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REVIEW



What causes cyberbullying among Asian school students? a systematic literature review

¿Qué provoca el ciberacoso entre los estudiantes asiáticos? Una revisión sistemática de la literatura

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ABSTRACT

Introduction: the pervasiveness of cyberbullying among school children has been a significant issue since the onset of the COVID-19 pandemic.

Objective: the aim of this Systematic Literature Review (SLR) was to examine and summarize the causes of cyberbullying perpetration among students in the Asian region. This review aims to provide comprehensive and well-structured insights for scholars interested in studying the occurrence of cyberbullying.

Method: relevant articles and studies were sourced from the Scopus, Science Direct, and Education Resources Information Center (ERIC) databases. After applying quality approval according to the PRISMA 2020 protocol, 21 articles were identified for inclusion in the SLR.

Results: the thematic analysis of the data revealed four emerging themes: individual factors, family engagement, peer affiliation, and school climate. These four themes were divided into 14 sub-themes. The findings from this SLR indicate that the factors contributing to cyberbullying perpetration are varied and unique to the local population. Understanding the causes of bullying is crucial for developing effective intervention programs.

Conclusion: this review will provide valuable insights into how stakeholders can effectively address and mitigate cyberbullying behavior among students.

Keywords: Bullying; Cyberbully; School Children; School Student; Systematic Review.

RESUMEN

Introducción: la omnipresencia del ciberacoso entre los niños en edad escolar ha sido un problema significativo desde el inicio de la pandemia de COVID-19.

Objetivo: el objetivo de esta Revisión Sistemática de la Literatura (SLR) fue examinar y resumir las causas de la perpetración del ciberacoso entre los estudiantes en la región asiática. Esta revisión tiene como propósito proporcionar conocimientos completos y bien estructurados para los académicos interesados en estudiar la ocurrencia del ciberacoso.

Método: Los artículos y estudios relevantes fueron obtenidos de las bases de datos Scopus, Science Direct y Education Resources Information Center (ERIC). Después de aplicar la aprobación de calidad según el protocolo PRISMA 2020, se identificaron 21 artículos para su inclusión en la SLR.

Resultados: el análisis temático de los datos reveló cuatro temas emergentes: factores individuales, participación familiar, afiliación con pares y clima escolar. Estos cuatro temas se dividieron en 14 subtemas.

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Los hallazgos de esta SLR indican que los factores que contribuyen a la perpetración del ciberacoso son variados y específicos de la población local. Comprender las causas del acoso es fundamental para desarrollar programas de intervención efectivos.

Conclusiones: esta revisión proporcionará valiosos conocimientos sobre cómo las partes interesadas pueden abordar y mitigar de manera efectiva el comportamiento de ciberacoso entre los estudiantes.

Palabras clave: Acoso Escolar; Ciberacoso; Niños En Edad Escolar; Estudiantes; Revisión Sistemática.

INTRODUCTION

Bullying among school children involves repeated harm or threats—physical, verbal, or psychological—by peers within or around schools. (1,2) Cyberbullying, in contrast, occurs via electronic devices, primarily online, through email, texts, or social media. (3,4,5) Unlike traditional bullying, it extends beyond school, making prevention more difficult. Perpetrators often act with peer support, sometimes anonymously. (1) Cyberbullying intentions is to harm victims, seek revenge, or gain social status. (2,6) It includes defamation, humiliation, hate speech, and stalking. (6) Many engage in it to assert dominance in the virtual world. As cyberbullying remains widespread, understanding its persistence is crucial. Though eliminating it is difficult, ongoing research and preventive measures are essential to reducing cases and mitigating potential violence.

Currently, there is a lack of comprehensive reviews of research on the causes of cyberbullying among schoolchildren in Asia. Through a Systematic Literature Review (SLR), the authors aim to make sense of large bodies of information by identifying effective and ineffective approaches. (7) By identifying and critically evaluating the available evidence, an SLR can provide an up-to-date overview of the state of the field and guide future research. This is primarily achieved by identifying, appraising, and synthesizing all relevant studies to answer specific research questions.

The SLR proposed in this study focuses on the research evidence review analysis of past studies to answer the following research question: What causes for cyberbullying incident to occur among school children (6 to 17 years old) based on studies from 2022 to 2024 in Asian regions? The current study addresses a gap in the literature by examining the causes of cyberbullying incidents and providing further insights into this form of bullying. This SLR will enable scholars and academics to identify relevant factors and processes related to cyberbullying, as well as to highlight best practices and preventive measures for future research. By focusing on school students in Asian countries, researchers can compare whether specific causes of cyberbullying are unique to the Asian context in contrast to other regions.

METHOD

Review protocol-PRISMA 2020

The SLR study was guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 review protocol with aims to assist systematic reviewers in clearly documenting the rationale behind conducting the review, the methods employed by the authors, and the outcomes they discovered and incorporates reporting guidance that encompasses advancements in techniques for identifying, selecting, evaluating, and combining studies where changes have been made to the structure and presentation of the items to make implementation easier. (8) Guided by PRISMA 2020, the SLR process began with formulating the research questions by applying the PICo method.

Next, the strategy for documented searching was steered according to three systematic phases: identification, screening, and eligibility. A quality appraisal process was necessary for this SLR and was conducted based on the revised criteria outlined by Hong et al. (9) The quality of each selected article was evaluated before it was included in the review. The final step involved a comprehensive process that included data extraction and analysis. The primary research question guided the data extraction process, while qualitative data synthesis, known as thematic synthesis, was used to analyze the extracted data. When relevant, the authors incorporated the recommendations outlined in the review and explored alternatives to ensure that the review protocol aligned with its objectives.

Formulations of research question

In this study, the research questions are designed to guide the SLR. The questions were developed using the mnemonic PICo, which stands for 'P' (Problem or Population), 'I' (Interest), and 'Co' (Context) (10). PICo is a helpful tool that assists authors in formulating appropriate research questions for their review. This review focuses on three primary elements: school children (Population), cyberbullying (Interest), and factors/causes (Context). These concepts allowed the authors to derive the main research question for the study: What are the causes of cyberbullying incidents among school children?

Systematic searching strategies

The systematic searching strategies for this review are based on three phases: identification, screening, and eligibility. These phases were implemented to ensure a rigorous investigation (see Figure 1) that effectively addresses the review's objectives. Additionally, this approach enables the authors to thoroughly locate and synthesize relevant studies in a well-organized and transparent SLR.

Identification

Identification is the first phase of systematic search strategies, involving the selection of keywords that will be used in the search process. Based on the formulated research question, the search was conducted using these three main keywords: cyberbullying, school, and children. The basic functions of Boolean operator OR or AND NOT and field code, phrase searching, wildcards, and truncation were used whenever possible.

The SLR was conducted using three primary indexing databases within the scientific community: Scopus, Science Direct, and the Education Resources Information Center (ERIC). Each article retrieved from these databases underwent thorough examination beyond just its title and abstract, aiming to identify the most relevant articles that align with the objectives of this SLR. This search process yielded a total of 2,589 potential articles from the selected databases.

Table 1. Search string used in the selected database								
Database	String							
Scopus	TITLE-ABS(cyberbully* AND school* AND NOT universit* AND NOT college* AND NOT infant*)							
Science Direct	("cyberbully" OR "cyberbullying") AND "school" AND NOT "university" AND NOT "college" AND NOT "infant"							
ERIC	abstract: "cyberbullying" AND abstract: "school" -university -college -kindergarten							

Table 2. Inclusion and exclusion criteria								
Criterion	Inclusion	Exclusion						
Timeline	2022-2025	2021 and earlier						
Document types	Articles (with empirical data)	Review article, book chapter, book, proceeding of conference etc.						
Language	English	Non-English						
Subject area	Education, social sciences, psychology, nursing, environmental science, health professions, arts and humanities	Medical, neuroscience, economics, computer science, business, management, accounting, biological sciences, biochemistry, engineering						
Region	Asian countries only	Non-Asian countries						

Screening

The screening phase or the second process, aims to find relevant articles for the SLR by applying specific criteria to distinguish suitable articles from unfitting ones. For this review, we focused on articles published between 2022 and 2025, guided by the concept of 'research field maturity'. Additionally, it was essential that the selected articles be empirical research papers, as they provide primary data and concentrate on the school environment and student behavior. Consequently, the chosen articles span various subject areas, including education, social sciences, psychology, nursing, environmental science, health professions, and arts and humanities. To enhance clarity and efficiency, we also restricted our selection to articles published in English. Initially, we eliminated 2,433 articles that did not meet our specified criteria, leaving us with 156 articles for duplication checks. After identifying and removing 14 duplicate records, we reduced the number of potential articles to 142 for the subsequent stage of the selection process.

Eligibility

The eligibility stage was the third step in the systematic search strategy. During this stage, the 142 selected articles were re-evaluated to assess their adherence to the established selection criteria. The authors manually reviewed the remaining papers, focusing on the title, abstract, or the entire text to determine if they met the inclusion criteria. In the title screening phase, 28 articles were removed. During the abstract screening phase, an additional 47 articles were discarded. After reviewing the content of the remaining articles, 46 more were excluded. In total, 121 articles were excluded during this eligibility stage for various reasons: they did not focus on cyberbullying incidents, addressed different groups (such as teachers, counselors, or college students), had research designs unrelated to the causes of cyberbullying among school children, or were conducted outside of Asian regions. As a result, 21 articles were eventually selected for the systematic literature review (figure 1).

Quality Appraisal

The quality appraisal stage is a crucial component of the systematic review process, involving a thorough examination and evaluation of the methodologies and analyses used in the 21 selected studies. To accomplish this, we utilized the Mixed-Method Appraisal Tool (MMAT), developed by Hong et al. (9) The evaluation process focused on five key criteria, specifically tailored to align with each research design. To ensure a meticulous review, two co-authors collaborated closely with the corresponding author, scrutinizing the methodological and analytical integrity of every article. Each study was carefully examined, with particular emphasis placed on the methodology section and the analytical approach taken, ensuring the quality appraisal process were robust and reliable.

The MMAT assessed the articles by examining the consistency between the sampling methods used in each study and the analyses conducted (comparing non-random sampling and accounting for confounders) (table 3). Following this quality appraisal process, all authors concluded that all 21 articles met the minimum quality standards concerning methodology and analysis.

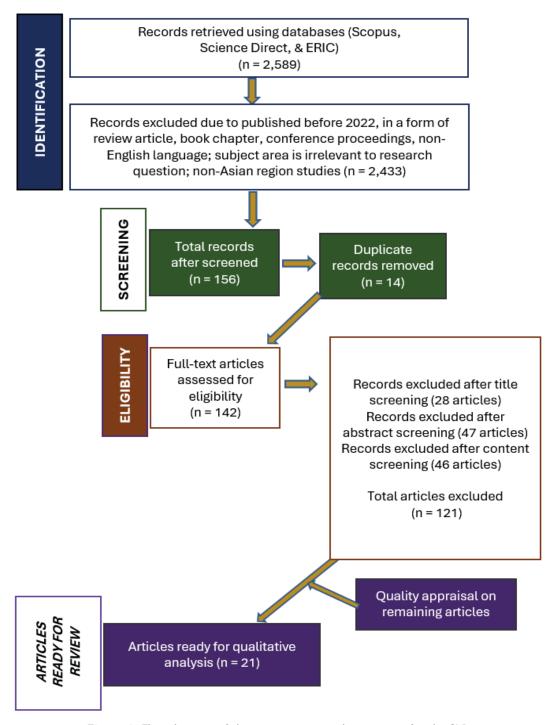


Figure 1. Flow diagram of the systematic search strategies for the SLR

Table 3. Result of the quality assessment								
Study	Research Design	QA1	QA2	QA3	QA4	QA5	Number of criteria fulfilled	Inclusion in the review
Wu et al. (2025)	QN (DC)	Υ	Υ	Υ	Υ	Υ	5/5	Y
Wang et al. (2025)	QN (DC)	Υ	Υ	Υ	Υ	Υ	5/5	Υ
Abdülaliam (2024)	QN (DC)	Υ	Υ	Υ	Ν	Υ	4/5	Υ
Bai et al. (2024)	QN (DC)	Υ	Υ	Υ	Υ	Υ	5/5	Υ
Bukhori et al. (2024)	QN (DC)	Υ	Υ	Υ	Υ	Υ	5/5	Υ
Chen et al. (2024)	QN (DC)	Υ	N	Υ	Υ	Υ	4/5	Υ
Kollo et al. (2024)	QN (DC)	Υ	Ν	Υ	Υ	Υ	4/5	Υ
Misra et al. (2024)	QN (DC)	Ν	Ν	Υ	Υ	Υ	3/5	Υ
Safaria & Ariani (2024)	QN (DC)	Ν	Υ	Υ	Υ	Υ	4/5	Υ
Gao et al. (2023)	QN (DC)	Υ	Υ	Υ	N	Υ	4/5	Υ
Li et al. (2023)	QN (DC)	Υ	Υ	Υ	N	Υ	4/5	Υ
Noipom et al. (2023)	QN (DC)	Υ	Υ	Υ	N	N	3/5	Υ
Tian et al. (2023)	QN (DC)	Υ	Υ	Υ	Υ	Υ	5/5	Υ
Wang et al. (2023)	QN (DC)	Υ	Υ	Υ	Υ	Υ	5/5	Υ
Wu et al. (2023)	QN (DC)	Υ	Υ	Υ	Υ	Υ	5/5	Υ
Choi et al. (2022)	QN (DC)	Υ	Υ	Υ	С	Υ	4/5	Υ
Jiang et al. (2022)	QN (DC)	Υ	Ν	Υ	N	Υ	4/5	Υ
Li et al. (2022)	QN (DC)	Υ	Υ	Υ	Υ	Υ	5/5	Υ
Liang et al. (2022)	QN (DC)	Υ	Υ	Υ	Υ	Υ	5/5	Υ
Wang & Jiang (2022)	QN (DC)	Υ	Υ	Υ	N	Υ	4/5	Υ
Zhang et al. (2022)	QN (DC)	Υ	Υ	Υ	Υ	Υ	5/5	Υ
QA=Quality assessment; QN (DC) = Quantitative descriptive; Y = Yes; N = No; C = Cannot tell								

Data extraction and analysis

The goal of this review is to identify the reasons why perpetrators engage in cyberbullying. To address this research question, the authors conducted a data extraction process to identify factors related to cyberbullying incidents as reported in various studies. A qualitative thematic analysis was employed to evaluate the collected data, as it is the most appropriate method for integrating diverse research designs. (14) Initially, the authors familiarized themselves with the articles' data through active and repeated readings. The second process involved generating initial codes and organizing data at a detailed level. During this phase, the researchers carefully examined all selected articles to gather relevant information related to the primary research question. They scrutinized the data to identify key findings and insights. The third process is theme generation, where the authors employ inductive coding frameworks. An inductive approach to data coding and analysis follows a bottom-up strategy that is informed by the data itself. (15) This method allows researchers to derive codes and themes directly from the content of the data.

The authors identified and developed four main themes during their theme-generation process. They then reviewed these themes for their suitability. For each theme, the researchers repeated the process to identify potential sub-themes, resulting in a total of 14 sub-themes. These themes and sub-themes were presented to two experts in qualitative synthesis, who were asked to validate their relevance to the research questions. After this evaluation, all four themes and 14 sub-themes were retained as shown in table 4 and figure 2. This figure displaying the final thematic map, also showing subthemes within these main themes.

Table 4. Findings														
Authors/Themes Individual factors			Family engagement		Peer affiliation		School climate							
Sub-themes	SK	LE	MD	SC	RT	SR	IC	PC	PS	FC	DF	VF	AE	TA
Wu et al. (2025)					/									
Wang et al. (2025)								/						
Abdülaliam (2024)			/	/	/									
Bai et al. (2024)						/	/							
Bukhori et al. (2024)				/				1						

Chen et al. (2024)		1		
Kollo et al. (2024) /				/ /
Misra et al. (2024)		1 1		
Safaria & Ariani (2024)	/	1		
Gao et al. (2023)	/	1		
Li et al. (2023)		1		
Noipom et al. (2023)			1	
Tian et al. (2023)	1		1 1	
Wang et al. (2023)	/ /		1	
Wu et al. (2023)	1			
Choi et al. (2022)		1	1	/ /
Jiang et al. (2022)	1			
Li et al. (2022)		1		/
Liang et al. (2022)	/	1	1	
Wang & Jiang (2022)		1		
Zhang et al. (2022)	1		1	
		PS: Poor parent supervision FC: Family conflict DF: Deviant friends or classmates	VF: Virtual friends' influ AE: Administration enga TA: Teacher affiliations	

RESULTS AND DISCUSSION

Background of the selected studies

This SLR of 21 articles has identified a total of 14 papers conducted their studies in China, three in Indonesia while each one in Arab Suadi, India, South Korea and Thailand. Furthermore, the review revealed the research design employed, where a total of 21 studies conducted quantitative analyses and no qualitative analyses were recorded. A total of six articles were published in both 2022 and 2023 while seven articles were published in 2024, followed by two articles were published in 2025.

The developed themes

The authors conducted inductive data analysis, mainly focused on identifying the factors of cyberbullying incidents conducted by school students, which have been applied and recorded scientifically for the past four years. Based on the thematic analysis of the 21 selected articles, the following four main themes were drawn out: 1) individual factors, 2) family engagement, 3) peer affiliation, and 4) school climate. These four themes further produced 14 sub-themes (figure 2 and table 4).

Based on the results, these four themes and 14 sub-themes answered this review's central research question, "What are the factors or reasons for cyberbullying to happen among school children (6 to 17 years old) based on studies in Asian regions?". The following section elaborates more on the themes and sub-themes identified in the 21 selected studies.

Individual factors

Students with poor interpersonal skills are more likely to be involved in cyberbullying incidents as victims or bullies. In this context, education can play a role in helping students develop a sense of social self-efficacy. (16) However, if student individually lacks enough moral and knowledge, they might involve in cyberbully aggression. The first sub-theme under individual factors was shallow knowledge or social skills of the school children. (17) The second sub-theme was related to the student's lack of empathy, where the students had a lower understanding and response to others' emotions. (18) The third sub-theme is moral disengagement, in which individuals with low moral standards can likely engage in immoral behaviors in an easily provoked environment. (18,19,20,21,21)

The fourth sub-theme in individual factors is poor self-control, where self-control and emotional regulation are key variables directly influencing constraints against and motivations for delinquent behavior among students. (19,22,23,24,25,26,27) The fifth sub-theme is retaliation, where victims do similar bullying acts to the perpetrators or other innocent people over the Internet. (19,28) The sixth sub-theme is stress relief, where the perpetrator conducts cyberbullying to reduce their distress level. (29,30,31) The final sub-theme in this main theme is incivility, where students have low levels of prosocial behavior, which causes them to be more likely to be involved in delinquency. (20,29)

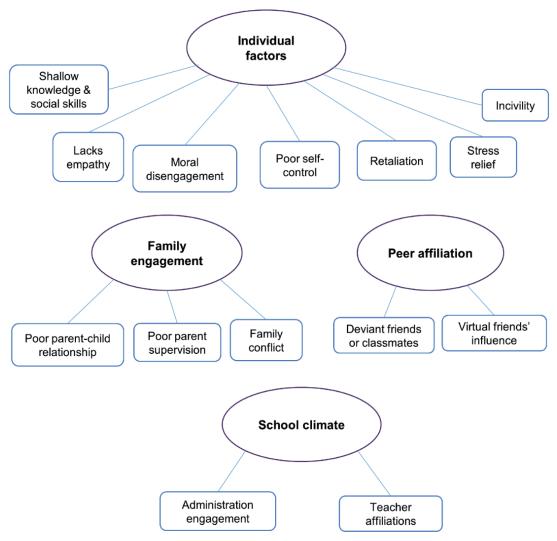


Figure 2. Final thematic map showing final four main themes of the SLR

Family engagement

This theme explained how family relationship with students will affecting their aggression behaviors to other people. The first sub-theme relates to the parent-child relationship, where poor relationships between students and their parents significantly affect their delinquent behavior. (21,22,24,31,32,33,34,35) The second sub-themed is poor parent supervision, where parents have a good relationship with their children but are unable to constantly monitor their children's behavior in the virtual world due to specific reasons. (31,36)

The third sub-theme is family conflict, which revolves around family members' treatment or the lousy environment at home surrounding school students. This situation is due to some children, as victims of family incivility, suffering from sarcasm or disregard from their family members, which keeps them from being integrated into the family. (18,26,28)

Peer affiliation

This theme relates to how peers or friends affect school students' perspectives or behavior. The first subtheme describes how deviant friends or classmates influence these students to be involved in cyberbullying. (21,26,32) The second sub-theme is virtual friends influence, which discusses the effect of peers meeting only in online sessions. (21,37)

School climate

This theme believed in the existence of the effect of the school environment on cyberbullying, where research by Bayar and Ucanok⁽³⁸⁾ suggested the school environment affects aggression in the cyber world. The first sub-theme is administration engagement, which focuses on how the leadership and management of the school control or intervene in cyberbullying behavior by school students.^(17,32,33) The second sub-theme is teacher affiliation, which discusses the impact of teacher support on students.^(17,32)

CONCLUSION

Reducing cyberbullying to zero is nearly impossible, so it is essential to educate youth about its definition, contributing factors, and impact. By raising awareness of the prevalence of cyberbullying among school students, we hope to decrease the rate of such incidents. Over the past four years, research has shown that individual factors—such as limited knowledge, lack of empathy, moral disengagement, poor self-control, and stress—have led some students to engage in cyberbullying. However, it is important to recognize that schoolchildren should not bear the full blame for their actions. Other influences, including family issues, peer pressure, and school climate, must also be taken into account if we want to eliminate the phenomenon of cyberbullying from our society. Furthermore, future research should focus on how these identified factors can be addressed to create effective interventions against cyberbullying. Such interventions are crucial for ensuring that every student has a safe and harmonious environment at school.

REFERENCES

- 1. Nansel TR, Overpeck M, Pilla RS, Ruan WJ, Simons-Morton B, Scheidt P. Bullying Behaviors Among US Youth. JAMA. 2001 Apr 25;285(16):2094. Available from: https://doi.org/10.1001/jama.285.16.2094
- 2. Shariff S. Confronting cyber-bullying: What schools need to know to control misconduct and avoid legal consequences. New York: Cambridge University Press; 2009. Available from: https://doi.org/10.1017/CBO9780511551260
- 3. Belsey B. www.cyberbullying.ca | "Always On? Always Aware!". The World's First Definition of "Cyberbullying." 2005 [cited 2025 Feb 5]. Available from: http://www.cyberbullying.ca
- 4. Scheithauer H, Schultze-Krumbholz A, Pfetsch J, Hess M. Types of Cyberbullying. In: Smith PK, Norman JO, editors. The Wiley Blackwell Handbook of Bullyin. John Wiley & Sons; 2021. p. 120-38. Available from: https://doi.org/10.1002/9781118482650.ch7
- 5. Slonje R, Smith PK. Cyberbullying: Another main type of bullying? Scandinavian Journal of Psychology. 2008 Apr;49(2):147-54. Available from: https://doi.org/10.1111/j.1467-9450.2007.00611.x
- 6. Hinduja S, Patchin JW. Social influences on cyberbullying behaviors among middle and high school students. Journal of Youth and Adolescence. 2013 Jan 8;42(5):711-22. Available from: https://pubmed.ncbi.nlm.nih.gov/23296318/
- 7. Petticrew M, Roberts H. Systematic Reviews in the Social Sciences. Petticrew M, Roberts H, editors. Oxford, UK: Blackwell Publishing Ltd; 2006. Available from: https://onlinelibrary.wiley.com/doi/book/10.1002/9780470754887
- 8. Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an Updated Guideline for Reporting Systematic Reviews. British Medical Journal. 2021 Mar 29;372(71). Available from: https://doi.org/10.1136/bmj.n71
- 9. Hong QN, Fàbregues S, Bartlett G, Boardman F, Cargo M, Dagenais P, et al. The Mixed Methods Appraisal Tool (MMAT) version 2018 for information professionals and researchers. Education for Information. 2018 Dec 18;34(4):285-91. Available from: https://doi.org/10.3233/EFI-180221
- 10. Lockwood C, Munn Z, Porritt K. Qualitative research synthesis: methodological guidance for systematic reviewers utilizing meta-aggregation. International Journal of Evidence-Based Healthcare. 2015 Sep;13(3):179-87. Available from: https://doi.org/10.1097/XEB.000000000000000002
- 11. Shaffril HAM, Krauss SE, Samsuddin SF. A systematic review on Asian's farmers' adaptation practices towards climate change. Science of The Total Environment. 2018 Dec;644:683-95. Available from: https://doi.org/10.1016/j.scitotenv.2018.06.349
- 12. Kraus S, Breier M, Dasí-Rodríguez S. The art of crafting a systematic literature review in entrepreneurship research. International Entrepreneurship and Management Journal. 2020 Feb 1;16(16):1023-42. Available from: https://doi.org/10.1007/s11365-020-00635-4
 - 13. Linares-Espinós E, Hernández V, Domínguez-Escrig JL, Fernández-Pello S, Hevia V, Mayor J, et al.

Methodology of a systematic review. Actas Urologicas Espanolas. 2018 Oct 1;42(8):499-506. Available from: https://pubmed.ncbi.nlm.nih.gov/29731270/

- 14. Whittemore R, Knafl K. The integrative review: Updated methodology. Journal of Advanced Nursing. 2005 Dec;52(5):546-53. Available from: https://doi.org/10.1111/j.1365-2648.2005.03621.x
- 15. Braun V, Clarke V. Reflecting on reflexive thematic analysis. Qualitative Research in Sport, Exercise and Health. 2019;11(4):589-97. Available from: https://www.tandfonline.com/doi/full/10.1080/2159676X.2019.1628806
- 16. Bandura A, Barbaranelli C, Caprara GV, Pastorelli C. Mechanisms of moral disengagement in the exercise of moral agency. Journal of Personality and Social Psychology. 1996;71(2):364-74. Available from: https://doi.org/10.1037/0022-3514.71.2.364
- 17. Kollo FL, Zulkarnain Z, Mahfud T, Matang M. Beware of cyberbullying! Evidence from high school students in Indonesia. International journal of evaluation and research in education. 2024 Jun 1;13(3):1465-5. Available from: http://doi.org/10.11591/ijere.v13i3.26686
- 18. Wang X, Dong W, Qiao J. How is childhood psychological maltreatment related to adolescents' cyberbullying perpetration? the roles of moral disengagement and empathy. Current Psychology. 2023;42:16484-164494. Available from: https://doi.org/10.1007/s12144-021-02495-9
- 19. Abdülaliam A. Cyberbullying motivations and moral disengagement among adolescent Cyberbullies: Exploring the mediating roles. Kıbrıs Türk Psikiyatri ve Psikoloji Dergisi. 2024 Mar 28;6(1):1-13. Available from: https://doi.org/10.35365/ctjpp.24.1.01
- 20. Gao L, Li X, Wang X. Agreeableness and Adolescents' Cyberbullying Perpetration: A Longitudinal Moderated Mediation Model of Moral Disengagement and Empathy. Journal of Personality. 2023 Feb 10;91(6):1461-77. Available from: https://doi.org/10.1111/jopy.12823
- 21. Liang H, Jiang H, Zhang C, Zhou H, Zhang B, Tuo A. How Does Parent-Adolescent Conflict and Deviant Peer Affiliation Affect Cyberbullying: Examining the Roles of Moral Disengagement and Gender. Psychology Research and Behavior Management. 2022 Aug; Volume 15:2259-69. Available from: https://doi.org/10.2147/PRBM.S371254
- 22. Bukhori B, Nuriyyatiningrum NAH, Zikrinawati K, Liem A, Wahib A, Darmuin D. Determinant factors of cyberbullying behaviour among Indonesian adolescents. International journal of adolescence and youth. 2024 Jan 2;29(1). Available from: https://doi.org/10.1080/02673843.2023.2295442
- 23. Jiang Q, Zhao F, Xie X, Wang X, Nie J, Lei L, et al. Difficulties in Emotion Regulation and Cyberbullying Among Chinese Adolescents: A Mediation Model of Loneliness and Depression. Journal of Interpersonal Violence. 2022;37(1-2):088626052091751. Available from: https://doi.org/10.1177/0886260520917517
- 24. Safaria T, Ariani IH. The Role of Self-Control, Authoritarian Parenting Style, and Cyberbullying Behavior Among Junior High School Students. Journal of technology in behavioral science. 2024 Jun 22; Available from: https://doi.org/10.1007/s41347-024-00422-w
- 25. Wu W, Yu L, Cao X, Guo Z, Long Q, Zhao X, et al. The latent profile of self-control among high school students and its relationship with gender and cyberbullying. Current Psychology. 2023 Nov 25;42(33):29650-60. Available from: https://doi.org/10.1007/s12144-022-03995-y
- 26. Tian L, Huang J, Huebner ES. Profiles and Transitions of Cyberbullying Perpetration and Victimization from Childhood to Early Adolescence: Multi-Contextual Risk and Protective Factors. Journal of Youth and Adolescence. 2023;52:434-48. Available from: https://link.springer.com/article/10.1007/s10964-022-01633-1
- 27. Zhang J, Xu Y, Zhang R, Wang Y, Li X, Xu Y, et al. Witnessing intimate partner violence and cyberbullying among Chinese adolescents: The mediating effect of self-control and moderating effect of parental psychological control. Cyberpsychology: Journal of Psychosocial Research on Cyberspace. 2022 Jun 30;16(3). Available from: https://doi.org/10.5817/CP2022-3-5

- 28. Wu J, Gao Y, Xiao Q, Zhang X. The Impact of Cyberbullying Victimization on Cyberbullying Among Chinese Junior High School Students: A Longitudinal Moderated Mediation Model. Youth & Society. 2025 Jan 10;0(0). Available from: https://doi.org/10.1177/0044118X241311600
- 29. Bai Q, Zhang Y, Dan Q, Kishimoto T. Understanding school incivility: Exploring its impact on students and practical interventions. Computers in Human Behavior. 2024 Mar 1;152:108037. Available from: https://doi.org/10.1016/j.chb.2023.108037
- 30. Chen R, Hu Y, Shi H, Fang Y, Fan C. Perceived chronic social adversity and cyberbullying perpetration among adolescents: the mediating role of rumination and moderating role of mindfulness. Frontiers in Psychology. 2024 Jun 6;15:1376347. Available from: https://pubmed.ncbi.nlm.nih.gov/38903464/
- 31. Misra R, Mahajan R, Srivastava S. Cyberbullying perpetration during the Covid-19 pandemic: A study on the relationship between strain, angerand parental support. Behaviour & Information Technology. 2024;43(2):1-18. Available from: https://doi.org/10.1080/0144929x.2022.2163692
- 32. Choi YJ, Shin SY, Lee J. Change in Factors Affecting Cyberbullying of Korean Elementary School Students during the COVID-19 Pandemic. International journal of environmental research and public health. 2022 Sep 3;19(17). Available from: https://doi.org/10.3390/ijerph191711046
- 33. Li S, Wang X, Nie Y. The Relationship between Parent-Child Attachment, Belief in a Just World, School Climate and Cyberbullying: A Moderated Mediation. International Journal of Environmental Research and Public Health. 2022 Jan 1;19(10):6207. Available from: https://www.mdpi.com/1660-4601/19/10/6207/htm
- 34. Li J, Wu Y, Hesketh T. Internet use and cyberbullying: Impacts on psychosocial and psychosomatic wellbeing among Chinese adolescents. Computers in Human Behavior. 2023 Jan;138:107461. Available from: https://doi.org/10.1016/j.chb.2022.107461
- 35. Wang J, Zheng S, Zhang M, Zhao NK. Parenting Styles and Adolescents' Cyberbullying: The Indirect Effect of Attitude Towards Human Dignity. Journal of Child and Family Studies. 2025 Jan 4;34:270-81. Available from: https://doi.org/10.1007/s10826-024-02971-3
- 36. Wang Z, Jiang S. Influence of parental neglect on cyberbullying perpetration: Moderated mediation model of smartphone addiction and self-regulation. Health & Social Care in the Community. 2022 Mar 17;30:2372-82. Available from: https://doi.org/10.1111/hsc.13787
- 37. Noipom R, Lim A, Sittichai R. Determinants of cyberbullying perpetration on Facebook among secondary school students in Southern Thailand. Social Psychology of Education. 2023 Feb 1;26. Available from: https://doi.org/10.1007/s11218-023-09766-2
- 38. Bayar Y, Ucanok Z. School Social Climate and Generalized Peer Perception in Traditional and Cyberbullying Status. Educational Sciences: Theory and Practice. 2012;12(4):2352-8. Available from: https://eric.ed.gov/?id=EJ1002851

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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