

Evaluation of school-based mental health literacy program in high school students: a scoping review protocol

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Abstract

Background & Aims: Mental health literacy training programs increase knowledge about mental health and mental illness among teenagers, which ultimately reduces the stigma associated with mental illness and increases help-seeking behavior. This study aims to investigate school-based mental health literacy programs in high school students.

Materials & Methods: This study is a scoping review aimed at examining school-based mental health literacy programs in high school students. Studies published from the first year of the article's publication related to the topic until April 10, 2024, were reviewed. Databases including Scopus, Web of Science, PubMed, and ProQuest, as well as three Iranian scientific databases — Scientific Information Database (SID), Islamic World Science Citation Database (ISC), and Magiran for Persian studies, were searched using keywords of school-based mental health literacy, school-based mental hygiene literacy, school-based mental health, school-based mental hygiene, intervention, program, and curriculum.

Results: Considering the inclusion and exclusion criteria, the studies will be examined and analyzed, and the information pertaining to these studies will be reported in accordance with the type of school-based mental health literacy training program, the training framework of the program, the program's objectives, and the findings.

Conclusion: In student mental health literacy programs, if incorporating mental health education into school curricula is the ultimate goal, it makes sense for teachers to provide a classroom-based curriculum as they are likely to be the ones putting this into practice in the real world.

Keywords: Adolescents, Guide, Health literacy, Mental health, Program, Review, Schools

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Introduction

Mental health literacy (MHL) has been considered an important strategy for promoting mental health because it enables teens to take better and more positive mental health actions (1, 2). The term "Mental Health Literacy" was defined in the late 1990s as "knowledge and beliefs about mental disorders which aid their recognition, management, or prevention" (3). Approximately one-fifth of children and teenagers have at least one psychiatric disorder. As a result, promoting teenage mental health is a major priority (4). Adolescents are more at risk of developing mental health problems than adults (5). Most mental illnesses first appear during the teenage years; however, most teens who have mental health issues do not seek help (6). According to studies, delaying proper care and treatment has negative consequences in adulthood (6-8). As a result, mental health education is required for teenagers to acquire knowledge about mental illnesses and improve attitudes towards them, which may lead to appropriate help-seeking (9). Okan et al. (10) emphasized the importance of MHL in achieving positive mental health and well-being, as well as facilitating access to timely and appropriate care when mental disorders arise.

Hart et al. (11) indicated that teenagers have a relatively poor level of MHL, making it difficult for them to recognize mental diseases and the fundamental causes behind their occurrence, risk factors, and protective factors related to them. Additionally, people are frequently less likely to seek treatment when they have incorrect assumptions about the efficacy of therapeutic approaches. Stigma and infamy associated with mental health disorders can be found at a young age (12). The well-being of adolescents is often overlooked in many developing countries when it comes to mental health. The 2019 national survey of children and adolescents in Iran revealed that 22.31 percent of participants were diagnosed with at least one psychiatric disorder (4).

The low level of MHL is known as one of the most important problems in the treatment of psychological disorders (13), and its increase through education can aid in easing the burden of mental illnesses and promoting mental health (14). More efforts are required in school curricula to promote mental health and prevent mental illness (15, 16). The importance of MHL in school settings has led to the publication of numerous guidelines and policies in the United Kingdom (17), Scotland (18), Wales (19), and Canada (20) and provided policies and statements to support the promotion of MHL in school-aged teens.

Most teens might obtain mental health care for the first time at school (21, 22). Over time, education influences teenagers' cognitive, social, and emotional development and aids in stabilizing their behavioral patterns, especially their health-related behaviors. The majority of teenagers can be reached at school (23). The MHL training programs provided by teachers in the curriculum are regarded as an effective and viable strategy for laying the groundwork for the early diagnosis and treatment of mental diseases (24). The outcomes of a school-based MHL program in Canada revealed a considerable improvement in students' knowledge and attitudes (25). Studies of a classroom-based education program for 15–18-year-old teens revealed a substantial increase in MHL and help-seeking intentions, and a decrease in stigmatizing attitudes (11).

The study investigates whether providing a schoolbased MHL curriculum to high school students could improve their MHL. Additionally, it examines whether the MHL program evaluates the role of teachers in MHL. This aim of this study is to investigate schoolbased MHL programs in high school students.

Materials & Methods

In the present review, with the aim of examining school-based MHL programs, the best evidences will be chosen from databases and keywords related to the subject under study, and by applying inclusionexclusion criteria based on the study purpose.

The selection criteria will include papers published from the first year of the article's publication related to the topic until April 10, 2024. Additionally, original scientific and research articles written in English and whose target population was students aged 12 to 18 years will be included in the study. On the other hand, studies for which the full text could not be obtained despite two attempts to contact the author, as well as abstracts of conference articles, review studies, and protocols, will be excluded from the study.

Search Strategy:

The research team will choose English keywords based on the study's objectives, and then develop the search strategy across several databases. The screening process will be conducted by two members of the research team using Endnote software (version 8). By removing duplicates, screening is done in three stages: title, abstract, and full text.

MESH terms will be utilized to select keywords. In this study, a single search strategy will be applied across many databases as follows: School -based MHL, school-based mental hygiene literacy, school-based mental health, school-based mental hygiene, Intervention, program, curriculum.

Keywords will be joined with the "AND" and "OR" operators, and the * and "..." symbols will be utilized to broaden the search. For search strategies, screening, as well as data selection, papers will be searched and retrieved initially and then all papers with the desired keywords in the title will be included in the study. Following the removal of duplicate publications, the titles and abstracts of the remaining papers will be examined to see whether they fit the inclusion criteria. The Cochrane Handbook was used to guide this scoping review, and it will be reported following PRISMA guidelines (26-28). Figure 1 depicts the PRISMA flow diagram.

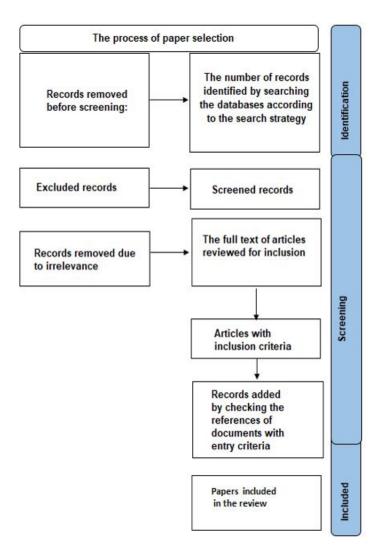


Fig. 1. PRISMA flow diagram

Searched Databases:

Given that a large portion of Iranian Persian journals are currently indexed in the three scientific databases of Scientific Information Database (SID), Islamic World Science Citation Center (ISC), and Magiran, these three databases are used to retrieve Persian studies on school-based MHL programs. Additionally, Scopus, Web of Science, PubMed, and ProQuest databases will be searched for English papers. Scopus and PubMed databases were selected due to their high subject coverage. The reason for choosing Web of Science is its extensive coverage of major journals in different subject areas. In selecting the ProQuest database, consideration will be given to the review of theses. Furthermore, to ensure that all available researches are considered, the references of the papers included in the review will also be examined. Table 1 reviews the articles, separately sorted by database.

Single search strategy in different databases
("School-based Mental health literacy" OR "School-based
mental hygiene literacy" OR "School-based Mental health" OR "School-based mental hygiene") AND (Intervention* OR
program* OR curriculum*)

Selection of Relevant Studies:

The studies will be organized using the EndNote reference manager. To select relevant studies, two researchers reviewed the papers separately based on the title and abstract. In cases where the researchers determined that the abstract and title met the inclusion criteria, the full text of the article was extracted. The full text of the papers was then carefully analyzed to decide on their inclusion based on the inclusion criteria of this study. In cases where the two researchers disagreed, a third researcher with scientific expertise in the field of Scoping Review decided whether the articles should be included.

Tabulating and Summarizing Information and Data:

At this stage, due to the large amount of information gathered, organization was crucial. One method of organizing the obtained information was to use a matrix. The matrix is a spreadsheet with rows and columns in which the characteristics of each study are extracted and summarized (29, 30). In this matrix, the following information was recorded: the title of the article, the author and the year of publication, the country, the type of study, the research community, the type of MHL training program used to conduct the research, and the results (Table 2).

Table 2. Matrix of information and data of articles

Title	e Author/vear	country Type of study	Type of	Type of MHL training	Population/community	Results
The	Authoryyear		study	program		

Results

Finally, considering the inclusion and exclusion criteria, the studies were reviewed and analyzed. The

information related to these studies, including the type of school-based MHL training program, the educational framework of the program, the objectives of the program, and the results, are reported in Table 3.

Tab	le 3. The results of school-based me	ntal health literacy training programs			
_	School-based MHL training	Educational framework of the	Objectives of the		
Row	programs	program	program	Results	

Discussion

This scoping review provides a comprehensive body of evidences examining school-based MHL initiatives for high school students. The studies conducted in the field of educational program with the aim of improving school-based MHL in students aged 12 to 18 years will be reviewed. The primary focus of all studies will be on school-based MHL instruction by certified teachers to high school students. This study will consider the components of MHL in educational programs and whether the implemented mental health educational programs are effective. Studies on schoolbased MHL programs are necessary to determine the programs' long-term effects because it is necessary for young people to receive support. Therefore, this study addresses the maintenance of MHL promotion over time. According to surveys, there have been numerous studies on student mental health interventions (20, 25, 31).A limitation of the study is that the results of all studies based on Guide Cymru's school-based MHL programs, which are based on a teacher-led classroom curriculum, are not available. Another limitation of this study is the duration of the training programs, which may affect the effectiveness of the program. One of the advantages of this study is that it will exclusively focus classroom-based, teacher-led mental health on education programs.

Conclusion

When it comes to student MHL programs, it makes sense for instructors to provide a classroom-based curriculum if the end objective is to incorporate mental health education into regular school curricula because they are probably the ones putting this into practice in the real world.

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Authors' Contributions

M.Kh. designed the study, and conceived the review. B.Z. and Kh.A. Performed the searches and screened studies for eligibility. B.Z. and M.Kh. takes responsibility for the paper as a whole. All authors commented and approved the final revised manuscript.

Data Availability

The raw data supporting the conclusions of this article are available from the authors upon reasonable request.

Conflict of Interest

The authors declared no conflict of interest.

Ethical Statement

This study is taken from the thesis of a Ph.D student in health education and health promotion. Institutional Review Board approval (code: IR.SSU.SPH.REC.1402.089) was obtained.

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References

- Jorm AF. Mental health literacy: empowering the community to take action for better mental health. American psychologist. 2012;67(3):231. https://doi.org/10.1037/a0025957
- Jorm AF. Mental health literacy: Promoting public action to reduce mental health problems. Literacia em saúde mental: Capacitar as pessoas e as comunidades para agir. 2014;8:27-39.
- Jorm AF, Korten AE, Jacomb PA, Christensen H, Rodgers B, Pollitt P. "Mental health literacy": a survey of the public's ability to recognise mental disorders and their beliefs about the effectiveness of treatment. Medical journal of Australia. 1997;166(4):182-6. https://doi.org/10.5694/j.1326-5377.1997.tb140071.x
- Mohammadi MR, Ahmadi N, Khaleghi A, Mostafavi SA, Kamali K, Rahgozar M, et al. Prevalence and correlates of psychiatric disorders in a national survey of Iranian children and adolescents. Iranian journal of psychiatry. 2019;14(1):1. https://doi.org/10.18502/ijps.v14i1.418
- Bamir M, Farahbakhsh S, Daneshi S, Sadeghi R. The Impact of Sleep Health as a Healthy Lifestyle on Coping with Coronavirus Vulnerability: A Narrative Review. Journal of Health Sciences & Surveillance System. 2023;11(3 (Supplement):535-41.
- 6. Yamaguchi S, Ojio Y, Foo JC, Michigami E, Usami S, Fuyama T, et al. A quasi-cluster randomized controlled trial of a classroom-based mental health literacy educational intervention to promote knowledge and help-seeking/helping behavior in adolescents. Journal of Adolescence. 2020;82:58-66.
 - https://doi.org/10.1016/j.adolescence.2020.05.002
- Rickwood D, Cavanagh S, Curtis L, Sakrouge R. Educating young people about mental health and mental illness: evaluating a school-based programme. International Journal of Mental Health Promotion. 2004;6(4):23-32.

https://doi.org/10.1080/14623730.2004.9721941

 Mohseni M, Khalafi P, Hajizamani S, Baghchi B. Impact of COVID-19 pandemic on patients with schizophrenia spectrum disorders: A review study. Clin Schizophr Relat Psychoses. 2022;16:S3.

- 9. Clement S, Schauman O, Graham T, Maggioni F, Evans-Lacko S, Bezborodovs N, et al. What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. Psychological medicine. 2015;45(1):11-27. https://doi.org/10.1017/S0033291714000129
- Okan O, Bauer U, Levin-Zamir D, Pinheiro P, Sørensen K. International Handbook of Health Literacy: Research, practice and policy across the lifespan: Policy Press; 2019. https://doi.org/10.56687/9781447344520
- 11. Hart LM, Mason RJ, Kelly CM, Cvetkovski S, Jorm AF. 'teen Mental Health First Aid': a description of the program and an initial evaluation. International journal of mental health systems. 2016;10(1):1-18. https://doi.org/10.1186/s13033-016-0034-1
- 12. Palha F. Is It Possible to "Find Space for Mental Health" in young people? Effectiveness of a school-based mental health literacy promotion program. Health Literacy in Context-Settings, Media, and Populations. 2019:129-40.
- Brijnath B, Protheroe J, Mahtani KR, Antoniades J. Do web-based mental health literacy interventions improve the mental health literacy of adult consumers? Results from a systematic review. Journal of Medical Internet Research. 2016;18(6):e165. https://doi.org/10.2196/jmir.5463
- Vimalanathan A, Furnham A. Comparing physical and mental health literacy. J Ment Health. 2019;28(3):243-8. https://doi.org/10.1080/09638237.2018.1466050
- 15. Eschenbeck H, Lehner L, Hofmann H, Bauer S, Becker K, Diestelkamp S, et al. School-based mental health promotion in children and adolescents with StresSOS using online or face-to-face interventions: study protocol for a randomized controlled trial within the ProHEAD Consortium. Trials. 2019;20:1-12. https://doi.org/10.1186/s13063-018-3159-5
- Marzban A, Salehi F, Razmi MR. Effects of COVID-19 on mental health among students. Health Science Monitor. 2023;2(3):153-5. https://doi.org/10.61186/hsm.2.3.153
- O'Reilly M, Svirydzenka N, Adams S, Dogra N. Review of mental health promotion interventions in schools. Social psychiatry and psychiatric epidemiology.

2018;53:647-62. https://doi.org/10.1007/s00127-018-1530-1

- Sharma S, Sharma CB. Role of Teachers Knowledge and School Intervention in Managing Childhood Problem Behaviours. Journal of Positive School Psychology. 2022:1643-50-50.
- Simkiss NJ, Gray NS, Malone G, Kemp A, Snowden RJ. Improving mental health literacy in year 9 high school children across Wales: a protocol for a randomised control treatment trial (RCT) of a mental health literacy programme across an entire country. BMC Public Health. 2020;20(1):1-8. https://doi.org/10.1186/s12889-020-08736-z
- 20. Mcluckie A, Kutcher S, Wei Y, Weaver C. Sustained improvements in students' mental health literacy with use of a mental health curriculum in Canadian schools. BMC psychiatry. 2014;14:1-6. https://doi.org/10.1186/s12888-014-0379-4
- Stanley K, Yifeng W. Mental health literacy and schools: effectively applying a similar model to help build good youth mental health outcomes in Japan and Canada. 学 校保健研究= Japanese journal of school health. 2018;60(3):141-9.
- 22. Hayes D, Moore A, Stapley E, Nisbet K, Thornton E, Lange A, et al. Correction: School-based intervention study examining approaches for well-being and mental health literacy of pupils in Year 9 in England: study protocol for a multischool, parallel group cluster randomised controlled trial (AWARE). 2022. https://doi.org/10.1136/bmjopen-2019-029044
- 23. Kabiri L, Shokri O, Pourshahriar H. Effect of cognitive social skills training on positive relationships with others and adjustment of students. Advances in Cognitive Science. 2019 Oct 10;21(3):105–19. https://doi.org/10.30699/icss.21.3.105
- 24. Kutcher S, Bagnell A, Wei Y. Mental health literacy in secondary schools: a Canadian approach. Child and

Adolescent Psychiatric Clinics. 2015;24(2):233-44. https://doi.org/10.1016/j.chc.2014.11.007

- 25. Kutcher S, Wei Y, Morgan C. Successful application of a Canadian mental health curriculum resource by usual classroom teachers in significantly and sustainably improving student mental health literacy. The Canadian Journal of Psychiatry. 2015;60(12):580-6. https://doi.org/10.1177/070674371506001209
- 26. Moher D, Liberati A, Tetzlaff J, Altman DG, Group* P. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. Annals of internal medicine. 2009;151(4):264-9. https://doi.org/10.7326/0003-4819-151-4-200908180-00135
- Nasr Esfahani M, Alaca BE. A review on size-dependent mechanical properties of nanowires. Advanced Engineering Materials. 2019;21(8):1900192. https://doi.org/10.1002/adem.201900192
- 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. International journal of surgery. 2021;88:105906. https://doi.org/10.1016/j.ijsu.2021.105906
- Tomasic D. Health sciences literature review made easy: The matrix method. Oxford University Press; 2011. https://doi.org/10.1093/ajhp/68.23.2302a
- Ahmadzadeh K, Bahrami M, Zare-Farashbandi F, Adibi P, Boroumand MA, Rahimi A. Patient education information material assessment criteria: A scoping review. Health Information & Libraries Journal. 2023;40(1):3-28. https://doi.org/10.1111/hir.12467
- Wei Y, Baxter A, Kutcher S. Establishment and validation of a mental health literacy measurement in Canadian educators. Psychiatry Research. 2019;279:231-6. https://doi.org/10.1016/j.psychres.2019.03.009