

ESTABLISHING CONTENT VALIDITY OF THE ATTITUDE TOWARDS VIOLENCE QUESTIONNAIRE (ATVQ) FOR JUVENILES IN MALAYSIAN PROBATION HOSTELS

Aminuddin Ibrahim Lastar¹, Abdul Razak Abd Manaf², Azizah Abdullah³

¹Universiti Malaysia Sabah

^{2,3}Universiti Utara Malaysia

aminuddin@ums.edu.my

Abstract: Attitudes towards violence are recognised as an important psychological construct in understanding aggressive behaviour and evaluating rehabilitation outcomes among juveniles. Reliable assessment of this construct is essential, particularly when instruments are adapted for use in different cultural and institutional settings. Before a questionnaire can be administered in empirical research, evidence should first be established to demonstrate that its content is relevant and appropriate for the intended context. This study aimed to establish the content validity of the Attitude Towards Violence Questionnaire (ATVQ) adopted for juveniles residing in Malaysian probation hostels. The questionnaire was adapted from two established instruments, namely the Attitudes Toward Violence Scale (ATV) and the Attitudes Toward Interpersonal Peer Violence Scale (ATIPV), while retaining all original items. A panel of nine experts with expertise in psychology, juvenile rehabilitation, counselling, psychometric assessment, and behavioural intervention evaluated seven content validation statements using a five-point rating scale. Content validity was determined using the Item-level Content Validity Index (I-CVI), the Scale-level Content Validity Index based on the Average method (S-CVI/Ave), and the Scale-level Content Validity Index based on Universal Agreement (S-CVI/UA). The findings showed that the questionnaire achieved an S-CVI/Ave of 0.81, indicating satisfactory overall content validity. Individual item agreement ranged from 0.56 to 1.00, while the S-CVI/UA was 0.14. Although several items received comparatively lower agreement, the overall findings suggest that the questionnaire demonstrates acceptable content validity for subsequent psychometric evaluation. The study provides preliminary evidence supporting the use of the ATVQ in future research involving juveniles residing in Malaysian probation hostels and offers an initial methodological foundation for further reliability and construct validation.

Keywords: Attitude Towards Violence, Content Validity, Content Validity Index, Juvenile Rehabilitation, Probation Hostels

INTRODUCTION

Violence involving juveniles continues to be a major concern for correctional and rehabilitation agencies because it affects not only public safety but also the long-term development of young offenders. Although violent behaviour is often examined through legal or criminological perspectives, psychological research has shown that an individual's attitude towards violence plays an important role in influencing how violence is perceived, accepted, justified, and expressed. For juveniles undergoing rehabilitation, understanding these attitudes provides useful information for planning intervention programmes, monitoring behavioural change, and evaluating rehabilitation outcomes.

Attitudes towards violence refer to an individual's beliefs, values, and perceptions regarding the acceptability and use of violence in different situations. Adolescents who perceive violence as acceptable or justified are generally more likely to engage in aggressive or violent behaviour than those who reject violence as a means of resolving conflict. Consequently, assessing attitudes towards violence has become an important component in studies involving juvenile delinquency, aggression, school violence, and offender rehabilitation. Reliable assessment also enables practitioners and researchers to identify changes in attitudes following intervention programmes and to determine whether rehabilitation efforts contribute to positive behavioural development.

Several instruments have been developed to assess attitudes towards violence among adolescents and young people. Among the most frequently cited are the *Attitudes Toward Violence Scale* (ATV) developed by Bosworth and Espelage (1995) and the *Attitudes Toward Interpersonal Peer Violence Scale* (ATIPV) developed by the Houston Community Demonstration Project (1993). These instruments have contributed substantially to research examining the relationship between violent attitudes and aggressive behaviour. However, questionnaires developed within one cultural or institutional setting may not be directly applicable to another without careful evaluation. Differences in language, rehabilitation practices, social norms, and institutional environments may influence how questionnaire items are interpreted by respondents. Consequently, when an existing instrument is adapted for a different context, its content should be reviewed to determine whether the items remain relevant, representative, and appropriate for the intended respondents.

Content validity is generally regarded as the first source of validity evidence that should be established during questionnaire development or adaptation. It examines whether the questionnaire adequately represents the construct it is intended to measure and whether individual items are suitable for the objectives of the study. Haynes et al. (1995) described content validity as the extent to which the elements of an instrument represent the targeted construct. Similarly, Cook and Beckman (2006) emphasised that evidence of content validity forms the basis for meaningful interpretation of subsequent psychometric findings. Without adequate content validation, later evidence of reliability or construct validity may be difficult to justify because the questionnaire itself may not sufficiently represent the intended construct.

A commonly accepted method for quantifying expert judgement is the Content Validity Index (CVI). The CVI summarises expert agreement regarding the relevance of questionnaire items and provides objective evidence to support content validity. Several indices are commonly reported, including the Item-level Content Validity Index (I-CVI), the Scale-level Content Validity Index based on the Average method (S-CVI/Ave), and the Scale-level Content Validity Index based on Universal Agreement (S-CVI/UA) (Polit & Beck, 2006; Polit et al., 2007). More recently, Yusoff (2019) provided practical guidance for conducting and reporting content validation studies, and these recommendations have been widely adopted in health, education, and psychological research.

The present study focused on the content validation of the Attitude Towards Violence Questionnaire (ATVQ), which was adapted from the ATV and ATIPV for use among juveniles residing in Malaysian probation hostels. Although both original instruments have been used in previous research, evidence supporting the content validity of an adapted questionnaire for this specific rehabilitation setting remains limited. Establishing such evidence is important before the questionnaire is administered in empirical studies involving this population.

Research Objective

The Attitude Towards Violence Questionnaire (ATVQ) was adapted for use among juveniles residing in Malaysian probation hostels to provide a contextually appropriate instrument for assessing attitudes towards violence. Before the questionnaire can be administered in empirical research, evidence

is required to demonstrate that its content adequately represents the construct being measured and is appropriate for the intended respondents. Establishing content validity also provides the initial psychometric evidence needed before proceeding to subsequent validation procedures, such as reliability testing and construct validation.

Hence, the objective of this study was:

To establish the content validity of the Attitude Towards Violence Questionnaire (ATVQ) for juveniles residing in Malaysian probation hostels through expert evaluation using the Content Validity Index (CVI).

METHODOLOGY

This study employed a quantitative methodological design to establish the content validity of the Attitude Towards Violence Questionnaire (ATVQ) for use among juveniles residing in Malaysian probation hostels. The study focused on obtaining evidence of content validity through expert evaluation before the questionnaire is administered in empirical research. Since the questionnaire was adapted from existing instruments for use in a different research context, expert review was considered necessary to determine whether the questionnaire adequately represented the construct of attitudes towards violence and whether the retained items remained relevant for the intended respondents.

Content validity was evaluated using the Content Validity Index (CVI), a widely accepted approach for quantifying expert judgement on the relevance of questionnaire items. Following recommendations by Lynn (1986), Polit and Beck (2006), Polit et al. (2007), and Yusoff (2019), three indices were calculated: the Item-level Content Validity Index (I-CVI), the Scale-level Content Validity Index based on the Average method (S-CVI/Ave), and the Scale-level Content Validity Index based on Universal Agreement (S-CVI/UA). These indices provide quantitative evidence regarding the adequacy of individual items and the overall questionnaire prior to subsequent psychometric evaluation.

Expert Panel Selection

Content validation was conducted using a purposive sample of nine experts selected based on their academic qualifications, professional experience, and expertise relevant to the objectives of the study. The expert panel comprised

individuals from the fields of psychology, counselling, juvenile rehabilitation, behavioural intervention, psychometric assessment, and related disciplines. Their combined expertise provided diverse professional perspectives for evaluating the content of the questionnaire.

The use of nine experts was considered appropriate based on methodological recommendations for content validation studies (Lynn (1986) who also suggested that studies involving six or more experts should achieve an Item-level Content Validity Index (I-CVI) of at least 0.78 for an item to be considered acceptable. Similarly, Polit and Beck (2006) recommended the inclusion of multiple experts to improve the stability of content validity estimates and reduce the influence of individual judgement. The panel size adopted in this study therefore exceeded the minimum number commonly recommended for content validation research.

Content Validation Procedure

The content validation procedure followed the recommendations outlined by Yusoff (2019). Each expert received the questionnaire together with a content validation form containing the study objectives, instructions for evaluation, and seven statements developed to assess the overall content of the questionnaire. The experts were requested to independently evaluate each statement according to its relevance and suitability using a five-point Likert scale, where 1 represented *Strongly Disagree* and 5 represented *Strongly Agree*. They were also encouraged to provide comments or suggestions for improving the questionnaire where necessary.

For the purpose of calculating the Content Validity Index, expert ratings were recoded into dichotomous scores. Ratings of 4 (*Agree*) and 5 (*Strongly Agree*) were coded as 1, indicating that the item was considered relevant, whereas ratings of 1 (*Strongly Disagree*), 2 (*Disagree*), and 3 (*Neutral*) were coded as 0, indicating that the item was not considered relevant. This recoding procedure follows the recommendations proposed by Polit and Beck (2006) and Yusoff (2019) for calculating content validity indices.

Data Analysis

The content validity of the questionnaire was analysed using the Item-level Content Validity Index (I-CVI), the Scale-level Content Validity Index based on the Average method (S-CVI/Ave), and the Scale-level Content Validity

Index based on Universal Agreement (S-CVI/UA). The I-CVI was calculated by dividing the number of experts who rated an item as relevant by the total number of experts. The S-CVI/Ave was obtained by averaging the I-CVI values across all evaluation statements, whereas the S-CVI/UA represented the proportion of evaluation statements that achieved complete agreement among all experts.

In addition to these indices, the average proportion of items judged as relevant across all experts was calculated to provide an overall indication of expert agreement regarding the questionnaire content. The resulting values were interpreted according to the recommendations of Lynn (1986), Polit and Beck (2006), Polit et al. (2007), and Yusoff (2019) to determine whether the questionnaire demonstrated satisfactory evidence of content validity prior to subsequent psychometric evaluation.

Table 1: Content Validity Indices Used in the Study

INDEX	DEFINITION	FORMULA	INTERPRETATION
I-CVI	Proportion of experts who rated an item as relevant (ratings of 4 or 5).	$\text{I-CVI} = \frac{\text{Number of experts agreeing}}{\text{Total number of experts}}$	Evaluates the content validity of each individual item. For nine experts, an I-CVI of ≥ 0.78 is generally considered acceptable (Lynn, 1986).
S-CVI/Ave	Average of all I-CVI values across the questionnaire.	$\text{S-CVI/Ave} = \frac{\text{Sum of I-CVI values}}{\text{Number of items}}$	Indicates the overall content validity of the questionnaire. Values ≥ 0.80 indicate satisfactory content validity (Polit & Beck, 2006).
S-CVI/UA	Proportion of items receiving universal agreement among all experts.	$\text{S-CVI/UA} = \frac{\text{Number of items with universal agreement}}{\text{Total number of items}}$	Reflects the degree of complete agreement among experts across all items.
Average Proportion Relevance	Average proportion of items judged as relevant across all experts.	$\frac{\text{Sum of expert relevance proportions}}{\text{Number of experts}}$	Provides an overall estimate of agreement among the expert panel.

Expert ratings were first recoded into dichotomous values, whereby ratings of 4 (*Agree*) and 5 (*Strongly Agree*) were coded as 1 (relevant), whereas ratings of 1 (*Strongly Disagree*), 2 (*Disagree*), and 3 (*Neutral*) were coded as 0 (not relevant). The recoded data were subsequently used to calculate the I-CVI, S-CVI/Ave, S-CVI/UA, and the average proportion of items judged as relevant across all experts.

The calculation and interpretation of the Content Validity Index (CVI) followed the recommendations of Lynn (1986), Polit and Beck (2006), Polit et al. (2007), and Yusoff (2019).

RESULTS

Nine experts evaluated the content of the Attitude Towards Violence Questionnaire (ATVQ) using seven content validation statements. Their ratings were analysed using the Item-level Content Validity Index (I-CVI), the Scale-level Content Validity Index based on the Average method (S-CVI/Ave), and the Scale-level Content Validity Index based on Universal Agreement (S-CVI/UA). The results are presented in Tables 3 and 4.

Table 2: Content Validation Statements Used for Expert Evaluation

ITEM	CONTENT VALIDATION STATEMENT
Q1	The questionnaire items comprehensively cover the key dimensions of attitudes towards violence (cognitive, emotional, and behavioural).
Q2	The questionnaire items accurately measure attitudes towards violence and represent the intended psychological constructs.
Q3	The content and language of the questionnaire are appropriate for juveniles residing in Malaysian probation hostels.
Q4	The questionnaire is capable of measuring changes in attitudes towards violence before and after intervention.
Q5	The selected measurement scales provide valid assessment of attitudes towards violence among juveniles.
Q6	The questionnaire allows respondents to express a broad range of beliefs, feelings, and attitudes related to violence.
Q7	The questionnaire adequately represents the intended construct and is consistent with the objectives of the study.

The seven content validation statements were designed to evaluate the questionnaire from several important perspectives, including construct representation, content relevance, contextual appropriateness, and suitability for the study objectives. The experts' ratings on these statements were subsequently used to determine the content validity of the ATVQ.

Table 3: Item-Level Content Validity of the Attitude Towards Violence Questionnaire (ATVQ)

ITEM	EXPERT IN AGREEMENT (n=9)	I-CVI
Q1	6	0.67
Q2	9	1.00
Q3	8	0.89
Q4	7	0.78
Q5	8	0.89
Q6	5	0.56
Q7	8	0.89

Note. I-CVI = Item-level Content Validity Index.

Table 3 shows the level of agreement among the experts for each content validation statement. Item Q2 achieved complete agreement with an I-CVI of 1.00. Items Q3, Q5, and Q7 each recorded an I-CVI of 0.89, while Item Q4 obtained an I-CVI of 0.78. These values indicate satisfactory agreement among the experts. In contrast, Item Q1 (I-CVI = 0.67) and Item Q6 (I-CVI = 0.56) received comparatively lower levels of agreement, suggesting that these aspects of the questionnaire may benefit from further review or refinement.

Table 4: Overall Content Validity of the Attitude Towards Violence Questionnaire (ATVQ)

CONTENT VALIDITY INDEX	VALUE
S-CVI/Ave	0.81
S-CVI/UA	0.14
Average Proportion of Items Judged as Relevant	0.81

Note. S-CVI/Ave = Scale-level Content Validity Index based on the Average method; S-CVI/UA = Scale-level Content Validity Index based on Universal Agreement.

As presented in Table 4, the questionnaire achieved an S-CVI/Ave of 0.81. The average proportion of items judged as relevant across the expert panel was also 0.81, indicating an overall satisfactory level of expert agreement regarding the content of the questionnaire. The S-CVI/UA was 0.14, reflecting

that only one evaluation statement achieved complete agreement among all experts.

DISCUSSION

The present study examined the content validity of the Attitude Towards Violence Questionnaire (ATVQ) for use among juveniles residing in Malaysian probation hostels. Based on the evaluation of nine experts, the questionnaire achieved an S-CVI/Ave value of 0.81, providing preliminary evidence that the questionnaire adequately represents the construct of attitudes towards violence. Although content validity represents only one aspect of instrument validation, it is generally recognised as the first source of validity evidence that should be established before an instrument is administered in empirical research (Haynes et al., 1995). A questionnaire that does not adequately represent the intended construct may produce findings that are difficult to interpret, regardless of its reliability or statistical performance (Cook & Beckman, 2006). Therefore, the findings of the present study provide an important foundation for the subsequent psychometric evaluation of the ATVQ.

At the item level, most of the content validation statements demonstrated satisfactory agreement among the experts. Five of the seven statements achieved I-CVI values that met or exceeded the recommended threshold proposed by Lynn (1986). In particular, the statement evaluating whether the questionnaire accurately measures the intended construct achieved complete agreement among the experts. This suggests that the overall content of the questionnaire was considered appropriate for assessing attitudes towards violence among juveniles residing in Malaysian probation hostels. High levels of expert agreement are important because they indicate that the questionnaire adequately reflects the theoretical construct it is intended to measure (Polit & Beck, 2006; Polit et al., 2007).

Two evaluation statements obtained lower levels of agreement than the recommended threshold. Rather than indicating weaknesses in the questionnaire, these findings suggest that certain aspects of the instrument may benefit from further refinement before large-scale administration. Expert reviewers often evaluate questionnaire content from different professional and theoretical perspectives. As a result, differences in judgement are expected, particularly when an instrument is adapted for use in a specialised setting such

as juvenile rehabilitation. Yusoff (2019) noted that expert disagreement should not necessarily be interpreted as evidence of poor instrument quality. Instead, it provides useful feedback that enables researchers to improve item wording, content coverage, or contextual relevance before proceeding to the next stage of instrument validation. The comments provided by the experts in the present study will therefore be considered during the refinement of the ATVQ prior to pilot testing.

The questionnaire also achieved an S-CVI/Ave value of 0.81, indicating satisfactory overall content validity. Although the S-CVI/UA value was comparatively lower, this result should be interpreted with caution. Universal agreement requires every expert to agree on every evaluation statement, making it a considerably more stringent criterion than the average method. Previous methodological studies have suggested that the S-CVI/Ave provides a more stable and practical estimate of overall content validity, particularly when a relatively large panel of experts is involved (Polit & Beck, 2006; Polit et al., 2007). Consequently, greater emphasis was placed on the S-CVI/Ave when interpreting the overall content validity of the ATVQ.

The availability of a content-validated questionnaire has practical implications for both research and rehabilitation practice. Attitudes towards violence are frequently used to evaluate behavioural change following rehabilitation programmes and to examine the effectiveness of interventions designed to reduce aggressive or violent behaviour among juveniles. A questionnaire that has undergone systematic expert evaluation provides greater confidence that the measured construct is relevant to the intended respondents and consistent with the objectives of the study. For researchers, this reduces the likelihood that observed changes are influenced by inadequacies in the questionnaire itself. For practitioners, it increases confidence that the information obtained from the questionnaire reflects meaningful aspects of the juveniles' attitudes towards violence rather than measurement error arising from inappropriate content.

Although the findings provide encouraging evidence supporting the content validity of the ATVQ, further psychometric evaluation remains necessary. Content validity alone does not establish the overall quality of an instrument. Subsequent studies should examine other psychometric properties, including internal consistency reliability, construct validity, and factor structure using

an appropriate sample of juveniles residing in Malaysian probation hostels. Establishing these additional sources of validity evidence will strengthen confidence in the questionnaire and support its wider application in future research and programme evaluation within juvenile rehabilitation settings.

CONCLUSION

The present study established the content validity of the Attitude Towards Violence Questionnaire (ATVQ) for use among juveniles residing in Malaysian probation hostels through a systematic expert evaluation process. Overall, the findings provide preliminary evidence that the questionnaire adequately represents the construct of attitudes towards violence and is appropriate for use within the intended research context. The satisfactory S-CVI/Ave value, together with the generally high level of agreement among the expert panel, supports the suitability of the questionnaire for subsequent psychometric evaluation.

This study also contributes to the methodological development of instruments used in juvenile rehabilitation research in Malaysia. The present findings therefore provide an important foundation for researchers and practitioners who require a contextually appropriate questionnaire to assess attitudes towards violence among juveniles undergoing rehabilitation. Establishing evidence of content validity represents an essential first step towards developing a psychometrically sound instrument capable of supporting both research and programme evaluation in juvenile rehabilitation settings.

The scope of this study was limited to establishing evidence of content validity through expert evaluation. Other psychometric properties, including reliability, construct validity, and factor structure, were beyond the scope of the present investigation and should be examined in subsequent studies. Future research is therefore recommended to evaluate the questionnaire's sensitivity in measuring changes in attitudes towards violence following rehabilitation or intervention programmes. Such evidence will strengthen the overall psychometric support for the ATVQ and facilitate its wider application in research, programme evaluation, and rehabilitation practice within the Malaysian juvenile justice system.

Informed Consent Statement

Informed consent was obtained from all expert reviewers prior to their participation in the content validation process. Each expert was informed about the purpose of the study, the evaluation procedures, the voluntary nature of their participation, and the intended use of the findings. All responses and comments provided by the experts were treated confidentially and used solely for research purposes.

Acknowledgement

The author would like to express sincere appreciation to his supervisors namely, Associate Professor Dr Abdul Razak Abd Manaf and Dr Azizah Abdullah of Universiti Utara Malaysia, Sintok, Kedah for their continuous guidance, constructive feedback, and academic support throughout the development of this research. Their valuable comments and encouragement have contributed significantly to the completion of this study. Appreciation is also extended to all expert reviewers who willingly participated in the content validation process and shared their professional expertise.

REFERENCES

- Bosworth, K., & Espelage, D. L. (1995). *Teen conflict survey*. Indiana University. (*Original source for the Attitudes Toward Violence Scale [ATV]*).
- Cook, D. A., & Beckman, T. J. (2006). Current concepts in validity and reliability for psychometric instruments: Theory and application. *The American Journal of Medicine*, 119(2), 166.e7–166.e16. <https://doi.org/10.1016/j.amjmed.2005.10.036>
- Davis, L. L. (1992). Instrument review: Getting the most from a panel of experts. *Applied Nursing Research*, 5(4), 194–197. [https://doi.org/10.1016/S0897-1897\(05\)80008-4](https://doi.org/10.1016/S0897-1897(05)80008-4)
- Haynes, S. N., Richard, D. C. S., & Kubany, E. S. (1995). Content validity in psychological assessment: A functional approach to concepts and methods. *Psychological Assessment*, 7(3), 238–247. <https://doi.org/10.1037/1040-3590.7.3.238>

Houston Community Demonstration Project. (1993). *Attitudes Toward Interpersonal Peer Violence Scale (ATIPV)*. Houston Community Demonstration Project.

Lynn, M. R. (1986). Determination and quantification of content validity. *Nursing Research*, 35(6), 382–385.

Polit, D. F., & Beck, C. T. (2006). The Content Validity Index: Are you sure you know what's being reported? Critique and recommendations. *Research in Nursing & Health*, 29(5), 489–497. <https://doi.org/10.1002/nur.20147>

Polit, D. F., Beck, C. T., & Owen, S. V. (2007). Is the CVI an acceptable indicator of content validity? Appraisal and recommendations. *Research in Nursing & Health*, 30(4), 459–467. <https://doi.org/10.1002/nur.20199>

Yusoff, M. S. B. (2019). ABC of content validation and content validity index calculation. *Education in Medicine Journal*, 11(2), 49–54. <https://doi.org/10.21315/eimj2019.11.2.6>