

Mental Health Knowledge among Chinese Secondary School Students: A Systematic Review and Meta-Analysis

INPLASY202530127

doi: 10.37766/inplasy2025.3.0127

Received: 30 March 2025

Published: 30 March 2025

Yan, LX; Sun, GQ; Zhang, JH.

Corresponding author:

Junhua Zhang

junhuazh2003@163.com

Author Affiliation:

Yancheng Teachers University.

ADMINISTRATIVE INFORMATION**Support** - National Education Sciences Planning Subjects of China, NO.BBA210039.**Review Stage at time of this submission** - Preliminary searches.**Conflicts of interest** - None declared.**INPLASY registration number:** INPLASY202530127**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 30 March 2025 and was last updated on 30 March 2025.**INTRODUCTION**

Review question / Objective to investigate the current status and trend of awareness of mental health knowledge among Chinese middle school students over the past 20 years.

Rationale In an effort to address the mental health challenges faced by middle school students, the Chinese government has set forth clear objectives in various policy documents aimed at enhancing public awareness of mental health. These initiatives include the "Mental Health Work Plan of China (2002-2010)," which sought to raise the awareness of mental health knowledge among the general population to 30% by 2005 and to 50% by 2010. Subsequent plans, such as the "National Mental Health Work System Development Guide (2008-2015)" and the "2015 National Mental Health Work Plan (2015-2020)," further raised the target, aiming for an awareness rate of 80% by 2015 and 2020, respectively. More recently, the "2019 Healthy China Action Plan" targeted an 80% awareness rate of core mental health knowledge

among children and adolescents by the end of 2022, and provinces like Shaanxi have set even more ambitious goals, such as achieving a 90% awareness rate among students by 2025. However, despite these efforts, there has been no authoritative report confirming whether these targets have been met. Research on the awareness and determinants of mental health knowledge among middle school students has yielded inconsistent conclusions, revealing variances associated with factors such as gender, urbanity, and school stage (Huang et al., 2009; Chen et al., 2020; Hu et al., 2012; Fu et al., 2005; Wang et al., 2012; Xuan et al., 2021; Liu et al., 2013; Yang et al., 2012). Furthermore, approximately 17.5% of Chinese students aged 6-16 suffer from mental illnesses (Li et al., 2022), yet there is a notable discrepancy between the prevalence of mental health issues and the utilization of mental health services. Students often hesitate to seek help due to feelings of shame, which may lead to delays in treatment and exacerbation of crises (Hawton et al., 2007). A primary contributing factor to this phenomenon is the limited knowledge about

mental illness, which acts as a barrier to seeking help (Shi et al., 2020; Heflinger et al., 2010; Gulliver et al., 2010).

Condition being studied Despite the government's efforts to enhance public awareness through various initiatives and policies, there remains a significant gap between the prevalence of mental health issues and the utilization of mental health services. Approximately 17.5% of Chinese students aged 6-16 suffer from mental illnesses, yet many are reluctant to seek help due to stigma and shame, leading to potential delays in treatment and worsening of mental health crises. Limited knowledge about mental illness is identified as a major barrier to seeking help. Previous research has explored the awareness and determinants of mental health knowledge, revealing variances associated with gender, urbanity, school stage, and other factors, but conclusions across studies are inconsistent. This highlights the need for a comprehensive understanding of the current state of mental health awareness and the factors influencing it among this demographic. (Huang et al., 2009; Chen et al., 2020; Hu et al., 2012; Fu et al., 2005; Wang et al., 2012; Xuan et al., 2021; Liu et al., 2013; Yang et al., 2012).

METHODS

Search strategy (mental health knowledge OR knowledge OR awareness OR mental health literacy) AND (adolescent OR child OR teen OR student) AND (China OR Chinese).

Participant or population Chinese secondary school students, including both junior and senior middle school students.

Intervention Chinese secondary school students.

Comparator The study compares the awareness rate of mental health knowledge among different groups of students, such as junior and senior middle school students, key and non-key school students.

Study designs to be included Cross-sectional studies on mental health knowledge.

Eligibility criteria (1) secondary school students from mainland China; (2) cross-sectional studies on mental health knowledge; (3) studies providing or enabling calculation of the total awareness rate.

Information sources PubMed (Medline), OVID, Web of Knowledge, CNKI, Wan-fang, and Chongqing VIP.

Main outcome(s) Overall awareness rate.

Additional outcome(s)

Recognition of psychological issues
where to seek psychological counseling
when to seek psychological counseling
whom to seek psychological counseling from
willingness to seek psychological counseling.

Quality assessment / Risk of bias analysis JBI Critical Appraisal Tool for quality assessment.

Strategy of data synthesis Statistical analysis was conducted using Comprehensive Meta-Analysis 3.0 software. A random-effects model calculated the total awareness rate, corresponding P-values, 95% confidence intervals, and Cochrane Q statistic. Heterogeneity was measured with I² values (Higgins et al., 2021). Publication bias was assessed using Egger's regression test (Egger et al., 2021). When the moderator is a continuous variable, meta-regression was used to examine significance; when it's a categorical variable, subgroup analysis was used instead.

Subgroup analysis

Region
Scale
Gender
School stage
Urban and rural factor
Key and non-key school factor.

Sensitivity analysis In sensitivity analysis, each study is sequentially excluded, and the effect size of the remaining studies is observed. If the direction and magnitude of the effect size do not show significant changes, it indicates that the results are robust.

Language restriction Chinese and English.

Country(ies) involved China.

Other relevant information None

Keywords Mental Health Knowledge, secondary school students, Chinese.

Contributions of each author

Author 1 - Lixia Yan.
Author 2 - Guanqi Sun.
Author 3 - Junhua Zhang.
Email: junhuazh2003@163.com