ORIGINAL PAPER

doi: 10.5455/aim.2025.33.58-63
ACTA INFORM MED. 2025, 33(1): 58-63
Received: FEB 16, 2025
Accepted: MAR 18, 2025

Tran Quoc Thang[1], Le Thi Kim Chi[2], Hoang Thuy[3], Son Dao Anh[4], Tran Thi Ly[5]

[1]Faculty of Public Health, Phenikaa University, Hanoi, Vietnam

[2]Faculty of Medicine and Pharmacy, Van Hien University, Ho Chi Minh City, Vietnam

[3]Department of Chronic Lung Disease, National Lung Hospital, Hanoi, Vietnam

[4]Department of Health Finance and Health Technology Assessment, Health Strategy and Policy Institute, Hanoi, Vietnam

[5]Faculty of Medicine, University of Medicine and Pharmacy, Vietnam National University, Hanoi, Vietnam

*Corresponding author: Tran Thi Ly, Faculty of Medicine, University of Medicine and Pharmacy, Vietnam National University, Hanoi, Vietnam. Email: ly13021984@gmail.com; ORCID: https://orcid.org/0009-0003-5846-983X

Reliability and Validity of the Vietnamese Cyberbullying Scale (CBS) Among University of Medicine and Pharmacy, Vietnam National University Students

ABSTRACT

Background: The proportion of individuals utilizing the Internet has increased rapidly, and as a result, cyberbullying has garnered significant attention across various communities, emerging as a critical public health concern. **Objective**: This study aimed to validate the Vietnamese version of the Cyberbullying Scale (CBS) within the Vietnamese context. **Methods**: A cross-sectional study was conducted with 257 students at University of Medicine and Pharmacy, Vietnam National University (VNU-UMP) in Hanoi , Vietnam, from November 2023 to March 2024. The Cyberbullying Scale was administered through the RedCap software platform.**Results**: Among the 257 students, 64.9% were female. The average time spent using social networks per day was 5.6 ± 3.3 hours. The factor loadings for all items ranged from 0.76 to 0.92. The Cronbach's Alpha coefficient was calculated to be 0.98. The final measurement model of the CBS-M demonstrated good fit with the data, yielding acceptable fit indices: Comparative Fit Index (CFI) = 0.93, Tucker-Lewis Index (TLI) = 0.91, Standardized Root Mean Square Residual (SRMR) = 0.03, and Root Mean Square Error of Approximation (RMSEA) = 0.06. **Conclusion**: The Cyberbullying Scale was identified as a reliable and valid instrument for assessing cyberbullying in Vietnam.

Keywords: Cyberbullying, CBS, Vietnam.

1. BACKGROUND

In the context of technology and communication, the proportion of individuals utilizing the Internet has increased rapidly. As of December 31, 2021, Internet World Stats reported a total of 5.38 billion Internet users worldwide (1). Innovation, particularly the proliferation of social media, has advanced at an unprecedented pace. It is undeniable that advancements in communication technologies have had a significant impact on individuals' lives. Email, smartphones, and instant messaging have enabled convenient communication over long distances, facilitating swift connections between individuals and improving business efficiency by eliminating time and distance barriers. While smartphones and the Internet offer numerous benefits, it is essential for society to consider their effects on public health and recognize their negative consequences. The rapid evolution and widespread use of social networks have given rise to various forms of bullying that extend beyond the traditional confines of face-to-face interactions (2–4). As a result, research on the phenomenon of "cyberbullying" has gained increasing attention (2). Cyberbullying is defined as "a combative, threatening, and willful behavior exhibited by an individual or a group, using online communication to dominate, control, and attack a victim who is vulnerable and emotionally unstable."(2–5) Various forms of interaction, including text, images, messages, websites, and group interactions, facilitate cyberbullying. The vast and borderless nature of the internet, which transcends limitations of time, space, scale, and human identity, underscores

cyberbullying as an emerging public health issue, particularly among adolescents (6,7).

The concept of "cyberbullying" has garnered significant attention across various communities, emerging as a critical aspect of human health concerns affecting multiple generations (8,9). This issue spans the dimensions of physical, mental, and social health. Online harassment is not limited to young children but extends to college students and adults, with prevalence rates for cyberbullying perpetration ranging from 3% to 40%, and for victimization ranging from 7% to 62% (5). In a study by Huang and Chou, it was found that 63.4% of Taiwanese students surveyed had experienced internet-based bullying, with 34.9% identified as victims and 20.4% as perpetrators (10). Over a quarter (26.3%) of participants experienced a significant decline in their academic performance as a direct result of cyberbullying. Furthermore, around 20% of participants considered leaving school, while 19.7% thought about discontinuing their internet use. Additionally, 21.1% of participants even contemplated self-harm due to the negative effects of cyberbullying (11). In line with these findings, data from the Centers for Disease Control and Prevention show that 14.9% of adolescents have been victims of cyberbullying, and 13.6% have made a serious suicide attempt as a consequence (12,13).

Cyberbullying had the potential to evolve into a significant public health issue, affecting a substantial portion of adolescents in ways that remained inadequately explored within the field. These alarming statistics underscore a critical gap in measuring the full extent of cyberbullying's effects, emphasizing the necessity of developing and validating a comprehensive tool to assess and address this pervasive issue. To address these gaps, several instruments have been created to assess cyberbullying, including the Cyber Victim and Bully Scale (CVBS), which consists of three factors and 22 items,(14) the Cyberbullying Experience Survey (CES) with two factors and 48 items,(15) the Cyberbullying Questionnaire (CBQ) featuring two factors and 27 items,(16) and the Cyberbullying Scale (CBS) with a single factor and 16 items (17).

The Cyberbullying Scale is a modern and more streamlined tool, developed for faster completion. It has demonstrated both reliability and validity across diverse populations and languages worldwide, including English, Malaysian, and others (17–20). This broad applicability makes it a valuable instrument for examining cyberbullying in various cultural settings(17,18) However, its reliability and validity have not yet been tested in the Vietnamese population. As a result, this study was undertaken to contribute to cyberbullying research in Vietnam by assessing the reliability and validity of fourteen items from the Cyberbullying Scale among young Vietnamese individuals.

2. OBJECTIVE

This study aimed to validate the Vietnamese version of the Cyberbullying Scale (CBS) within the Vietnamese context.

3. SUBJECT AND METHODS

Study Setting

A cross-sectional study was conducted at University of Medicine and Pharmacy, Vietnam National University (VNU-UMP) in Hanoi, Vietnam, from November 2023 to March 2024. The participants of the study included students from Year 1 to Year 6 at VNU-UMP. The inclusion criteria were students who used electronic devices such as smartphones, tablets, and iPads. Students who were absent during the study period were excluded from participation.

Questionnaire

The questionnaire used in this study was developed and refined from the questionnaire used in a 2014 study by Steward et al. (2014),(17) which had been translated from English to Vietnamese and adapted to fit the context of this study. The data collection was conducted using an online questionnaire on the RedCap software platform.

The demographic section of the questionnaire gathered information on gender, academic year, weight, height, field of study, place of residence, recent academic performance, average daily social media usage time, peak social media usage time in a day, regular social media platforms used, and participation in any groups. Participants self-reported their height and weight in this section.

The section assessing cyberbullying included 16 items, with 14 of them using a 5-point Likert scale (1 = never, 2 = rarely, 3 = occasionally, 4 = frequently, 5 = always). The overall score could range from 1 to 70, where higher scores suggested a higher level of cyberbullying exposure.

The Vietnamese version of the questionnaire was initially tested on a small group of students. Based on their feedback, the questions were revised to ensure clarity and accu-

Features		Mean ± SD or n (%)
Gender	Male	90 (35%)
	Female	167 (65%)
Year of study	1	88 (34.2%)
	2	40 (15.6%)
	3	36 (14%)
	4	53 (20.6%)
	5	35 (13.6%)
	6	5 (1.9%)
Department	General Medicine	74 (28.8%)
	Pharmacy	103 (40.1%)
	Nursing	36 (14%)
	Oral and Maxillofacial	13 (5.1%)
	Medical Laboratory Technology	21 (8.2%)
	Medical Imaging Technology	11 (4.3%)
The average time spent on using social networks per day		5.6 ± 3.3
Timing on the day spent the most for social media	Morning (6.00am – 12.00pm)	8 (3.1%)
	Afternoon (12.00pm-18.00pm)	21 (8.2%)
	Evening (18.00pm-00.00am)	210 (81.7%)
	Night (00.00am-6.00am)	18 (7%)
Social Networks	Facebook	213 (82.9%)
	Messenger	184 (71.6%)
	TikTok	150 (58.4%)
	YouTube	112 (43.6%)
	Tinder	1 (0.4%)
	Zalo	82 (31.9%)
	Instagram	90 (35%)

Table 1. Socio-demographic features among study participants (n= 257)

rate understanding. Afterward, the questionnaire was translated back into English to verify that the original meaning of the questions was preserved.

Sample Size and Sampling

According to Comrey and Lee, the optimal sample-to-variable ratio (N:p ratio) should be at least 10:1 (21). Given that this study included 14 variables, the minimum required sample size was 140. However, MacCallum suggested that a sample size of 200 or more is necessary for factor analysis (22). Accordingly, convenience sampling was employed, and 257 participants were selected for the study.

Statistical Analysis

Data for the study were managed and analyzed using STATA 15.0 statistical software. Descriptive statistics were computed by calculating the mean and standard deviation for quantitative variables, while qualitative variables were represented by frequency and percentage.

Exploratory Factor Analysis (EFA) was conducted to assess the validity and reliability of the CBS scale. This included the evaluation of factor loadings, the Kaiser-Meyer-Olkin (KMO) measure, and Bartlett's test of sphericity. Additionally, the Cronbach's alpha coefficient was used to assess internal consistency, while Confirmatory Factor Analysis (CFA) was employed to evaluate the stability of the factor structure.

Items	Factor loadings
Receiving online or text threats from another kid.	0.89
Being purposefully excluded from online groups.	0.76
Mean messages or name-calling via text or online.	0.84
Revenge exclusion from online groups by a mad peer.	0.87
Messages that make you fear for your safety.	0.91
Lies spread online to harm your reputation.	0.86
Being coerced into actions to gain approval.	0.90
Others posting or texting mean things to isolate you.	0.90
Threats to harm you unless you comply.	0.93
Engaging in online arguments or fights.	0.77
Cruel gossip, rumors, or insults posted about you.	0.88
Someone impersonates you to ruin your reputation.	0.90
Personal secrets or images shared without permission.	0.82
Seeking adult help to resolve online issues.	0.92
Bartlett test of sphericity	Chi-square = 9306.807; p = 0.000
KMO	0.97

Table 2. Factor loadings, factor score coefficients, single extracted factor in Vietnam Cyberbullying Scale (n=257)

Items	Item-test correlation	Item-rest correlation	Average inter-item covariance	Alpha
B1.	0.90	0.89	0.43	0.97
B2.	0.78	0.75	0.43	0.98
B3.	0.86	0.83	0.43	0.98
B4.	0.88	0.86	0.43	0.97
B5.	0.92	0.90	0.43	0.97
B6.	0.87	0.85	0.43	0.98
B7.	0.91	0.89	0.43	0.97
B8.	0.91	0.89	0.43	0.97
B9.	0.92	0.91	0.43	0.97
B10.	0.80	0.77	0.43	0.98
B11.	0.89	0.87	0.43	0.97
B12.	0.91	0.89	0.43	0.97
B13.	0.84	0.81	0.43	0.98
B14.	0.92	0.91	0.43	0.97

Table 3. Cronbach's alpha coefficient of each question in the Vietnam Cyberbullying Scale (n=257)

CFA' index	Value
The Standardized Root Mean Square Residual (SRMR)	0.03
The Root Mean Square Error of Approximation - Satorra Bentler estimation (RMSEA - SB)	0.06
The Comparative Fit Index (CFI)	0.93
Tucker–Lewis Index (TLI)	0.91

Table 4. CFA's index in Vietnam Cyberbullying Scale

Ethics Approval

Participants were provided with information regarding the purpose of the study and consent procedures via the online survey platform before deciding whether to participate. Anonymity was assured, and no personal information would be linked to their responses. Participation was entirely voluntary, with participants free to refuse or withdraw from the survey at any time. All data collected were kept confidential and used solely for research purposes

4. RESULTS

Table 1 presents the socio-demographic characteristics of the study participants. Among the 257 students from VNU-UMP who participated in the study, 64.9% were female. The largest proportion of students were enrolled in the Preventive Medicine program (38.0%), followed by those in the General Medicine program (25.5%) and the Bachelor of Nutrition program (13.8%). The remaining majors accounted for less than 10% of the participants. The majority of participants were freshmen at the research site. The average time spent using social networks per day was 5.6 ± 3.3 hours. The period during which participants most frequently used social media was in the evening, between 6:00 p.m. and 12:00 a.m. (81.7%). The most commonly used social networks among participants were Facebook (83.0%), Messenger (71.7%), TikTok (58.3%), and YouTube (43.5%).

The results confirmed the reliability of the CBS scale in the Table 2. Factor analysis was supported by the significant outcome of Bartlett's test (p = 0.000), which indicated that the correlation matrix was appropriate for factor analysis. The KMO test revealed a high adequacy (KMO = 0.97), further affirming the suitability of employing exploratory factor analysis (EFA) in this study. Subsequently, calculations were performed to determine the number of eigenvalues exceeding 1. Based on an initial eigenvalue of 10.6, and supported by the scree plot, a one-dimensional structural model was sug-

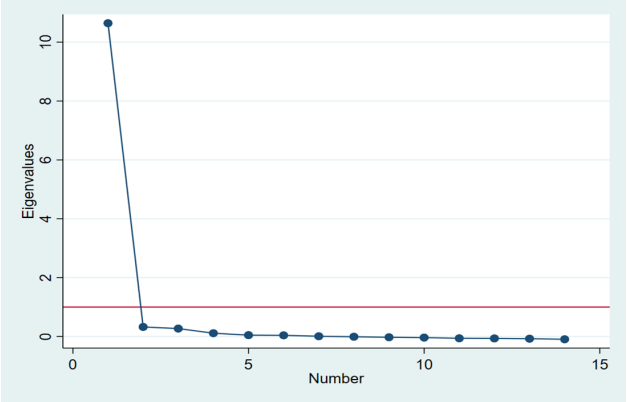

Figure 1. Scree plot of eigenvalues after factor in Vietnam Cyberbullying Scale

gested. Therefore, a one-factor model was selected (Figure 1).

Table 2 presented the factor loadings of the 14 items. All item values were greater than 0.5, ranging from 0.76 to 0.92. These high factor loadings indicated (a) a strong correlation between the observed variables and the factors in the model, (b) the significance of all variables in the CBS scale, and (c) the consistency of the measurement variables within the factor analysis model, which were found to measure the same aspects of the CBS scale.

The results presented in Table 3 demonstrated that the CBS scale exhibited both internal consistency and stability. The calculated Cronbach's Alpha coefficient of 0.98 exceeded the threshold of 0.7, indicating strong internal consistency. Furthermore, all item-rest correlation values surpassed 0.4. Consequently, all 14 observed items were accepted for use in the subsequent factor analysis.

Table 4 presented the CFA indices for the Vietnam Cyberbullying Scale. The CFA model indicated that the scale exhibited good reliability, with a Standardized Root Mean Square Residual (SRMR) of 0.03 and a Root Mean Square Error of Approximation (RMSEA) estimated using the Satorra-Bentler method of 0.06. Due to the left-skewed distribution, the RMSEA-Satorra-Bentler (RMSEA-SB) estimate was used in place of the traditional RMSEA index. Specifically, the Comparative Fit Index (CFI) was 0.93, and the Tucker-Lewis Index (TLI) was 0.91, both suggesting a robust model fit.

Figure 2 illustrated the frequency of responses to the questions. The proportions of "Never" and "Rarely" were found to be larger than those of "Sometimes," "Often," or "Always."

5. DISCUSSION

Several toolkits for cyberbullying research focusing on adolescents have been developed in many countries around the world (23–26). Among these, the original CBS (Cyberbullying Scale) was proven to be a valid and reliable tool (18,27). This is due to the increasing attention given to the issues of cyberbullying and adolescents' mental health globally. However, despite the growing recognition of these concerns, the issue of cyberbullying has not been adequately researched in Vietnam (28,29).

The present study aimed to advance cyberbullying research by developing a comprehensive tool for assessing cyberbullying victimization, referred to as the Cyberbullying Scale. The results indicated that, among the study participants, 38.01% were preventive doctors and first-year students at the research site. The sample was drawn from university students. In contrast, Stewart and colleagues focused on middle and high school students and found no significant differences in total CBS scores between younger and older subsamples (17). However, our sample was more aligned with research targeting university students (30). Approximately 30% of younger participants reported that they first experienced cyberbullying during their college years, while 43% indicated that they had endured such victimization since their secondary and high school years. These findings underscore the prevalence of cyberbullying across a wide range of ages, particularly in the era of rapidly growing social media.

The development of a cyberbullying scale in Vietnamese was considered essential not only to assess cyberbullying behavior among students in Vietnam but also to raise awareness about cyberbullying, specifically among students and more broadly among Vietnamese teenagers. Additionally, it aimed to establish the validity of the cyber violence scale in Vietnam through exploratory factor analysis (EFA). The original version of the Cyberbullying Scale (CBS) consisted of 16 items, 14 of which were measured on a Likert scale. The initial CBS was constructed with a single factor, cyberbullying victimization, similar to the current study, where the scree plot with coefficients greater than 1 also revealed a single factor (17). The factor loadings for the 14 items in the Vietnamese Cyberbullying Scale ranged from 0.76 to 0.92, in contrast to the

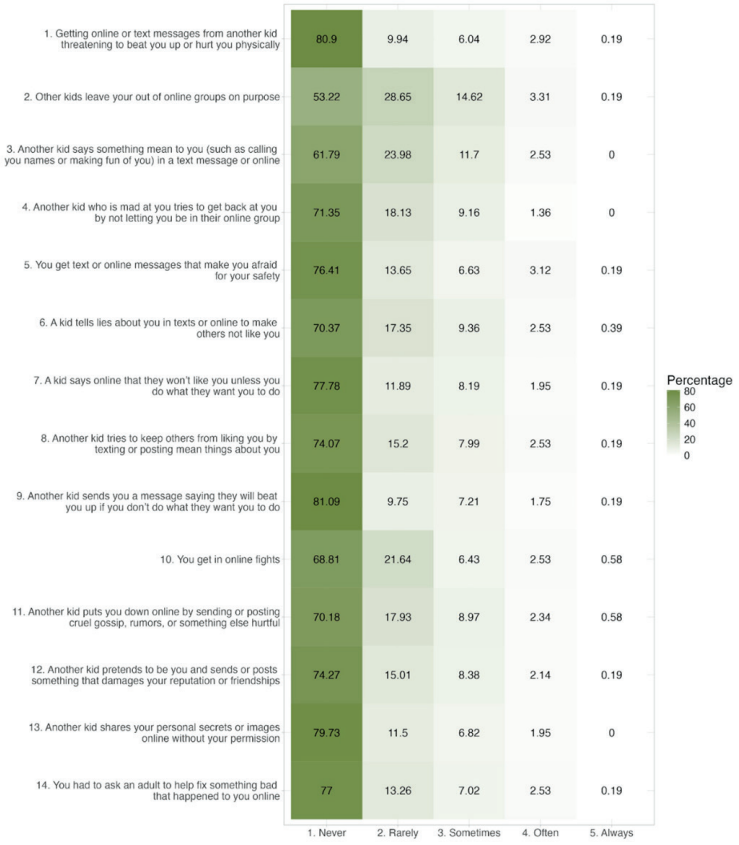

Figure 2. The frequency of responses to the question of Cyberbullying Scale

Malaysian version, which exhibited a range of 0.294 to 0.796 (18). This discrepancy may be attributed to the differing demographics of the two studies: the Vietnamese version targeted students, whereas the Malaysian version focused on adolescents. Notably, two items—"Other kids leave you out of online groups on purpose" and "You get in online fights"—demonstrated relatively low factor loading values of 0.76 and 0.77, respectively. Nevertheless, both items addressed key aspects of cyberbullying and were retained in the scale.

The exploratory factor analysis (EFA) model validated that the construct comprised a single factor consisting of 14 items. The Cronbach's Alpha coefficient for the Vietnamese version was notably high at 0.98, surpassing the 0.87 observed in the Malaysian version and aligning closely with the original CBS version at 0.94. This confirmed the appropriateness of the factor analysis and the meaningfulness of all items in measuring cyberbullying behavior. As a result, no items were excluded, leading to the progression to confirmatory factor analysis (CFA). CFA was performed to assess the adequacy of the 14-item model, and the results indicated favorable fit indices (CFI = 0.93, TLI = 0.91, SRMR = 0.03, RMSEA-SB = 0.06), which were consistent with those of the original study employing a single-factor model.

Bartlett's test of sphericity revealed a significant result with a p-value < 0.001, indicating correlations among variables and their interrelations within the overall model. The scale's Kaiser-Meyer-Olkin (KMO) value was 0.97, further confirming the suitability of the EFA model. This value was higher than the 0.79 reported in the Malaysian version (31).

Therefore, the correlation among variables within this scale was robust and statistically significant. The Vietnamese adaptation of the CBS, which assessed cyberbullying behaviors among VNU-UMP students, demonstrated both reliability and validity. The significance of this study was underscored by its exploration of cyberbullying behaviors among students, providing a foundation for future research and interventions in Vietnam. By employing the CBS scale, the study offered a comprehensive understanding of cyberbullying behaviors among students. Moreover, the Cyberbullying Scale in Vietnam held applicability not only for VNU-UMP students but also for students nationwide. However, the study exhibited some limitations. Primarily, it was important to acknowledge that the sample composition may not have fully represented the entire population of VNU-UMP students, due to the use of a convenience sampling methodology. Additionally, the study lacked a definitive cut-off point, making the adoption of either the mean or median as a threshold a potential solution to address this limitation. Nevertheless, for future researchers adopting this approach, it is crucial to solicit expert input from the field of mental health and conduct a more thorough review of the literature to enhance the quality of the Cyberbullying Scale in Vietnam.

6. CONCLUSION

The Cyberbullying Scale was identified as a reliable and valid instrument for assessing cyberbullying in the Vietnamese language through factor analysis. It was deemed essential to establish a safe and confidential reporting system to encourage individuals to report incidents of cyberbullying. Additionally, individuals were encouraged to utilize their online platforms to promote positivity and provide support to others.

What Is Already Known on This Topic: Cyberbullying was recognized as a critical public health concern.

What This Study Adds: For the first time, the Cyberbullying Scale was validated as a reliable instrument for assessing cyberbullying in Vietnam.

- **Authors' Contributions**: Concept and design: DOT and VPT; Acquisition, analysis and interpretation of data: VPT and SDA; Drafting the article: VPT and SDA; Revising it critically for important intellectual content: DOT; VPT and SDA. Approved final version of the manuscript: DOT; VPT and SDA.
- **Conflicts of interest**: The authors declared that they have no conflict of interest.
- **Funding**: This research received no specific grant from any government, commercial, or non-profit funding body.

REFERENCES

1. Statista. Statista. [cited 2024 Dec 9]. Internet and social media users in the world 2024. Available from: https://www.statista.com/statistics/617136/digital-population-worldwide/
2. Jadambaa A, Thomas HJ, Scott JG, Graves N, Brain D, Pacella R. Prevalence of traditional bullying and cyberbullying among children and adolescents in Australia: A systematic review and meta-analysis. Aust N Z J Psychiatry. 2019 Sep;53(9):878–88.
3. Henares-Montiel J, Pastor-Moreno G, Ramírez-Saiz A, Rodríguez-Gómez M, Ruiz-Pérez I. Characteristics and effectiveness of interventions to reduce cyberbullying: a systematic review. Front Public Health. 2023;11:1219727.
4. Selkie EM, Fales JL, Moreno MA. Cyberbullying Prevalence Among US Middle and High School-Aged Adolescents: A Systematic Review and Quality Assessment. J Adolesc Health. 2016 Feb;58(2):125–33.
5. Thumronglaohapun S, Maneeton B, Maneeton N, Limpiti S, Manojai N, Chaijaruwanich J, et al. Awareness, perception and perpetration of cyberbullying by high school students and undergraduates in Thailand. PLoS One. 2022 Apr 29;17(4):e0267702–e0267702.
6. Zhu C, Huang S, Evans R, Zhang W. Cyberbullying Among Adolescents and Children: A Comprehensive Review of the Global Situation, Risk Factors, and Preventive Measures. Front Public Health. 2021;9:634909.
7. Wang L, Jiang S. Effectiveness of Parent-Related Interventions on Cyberbullying Among Adolescents: A Systematic Review and Meta-Analysis. Trauma Violence Abuse. 2023 Dec;24(5):3678–96.
8. Popat A, Tarrant C. Exploring adolescents' perspectives on social media and mental health and well-being–A qualitative literature review. Clin Child Psychol Psychiatry. 2023 Jan;28(1):323–37.
9. Gohal G, Alqassim A, Eltyeb E, Rayyani A, Hakami B, Al Faqih A, et al. Prevalence and related risks of cyberbullying and its effects on adolescent. BMC Psychiatry. 2023 Jan 14;23(1):39.
10. Huang J, Zhong Z, Zhang H, Li L. Cyberbullying in Social Media and Online Games among Chinese College Students and Its Associated Factors. Int J Environ Res Public Health. 2021 Apr 30;18(9):4819.
11. Gohal G, Alqassim A, Eltyeb E, Rayyani A, Hakami B, Al Faqih A, et al. Prevalence and related risks of cyberbullying and its effects on adolescent. BMC Psychiatry. 2023 Jan 14;23(1):39.

12. Schonfeld A, McNiel D, Toyoshima T, Binder R. Cyberbullying and Adolescent Suicide. J Am Acad Psychiatry Law. 2023 Mar;51(1):112–9.
13. Hinduja S, Patchin JW. Bullying, cyberbullying, and suicide. Arch Suicide Res. 2010;14(3):206–21.
14. Çetin B, Yaman E, Peker A. Cyber victim and bullying scale: A study of validity and reliability. Computers & Education. 2011;57(4):2261–71.
15. Doane AN, Kelley ML, Chiang ES, Padilla MA. Development of the Cyberbullying Experiences Survey. Emerging Adulthood. 2013 Sep 1;1(3):207–18.
16. Calvete E, Orue I, Estévez A, Villardón L, Padilla P. Cyberbullying in adolescents: Modalities and aggressors' profile. Computers in Human Behavior. 2010 Sep 1;26(5):1128–35.
17. Stewart RW, Drescher CF, Maack DJ, Ebesutani C, Young J. The Development and Psychometric Investigation of the Cyberbullying Scale. Journal of Interpersonal Violence. 2014 Jan 14;29(12):2218–38.
18. Saman ZM, Siti-Azrin AH, Othman A, Kueh YC. The Validity and Reliability of the Malay Version of the Cyberbullying Scale among Secondary School Adolescents in Malaysia. Int J Environ Res Public Health. 2021 Nov 6;18(21):11669.
19. Gohal G, Alqassim A, Eltyeb E, Rayyani A, Hakami B, Al Faqih A, et al. Prevalence and related risks of cyberbullying and its effects on adolescent. BMC Psychiatry. 2023 Jan 14;23(1):39.
20. Popat A, Tarrant C. Exploring adolescents' perspectives on social media and mental health and well-being–A qualitative literature review. Clin Child Psychol Psychiatry. 2023 Jan;28(1):323–37.
21. Kyriazos TA. Applied Psychometrics: The 3-Faced Construct Validation Method, a Routine for Evaluating a Factor Structure. Psychology. 2018;09(08):2044–72.
22. MacCallum RC, Widaman KF, Zhang S, Hong S. Sample size in factor analysis. Psychological Methods. 1999;4(1):84–99.
23. Álvarez-Marín I, Pérez-Albéniz A, Lucas-Molina B, Martínez-Valderrey V, Fonseca-Pedrero E. Development and Validation of a Brief Version of the European Bullying and Cyberbullying Intervention Project Questionnaires (EBIP-Q and ECIP-Q). Psicothema. 2022 Nov;34(4):571–81.
24. Thomas HJ, Scott JG, Coates JM, Connor JP. Development and validation of the Bullying and Cyberbullying Scale for Adolescents: A multi-dimensional measurement model. Br J Educ Psychol. 2019 Mar;89(1):75–94.
25. Sitthi N, In-Iw S, Theppiban S, Manaboriboon B. Cyberbullying Among Adolescents with Chronic Illnesses in Thailand: Prevalence and Relationship with Health-Risk Behaviors. J Dev Behav Pediatr. 2022 Nov 1;43(8):e533–40.
26. Sahli L, Bourgou S, Haj Amor S, Belhadj A. Arabic validation of a cyberbullying assessment instrument. Encephale. 2023 Dec;49(6):577–81.
27. Mohd Fadhli SA, Liew Suet Yan J, Ab Halim AS, Ab Razak A, Ab Rahman A. Finding the Link between Cyberbullying and Suicidal Behaviour among Adolescents in Peninsular Malaysia. Healthcare (Basel). 2022 May 6;10(5):856.
28. Ngo AT, Tran AQ, Tran BX, Nguyen LH, Hoang MT, Nguyen THT, et al. Cyberbullying Among School Adolescents in an Urban Setting of a Developing Country: Experience, Coping Strategies, and Mediating Effects of Different Support on Psychological Well-Being. Front Psychol. 2021;12:661919.
29. Chudal R, Tiiri E, Brunstein Klomek A, Ong SH, Fossum S, Kaneko H, et al. Victimization by traditional bullying and cyberbullying and the combination of these among adolescents in 13 European and Asian countries. Eur Child Adolesc Psychiatry. 2022 Sep;31(9):1391–404.
30. Kowalski RM, Giumetti GW, Schroeder AN, Reese HH. Chapter 14 Cyber Bullying Among College Students: Evidence from Multiple Domains of College Life. Cutting-Edge Technologies in Higher Education. 2012 Jan 27;293–321.
31. Saman ZM, Siti-Azrin AH, Othman A, Kueh YC. The Validity and Reliability of the Malay Version of the Cyberbullying Scale among Secondary School Adolescents in Malaysia. Int J Environ Res Public Health. 2021 Nov 6;18(21):11669.