to the Organisation for Economic Co-operation and Development (OECD), financial education can improve understanding of financial products, and the concepts and risks associated with them. Based on the information and recommendations provided, individuals can develop the skills and confidence needed to make safe decisions and improve their financial wellbeing. Financial literacy is the combination of awareness, financial knowledge, financial attitudes, and financial behaviours needed to make the right financial decisions and ultimately achieve individual financial wellbeing (Potrich et al., 2016).

Mbarire and Ali (2014) asserted that construct measurements must be carried out to improve financial literacy. Furthermore, Huston (2010) indicated that the design of an efficient financial literacy instrument encompasses three key areas involving twelve to twenty questions related to personal financial knowledge management and its applications. Lusardi and Mitchell (2014) plotted questions on three basic concepts consisting of interest, inflation, and risk diversification. Atkinson and Messy (2012) devised twenty-one basic questions about financial knowledge, financial behaviour, and financial products. Lastly, Potrich et al., (2016) designed a financial literacy model among university students that confirms the existence of unique financial literacy through a combination of financial knowledge, financial attitudes, and financial behaviour. Although there are many differences in conceptualising and evaluating all the dimensions related to financial literacy, there are several consensuses on their importance. Anderloni and Vandone (2011) argued that financial education acts as a preventative measure to control debt while Vitt (2015) indicated that financial literacy helps in the financial decision-making process as it represents a systematic effort aimed at the expansion of knowledge, behaviours, and positive attitudes. Thus, financial education helps individuals to harness knowledge related to financial transition, giving them the tools needed to make responsible and accurate decisions. However, there are no consensuses in academia on what instruments should be used to model the financial literacy of B40 households in Malaysia. Recently, there have been many studies conducted around the globe about financial literacy such as studies done to examine families from the United Kingdom (Disney & Gathergood, 2011) and Sekita (2012) in Japan, financial literacy among university students in Ghana (Ansong & Gyensare, 2012), and retired people in the Netherlands (Van Rooij et al., 2011).

The current level of financial literacy in Malaysia can be identified based on [1] the level of financial knowledge, [2] savings and budgeting, [3] readiness to face unexpected situations, [4] retirement planning, and [5] awareness of the risks and returns of investment. According to (Mokhtar et al., 2018), family leaders need to equip themselves with financial knowledge and practise financial literacy to support their financial well-being and improve their socio-economic status (SES). In Indonesia, poverty was alleviated in East Java when the people’s income increased and the rice price declined(Wulandari et al., 2020). B40 households are defined as 40% of overall households in Malaysia that earn the lowest income range. In general, the average family income in Malaysia is less than RM3, 860 (2019) and this income range was updated to RM4, 850 by the Department of Statistics Malaysia in 2020. Household financial literacy is very important in influencing the financial wellbeing of a family institution thereby enhancing the SES of the community (Kusairi et al., 2019; Mayan et al., 2017). Consequently, every household must be financially literate to lead to financial well-being and ensure that the SES of B40 households can be improved in line with the 11th Malaysia Plan (Unit Perancang Ekonomi, 2015; Mayan et al., 2017).

Mahdzan et al., (2019) had found that financial literacy factors are closely related to the level of financial wellbeing in B40 households while Hassan and Alavi (2019) noted the differences in implementing youth financial management planning according to the literacy level of youths. The financial vulnerability stems from economic, social, and environmental dimensions (Siwar et al., 2019). The dependence on a single source of income, high cost of living, inability to own a home, high indebtedness, and access to assets are economic factors that contribute to the vulnerability of B40 households while social vulnerability includes low levels of education, employment, and skills. A study by Yusof et al., (2015) stated that B40 households are burdened with a high cost of living, resulting in an increased debt burden.

Furthermore, financial insecurity that stems from low levels of financial literacy in B40 households cause financial stress and affects SES (Idris et al., 2013; Kimiyaghalam & Yap, 2017; Kulub Abd. Rashid et al., 2018; Zuriati Amani Ab Rani et al., 2019; Siwar et al., 2019; Kusairi et al., 2019)). Previous literature has identified three important aspects of financial literacy which are relevance, financial knowledge (Idris et al., 2013; Krishnakumare & Singh, 2019; Németh & Zsótér, 2019; Sawandi et al., 2018), financial attitudes, and financial behaviour Studies done to indicate that the level of financial knowledge as an aspect of household competence must be considered when developing instruments(A. Ali et al., 2015; P. Ali et al., 2016; Arshat et al., 2018; Atiqah et al., 2017; Hoe Kock, 2015; Maki, 2019; Mansor et al., 2015; Mayan et al., 2017; Potrich et al., 2016; Sang, 2020; Yusof et al., 2015; Zaimah et al., 2016; Nur Farhana et al., 2020).

This study aims to adapt and test the financial literacy instrument to assess the financial literacy of B40 households in Malaysia. The instruments for financial literacy constructs that combine elements of financial knowledge, behaviour, and attitudes were adapted and then sent to five content validity expert panels to score using the I-CVI through Excel Literature Software. This study argued that financial literacy is an interdisciplinary concept and with many dimensions and instruments that must be built and validated to consider measures and their relationships simultaneously. Previous studies have argued that a disconnected relationship between the definition of financial literacy and future work should develop more promising measures that are more relevant to the definition of the concept of financial literacy and how it has been operated (Fernandes et al., 2014). This is one of the first studies that use a multidimensional measure to determine financial literacy. This article is divided into five parts; introduction, theoretical and empirical foundations, methodology, analysis and discussion, and recommendations, respectively.

Literature Review

Financial Literacy

According to OECD (2019) and Potrich et al., (2016), financial literacy exists as a result of the interaction between the fields of economic education and financial management. Scholars and professionals in these fields are developing dedicated financial literacy to help solve financial problems faced by households that find it difficult to adapt to financial management theories and practices. Financial literacy in this study is defined as a set of financial management strategies for B40 households consisting of three main constructs; financial knowledge, financial attitude, and financial behaviour.

Financial Knowledge

Financial knowledge is a specific type of human capital achieved throughout the life cycle, by studying subjects that affect the ability to manage income, expenses, and savings effectively and involves questions related to concepts like compounds, interest, risk and return, and inflation (Delavande et al., 2011; Atkinson & Messy, 2012; Hasler & Lusardi, 2017). Financial knowledge is a key component in the financial literacy model, where the ability of an individual to apply their knowledge and skills to make appropriate financial decisions for effective financial resource management (Abel et al., 2018). Studies have shown that financial knowledge among financial experts outweighs the knowledge and risk-taking ability of the public (Diacon, 2004).

Financial Behaviour

Financial behaviour is a key element of financial literacy and is driven by behaviour such as expenses planning, financial stability awareness, financial safety net, and negative behaviours like excessive credit and loans that can influence financial wellbeing (Atkinson & Messy, 2012; OECD, 2013; Bhushan & Medury, 2014; Chong et al., 2021). Studies show that individuals with lower levels of financial risk tolerance face difficulties in making financial decisions and are dissatisfied with the efficiency of their financial management. This indicates an interrelation between financial attitudes and financial behaviour among individuals (Sekar.M & Gowri.M, 2015; Sharma, 2015; Rai et al., 2019; Banerjee et al., 2020). (Bhushan & Medury, 2014; Chavali et al., 2021; Zahra & Anoraga, 2021) concluded that to increase the level of financial literacy of individuals, governments should focus on building positive financial behaviours and attitudes along with financial education. Therefore, this study focuses on various behaviours of B40 households, with emphasis on behaviours that can improve their SES. Financial behaviours in this study are defined as the most important element of financial literacy in B40 households. In addition to the findings of recent studies, dimensions of financial behaviour are determinants of financial literacy.

Financial Attitude

Financial attitudes are shaped through economic and non-economic beliefs held by decision-makers about the outcome of certain behaviours and are a key factor in the personal decision-making process (Ajzen, 1991; Atkinson & Messy, 2012; OECD, 2019). Financial attitude can be defined as a personal inclination towards financial problems and the ability to plan for the future and maintain important savings accounts. If people have a relatively negative attitude towards saving for their future and prefer to prioritise short-term wants, then they are less likely to have emergency savings or make long-term financial plans. The financial literacy survey includes three attitude statements to measure respondents' attitudes towards money and planning for their future. Studies show that to improve intergenerational financial literacy, the focus should be given to developing good financial attitudes among the nation's society and the result of certain behaviours and attitudes can be empowered through their economic and non-economic beliefs (Ajzen, 1991; Bhushan &Medury, 2014). (Ibrahim & Alqaydi, 2013) concluded that education can improve personal financial attitudes, thus reducing the dependence on credit cards. Financial attitudes along with financial behaviours can affect financial wellbeing. Financial attitudes in this study are defined as the combination of concepts, information, and emotions about learning which results in the readiness of B40 households to respond favourably.

Research Methodology

Content validity represents the extent of a measured construct and is considered important to support the validity of research tools like questionnaires and consists of five sources of evidence specifically content, reaction process, internal structure, relationships with other variables, and consequences. Thus, B40 household financial literacy consisting of financial knowledge, financial behaviour, and financial attitudes were tested and analysed using the I-CVI. The following are the six steps taken for content validation:

Content validation procedure

a) Preparing content validation form

b) Selecting a review panel of experts
c) Conducting content validation
d) Reviewing domain and items
e) Providing score for each item
f) Calculating Content Validity (CVI)

Each step was elaborated further in subsequent subtopics.

Step 1: Preparing content validation form

The content validation form was prepared to ensure that the expert review panel had clear expectations and an understanding of the task. Examples of instruction and evaluation scales are provided in Figure 1. The recommended relevance scale of 5–7 was used to tally individual scores (Figure 2). Domain definitions were provided to facilitate the scoring process by experts.

EVALUATION OF THE VALIDITY OF THE CONTENT OF THE B40 HOUSEHOLD FINANCIAL LITERACY INSTRUMENT

ASSESSMENT GUIDE

This questionnaire instrument consists of a Financial Literacy construct consisting of 60 items related to three elements namely financial knowledge, financial behavior and financial attitudes of B40 households. Please provide a level of agreement about the items constructed to represent the constructs tested. Please use the following scale to provide feedback on either agreeing to keep the existing item OR write for changes or improvements in the comments/suggestions space. The validity check of the instrument is based on the definitions and terminology related to the construct and its items. Please be objective and constructive in providing your comments using the following rating scales.

Level of Expert Consent on the suitability of items in measuring constructs:

1 = highly strongly disagree (item highly strongly disagrees with measuring construct)
2 = strongly disagree (item strongly disagrees with measuring construct)
3 = disagree (item does not match measuring construct)
4 = simple agree (simple item according to measure construct)
5 = agree (appropriate item measures construct)
6 = strongly agree (item strongly fits measure construct)
7 = highly strongly agree (highly appropriate item measures construct)

Figure 1: Expert content validation instructions and evaluation scales

Construct 1: Financial literacy

This section measured the first sub-construct of financial literacy which is the financial knowledge among B40 household that involved questions related to financial knowledge like budget, compound, interest, risk and return, and inflation. All items in construct 1 were adopted from (Magesvari et al., 2018; Potrich et al., 2016).

Table 1.
Content verification form with constructs, definitions, and items representing (measured) constructs.

	Financial Knowledge	Expert's Consent Level	Expert Comments
1	A budget is a part of financial planning that I need to do.	1 2 3 4 5 6 7	
2	Budget guides me to shop according to ability.	1 2 3 4 5 6 7	
3	My salary or wages earn is also known as income.	1 2 3 4 5 6 7	
4	The setting of interest rates is determined by the bank.	1 2 3 4 5 6 7	
5	Provision of 10% of income for savings is a good idea	1 2 3 4 5 6 7	
6	Interest or profit rate is a loan condition when borrowing money from banks.	1 2 3 4 5 6 7	
7	Money I have spent is also known as expenses.	1 2 3 4 5 6 7	
8	The budget should contain both income and expenses.	1 2 3 4 5 6 7	
9	Purchase of insurance/takaful is a good investment for a time of emergency	1 2 3 4 5 6 7	
10	When borrowing money from the bank, I will try to get the lowest interest rate.	1 2 3 4 5 6 7	
11	In my opinion, borrowing money from banks can increase costs refunds compared to using existing savings.	1 2 3 4 5 6 7	
12	Purchase using a credit card is the same as being in debt with the bank.	1 2 3 4 5 6 7	
13	When I buy something using a debit card I spend from my savings in the bank.	1 2 3 4 5 6 7	
14	When I save money in a bank savings account, the bank will pay interest to me.	1 2 3 4 5 6 7	
15	Return of dividends my savings are lower than interest rates imposed on bank loans.	1 2 3 4 5 6 7	
16	Increase in the price of goods reduces the capacity to buy goods.	1 2 3 4 5 6 7	
17	Buying goods regularly through debt will reduce the ability to buy goods	1 2 3 4 5 6 7	

	(purchasing power).	
18	My family needs to have at least 3 months of savings.	1 2 3 4 5 6 7
19	I shouldn't borrow money to invest.	1 2 3 4 5 6 7
20	Purchase of credit or loan increases my purchasing power.	1 2 3 4 5 6 7

Step 2: Selecting an expert review panel

The selection of experts to critique the assessment instrument i.e. the questionnaire is usually based on selecting specialists on a particular topic of study. Five experts on content validation from three universities with relevant expertise on financial literacy were selected. The first assessor selected was from the University of Malaya who has experience in economic and financial education for 20 years while the second panellist chosen is an expert in business education and policy for 15 years. Furthermore, the third and fourth panels were from University Science Malaysia which have extensive expertise in economic and business education. Lastly, the fifth panel was from the Sultan Idris University of Education and has special expertise in economic and business education for 16 years. Table 2 covers the number of experts recommended and the suggestions for the acceptable deduction score from the CVI value. It can be concluded that for verification, the minimum number of experts that can be accepted is two members and a minimum of six experts for a larger sample number. Given that the recommendation of five to eight people is sufficient to assess the validity of the instrument, the number of experts for content verification should be at least five to ten people.

Table 2.
The number of experts and on the suggested acceptable cut-off score of CVI

Number of Experts	Acceptable CVI Values	Source of Recommendation
Two experts	At least 0.80	(Davis, 1992)
Three to five experts	Should be 1	(Denise F. Polit, Cheryl Tatano Beck, 2007)
At least six experts	At least 0.83	(Denise F. Polit, Cheryl Tatano Beck, 2007)
Six to eight experts	At least 0.83	(Mary R. Lynn, 1986)
At least Nine experts	At least 0.78	(Mary R. Lynn, 1986)

Step 3: Conducting content validation

Content verification can be done through a face-to-face or virtual approach. For a face-to-face approach, expert panel meetings were arranged and researchers facilitated the content verification process from Step 4 to Step 5. For the virtual approach, an online content verification form was sent to an expert and clear instructions were given (Figure 1) to facilitate the content verification process. The most important factors to consider when doing content verification are the cost, time taken, and response rate. Although the response rate from the panellists will be higher during the face-to-face approach, the cost and time taken to gather all the experts may be challenging. Conversely, it is cheaper to opt for a virtual meeting, however, the response rate and time taken to arrange for a virtual meeting is challenging and there is a risk of not getting a response from experts. Nevertheless, a virtual approach is very efficient if systematic follow-ups are done to improve response rate and time.

Step 4: Reviewing construct and items

The panel of experts critically reviewed the construct and items before assigning a score to each item. Experts were encouraged to provide oral or written comments to improve the suitability of each item within the targeted construct. All comments were considered when correcting the construct and items.

Step 5: Providing scores for each item

Upon completion of the review of constructs and items, the experts were asked to score each item independently based on the relevant scales. Experts were asked to present their answers to the researchers after scoring. If the expert placed a score of 1 to 4 then the item was deemed unsuitable to measure the construct and the researcher gave a score of 0 for that item in the I-CVI calculations. While a score of 5 to 7 for the item is suitable and is given a score of 1 for I-CVI calculations. The suggestions and comments of the experts were taken into account when deciding if the item were retained or dropped.

Step 6: Calculating CVI

There are two forms of CVI: item-level CVI level (I-CVI) and scale-level CVI (S-CVI). S-CVI is calculated using two methods using the average I-CVI score for all items on the scale (S-CVI/Ave) or by calculating the scale proportion of items on the scale over the universal agreement (UA) (S-CVI/UA). The definitions and formulas of the CVI index were summarised in Table 2. Before the CVI calculation, the relevance level must be coded as 1 (relevance scale 5 to 7) or 0 (relevance scale 1 to 4) as shown in Table 3. The relevant assessments of the CVI index based on the item scale by five experts were provided in Table 3. The definition and formula were based on the recommendations by Lynn, Davis, Polit & Beck (year?) and Potrich et al., (2016).

Table 3.
The definition and formula of I-CVI, S-CVI/Ave, and S-CVI/UA

CVI Indices	Definition	Formula
I-CVI (item-level Content Validity Index)	The proportion of content experts giving an item a relevance rating of 5, 6, or 7	I-CVI = (agreed items)/ (number of experts)
S-CVI/Ave (scale-level content validity index based on the average method)	The average of the I-CVI scores for all items on the scale or the average of proportion relevance judged by experts. The proportion	S-CVI/Ave = (sum of I-CVI scores)/(number of items)

	relevant is the average relevance rating by an individual expert.	S-CVI/Ave = (sum of proportion relevance rating)/ (number of experts)
S-CVI/UA (scale-level Content Validity Index based on the universal agreement method)	The proportion of items on the scale that achieve a relevance scale of 5, 6, or 7 by all experts. UA score given as 1 when the item achieved 100% agreement by experts otherwise, the UA score is 0.	S-CVI/UA = (sum of UA scores)/(number of items)

Findings

This study investigated the validity of financial literacy inB40 households in Malaysia, consisting of three elements; financial knowledge, financial behaviour, and financial attitude. The expert consent value of an item was obtained by summing the relevant evaluation scores given by all experts for each item.

Table 4.
The relevance ratings on the item scale by five experts

	CONSTRUCT 1 : FINANCIAL LITERACY								
		(a) Financial knowledge							
	Expert 1	**Expert 2**	**Expert 3**	**Expert 4**	**Expert 5**		**Experts in agrement**	**I-CVI**	**UA**
Item									
Q1	1	1	1	1	1		5	1	1
Q2	1	1	1	1	1		5	1	1
Q3	1	1	1	1	1		5	1	1
Q4	1	1	1	1	1		5	1	1
Q5	1	1	1	1	1		5	1	1
Q6	1	1	1	1	1		5	1	1
Q7	0	1	1	1	1		4	0.8	1
Q8	1	1	0	1	1		4	0.8	1
Q9	0	0	0	0	1		1	0.2	0
Q10	1	1	0	0	1		3	0.6	0
Q11	1	1	1	0	1		4	0.8	0
Q12	1	1	1	1	1		5	1	1
Q13	1	1	1	1	1		5	1	1
Q14	1	1	1	1	1		5	1	1
Q15	1	1	1	1	1		5	1	1
Q16	1	1	1	1	1		5	1	1
Q17	1	1	1	1	1		5	1	1
Q18	1	1	1	1	1		5	1	1
Q19	1	1	1	1	1		5	1	1
Q20	1	1	1	1	1		5	1	1
							S-CVI/Ave	**0.91**	
Proportion relevance	**0.9**	**0.95**	**0.85**	**0.85**	**1**		**S-CVI/UA**		**0.85**
	Average proportions of items relevance across the five					**0.91**			

Table 5.

The relevance ratings scored by five experts based on the item scale

	(b) Financial Behaviour								
	Expert 1	**Expert 2**	**Expert 3**	**Expert 4**	**Expert 5**		**Experts in agrement**	**I-CVI**	**UA**
Item									
Q1	1	1	1	1	1		5	1	1
Q2	1	1	1	1	1		5	1	1
Q3	1	1	1	1	1		5	1	1
Q4	1	1	1	1	1		5	1	1
Q5	1	1	1	1	1		5	1	1
Q6	1	1	1	1	1		5	1	1
Q7	1	1	1	1	1		5	1	1
Q8	1	1	1	1	1		5	1	1
Q9	1	1	1	1	0		4	0.8	0
Q10	0	1	1	1	0		3	0.6	0
Q11	1	1	1	1	1		5	1	1
Q12	1	1	1	1	1		5	1	1
Q13	1	1	1	1	1		5	1	1
Q14	1	1	1	1	1		5	1	1
Q15	1	1	1	1	1		5	1	1
Q16	1	1	1	1	1		5	1	1
Q17	1	1	1	1	1		5	1	1
Q18	1	1	1	1	1		5	1	1
Q19	1	1	1	1	1		5	1	1
Q20	1	1	1	1	1		5	1	1
							S-CVI/Ave	**0.97**	
	0.95	**1**	**1**	**1**	**0.9**		**S-CVI/UA**		**0.9**
Proportion relevance	Average proportions of items relevance across the five					**0.97**			

Table 6.

The relevance ratings on the item scale by five experts

	(c) Financial Attitude								
	Expert 1	**Expert 2**	**Expert 3**	**Expert 4**	**Expert 5**		**Experts in agrement**	**I-CVI**	**UA**
Item									
Q1	1	1	1	1	1		5	1	1
Q2	1	1	1	1	1		5	1	1
Q3	1	1	1	1	1		5	1	1
Q4	1	1	1	1	1		5	1	1
Q5	1	1	1	1	1		5	1	1
Q6	0	1	1	1	1		4	0.8	1
Q7	0	1	1	1	1		4	0.8	1
Q8	1	1	1	1	1		5	1	1
Q9	0	1	0	1	1		3	0.6	0
Q10	1	1	1	1	1		5	1	1
Q11	1	1	1	1	1		5	1	1
Q12	1	1	1	1	1		5	1	1
Q13	1	1	1	1	1		5	1	1
Q14	1	1	1	1	1		5	1	1
Q15	1	1	1	1	1		5	1	1
Q16	1	1	1	1	1		5	1	1
Q17	1	1	1	1	1		5	1	1
Q18	1	1	1	1	1		5	1	1
Q19	1	1	1	1	1		5	1	1
Q20	1	1	1	1	1		5	1	1
							S-CVI/Ave	**0.96**	
Proportion Relevance	**0.85**	**1**	**0.95**	**1**	**1**		**S-CVI/UA**		**0.95**
	Average proportions of items relevance across the five					**0.96**			

Table 6 displays the validity findings for the financial attitude where all I-CVI values measured had a high validity of more than 0.6 while the values of S-CVI/Ave and S-CVI/UA were also high at 0.96 and 0.95, respectively.

Conclusion and Recommendations

There were five sources of validation namely [1] item content, [2] reaction process, [3] internal structure of the item, [4] the relationship with other variables and [5] results. Content validity is very important to ensure overall validity and should be done systematically based on evidence and best practices. Instrument evaluation elements such as questionnaire items, response formats, and instructions can influence the data s. Based on the suitability of construct elements, a financial literacy questionnaire, its influence on B40 households, and their SES were developed to ensure the mobility of B40 households to the middle class (M40) group. The relevance of the evaluation tool indicates the suitability of the elements used for the targeted construct while the representation of the evaluation tool refers to the degree to which the elements are proportional to the targeted construct. Although there are two aspects of content validity (relevance and representation of the assessment tools), those related to the assessment tools were supported by (Davis, 1992) who measured content validity. It is important to note that setting content validity is important to support validity assessment tools such as questionnaires, especially for research purposes.

Based on the analysis of the scale of the questionnaire, it can be concluded that the content validity using I-CVI, S-CVI / Ave, and S-CVI / UA are satisfactory except item number 9 which was subsequently dropped. Content validity is very important to ensure the overall validity assessment. Therefore this study can provide an evidence-based systematic approach to carry out content verification. It is suggested that the calculation for I-CVI using this instrument utilise empirical data from expert scores. It is recommended that future studies use Exploratory Factor Analysis (EFA) to investigate the validity and reliability of the measured instruments.

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