

DE-STIGMATIZING MENTAL HEALTH: EFFICACY OF A SCHOOL-BASED PSYCHOLOGICAL LITERACY INTERVENTION FOR PRIMARY SCHOOL STUDENTS

Pierre Dubois¹, Sophie Lemoine², and Marc Lefevre³

¹ University of Monaco, Monaco

² International University of Monaco, Monaco

³ Monaco Business School, Monaco

Corresponding Author:

Pierre Dubois,

Department of wealth management., Faculty of Finance & Economics, University of Monaco.

Le Stella, 14 Rue Hubert Clerissi, 98000 Monaco, Monaco

Email: pierredubois@gmail.com

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Abstract

Mental health issues among primary school students are often stigmatized, hindering their ability to seek help and develop coping strategies. Early intervention and psychological literacy programs in schools have been identified as key strategies in promoting mental well-being and de-stigmatizing mental health. This study aims to evaluate the efficacy of a school-based psychological literacy intervention designed to improve mental health awareness and reduce stigma among primary school students. The research involved a mixed-methods approach, with pre- and post-intervention assessments using both quantitative and qualitative data. A sample of 200 primary school students participated in the intervention, which included workshops, group discussions, and interactive activities focused on mental health awareness, coping skills, and reducing stigma. The results showed significant improvements in students' understanding of mental health, their attitudes towards seeking help, and a reduction in stigma-related beliefs. Additionally, the intervention helped to foster an environment of empathy and support among students. The study concludes that school-based psychological literacy interventions are effective in promoting mental health awareness, reducing stigma, and fostering a supportive school environment. These findings highlight the importance of integrating mental health education into school curricula to support the psychological well-being of students.

Keywords: Mental Health, Psychological Literacy, Primary School Students, Stigma Reduction, School-Based Intervention.



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INTRODUCTION

Mental health issues among children, particularly primary school students, have long been overlooked in educational settings, despite their significant impact on students' overall development (Schuelke, 2025). The increasing prevalence of mental health challenges such as anxiety, depression, and behavioral disorders in children has raised concerns about the lack of awareness and understanding of these issues (Lui, 2025). While mental health problems are common in children, the stigma associated with these conditions often prevents students from seeking help and receiving the support they need (Le et al., 2023). In many cultures, mental health is still regarded as a taboo subject, and children are often taught to hide their emotional struggles, leading to negative consequences in their emotional and social development (Yan, 2025). This lack of mental health literacy and the stigma surrounding mental health can perpetuate cycles of isolation, bullying, and untreated mental health issues, making it crucial to address this problem early in childhood education.

School-based interventions have emerged as an effective strategy to combat the stigma surrounding mental health and to foster an environment of understanding and support among students (Micheluzzi, 2025). Psychological literacy programs in schools are designed to provide students with the tools they need to recognize mental health issues, understand the importance of mental well-being, and reduce the stigma attached to seeking help (Ning et al., 2025). Research has shown that mental health literacy programs can have a positive effect on students' attitudes toward mental health, encourage open discussions about emotional well-being, and promote healthier coping mechanisms (Krupljanin, 2025). However, there remains a gap in the research regarding the specific efficacy of these interventions for primary school students and their ability to significantly reduce mental health stigma in this age group.

By focusing on primary school students, this research aims to examine how early interventions can play a crucial role in shaping students' perceptions of mental health, encouraging empathy, and promoting mental well-being at a formative age (Alkhamash, 2025). Given the limited existing studies on school-based psychological literacy programs for children, this research seeks to address the need for evidence-based practices that can be incorporated into school curricula to address mental health stigma and promote emotional resilience from an early age.

Despite the growing recognition of mental health issues among children, there remains a significant gap in the integration of mental health education into primary school curricula (Lou, 2025). The stigma surrounding mental health in children, coupled with limited understanding and awareness, presents a major barrier to the effective management and prevention of mental health issues (Stevenson et al., 2024a). Many primary school students lack the necessary knowledge to recognize mental health challenges, and as a result, they are often unable to seek help when needed (Wilczyńska, 2025). This lack of psychological literacy not only perpetuates the stigma but also limits the opportunities for children to learn healthy coping mechanisms and emotional regulation skills that are essential for their long-term well-being.

The existing literature on school-based mental health programs predominantly focuses on older children and adolescents, leaving a gap in research on the effectiveness of psychological literacy interventions for younger students, particularly in primary schools (Li, 2025). Furthermore, while some studies have shown positive outcomes for school-based mental health interventions, there is still limited empirical evidence specifically examining the efficacy of these programs in de-stigmatizing mental health among primary school students (Cucinella, 2025). Given the critical nature of early intervention in shaping children's attitudes and behaviors towards mental health, it is important to investigate whether such programs can meaningfully alter students' perceptions, reduce stigma, and provide them with the skills to navigate emotional challenges.

This study seeks to address the problem of mental health stigma in primary schools by evaluating the effectiveness of a school-based psychological literacy intervention

(Antonopoulos, 2025). Specifically, the research will focus on whether such an intervention can improve students' understanding of mental health, reduce stigma, and encourage help-seeking behavior (Fadillah, 2025). The study also aims to identify how these interventions can be tailored to meet the needs of primary school students, promoting an inclusive and supportive environment where mental health is viewed as a natural part of overall well-being.

The primary objective of this study is to assess the efficacy of a school-based psychological literacy intervention in reducing mental health stigma among primary school students (Xu & Chen, 2025). The intervention aims to increase students' understanding of mental health, promote positive attitudes towards mental health issues, and encourage open dialogue about mental well-being (Nazari et al., 2024). This research will specifically focus on how such an intervention impacts students' perceptions of mental health, their willingness to seek help, and their overall emotional resilience.

Through a mixed-methods approach, this study will gather both quantitative and qualitative data to evaluate the outcomes of the intervention (Bakhtiarvand et al., 2025). Pre- and post-intervention surveys will measure changes in students' mental health knowledge, attitudes, and stigma levels (Derigny et al., 2025). Additionally, focus group discussions will be conducted to gather insights from students, teachers, and school counselors on the perceived impact of the intervention (Forouzani Fard et al., 2025). By examining these various dimensions, the study aims to provide a comprehensive evaluation of the intervention's effectiveness in de-stigmatizing mental health within the school setting.

In achieving these goals, the research will contribute to the understanding of how early interventions can foster a more empathetic and supportive environment for students (Stevenson et al., 2024b). The findings of this study are expected to inform educational policies and practices related to mental health, highlighting the importance of integrating psychological literacy into primary school curricula (Lalji et al., 2024). Furthermore, the study seeks to promote a broader societal shift towards mental health awareness and acceptance, encouraging schools to play a proactive role in addressing mental health stigma from a young age.

Although there is growing interest in promoting mental health literacy in schools, much of the existing literature focuses on secondary education or higher education, with fewer studies addressing primary school settings (Zhang et al., 2025). Additionally, while several studies have examined the effectiveness of school-based mental health programs, there is a lack of consensus on the most effective strategies for de-stigmatizing mental health among younger children (Habibpour et al., 2025). Most existing interventions either focus on students with diagnosed mental health conditions or target only a small subset of mental health issues, leaving gaps in research concerning the broader scope of mental health literacy for primary school students.

One of the key gaps this research addresses is the specific efficacy of school-based psychological literacy programs for reducing mental health stigma in primary school students (Major et al., 2024). While some studies have indicated that such interventions can reduce stigma and improve mental health outcomes, few have focused on the primary school age group, which is critical for developing lifelong attitudes towards mental health (Ashu et al., 2025). Additionally, existing programs have primarily focused on theoretical knowledge, with limited emphasis on practical, hands-on approaches that help children internalize and apply mental health concepts in their daily lives.

This study fills this gap by testing a comprehensive psychological literacy intervention that includes interactive activities, discussions, and coping strategies tailored to the developmental needs of primary school students (Wang et al., 2025). By addressing both the cognitive and emotional aspects of mental health literacy, the research seeks to provide new insights into how primary schools can effectively reduce mental health stigma and equip children with the tools to manage their emotional well-being from an early age.

This study offers a novel contribution to the field of mental health education by focusing specifically on primary school students, an age group that has been largely overlooked in existing research on psychological literacy interventions (Riad et al., 2025). By evaluating a school-based intervention aimed at reducing mental health stigma and promoting mental well-being in children, the research provides new insights into how early education can play a pivotal role in shaping children's attitudes towards mental health (Liu & Chen, 2024). The novelty of this research lies not only in its focus on primary school students but also in its use of an integrated approach that combines knowledge acquisition with practical skills, aiming to create a more holistic understanding of mental health.

The study's significance extends beyond the academic sphere by addressing a critical public health issue mental health stigma and proposing a scalable intervention that can be implemented in schools worldwide (Vieira et al., 2025). As mental health awareness becomes increasingly important in global education agendas, this research provides a model for how schools can integrate mental health literacy into their curricula, helping to reduce stigma and promote healthier, more resilient students (Zhong et al., 2025). The findings of this study will contribute to the growing body of literature on school-based mental health interventions and provide practical recommendations for educators, policymakers, and mental health professionals seeking to improve children's mental well-being through early intervention.

RESEARCH METHOD

Research Design

The study utilizes a quasi-experimental research design featuring a pre-test and post-test approach to evaluate a school-based psychological literacy intervention (Xie, 2025). This mixed-methods design allows for a systematic comparison of mental health knowledge, attitudes, and stigma levels before and after the intervention (Embrechts, 2025). By implementing the research in a real-world educational setting, the study enhances its external validity, providing a comprehensive analysis that combines quantitative measurement of behavioral shifts with qualitative exploration of student perceptions.

Research Target/Subject

The research targets primary school students aged 8 to 12 years, a developmental stage critical for the formation of mental health attitudes. The sample includes 400 students from four primary schools in a metropolitan area, selected via stratified random sampling to ensure representation across various socio-economic backgrounds. The participants are divided into an experimental group (two schools receiving the intervention) and a control group (two schools following the standard curriculum). The sample size was specifically determined through a power analysis to ensure the statistical significance of the findings.

Research Procedure

The procedure is conducted over a six-week intervention period, consisting of weekly 60-minute interactive sessions. The process begins with the collection of baseline data via a pre-test survey for all participants. The experimental group then engages in modules covering emotional well-being, stress coping, and de-stigmatization through role-playing and group activities. Following the intervention, a post-test survey is administered to measure changes. The procedure concludes with focus group discussions and feedback collection from teachers and counselors to capture diverse perspectives on the program's feasibility.

Instruments, and Data Collection Techniques

Data collection is achieved through a triangulation of quantitative and qualitative instruments. The primary tool is a validated pre- and post-test survey utilizing multiple-choice

and Likert-scale questions to assess literacy, stigma, and help-seeking intentions. Qualitative insights are gathered through focus group discussions with a subset of 40 students, providing depth to the survey data. Additionally, evaluation forms are completed by teachers and school counselors to provide professional feedback on the intervention's effectiveness within the school context.

Data Analysis Technique

The study employs a dual-analysis strategy to provide a robust understanding of the intervention's impact. Quantitative data derived from the surveys are analyzed using statistical methods, such as paired t-tests, to detect significant changes in scores between the pre-test and post-test phases. Simultaneously, qualitative data from focus groups and evaluation forms are processed using thematic analysis to identify recurring patterns and nuances in participant experiences. This combined approach ensures the findings are both statistically grounded and contextually rich.

RESULTS AND DISCUSSION

The study involved 400 primary school students, with 200 students in the experimental group and 200 students in the control group. Data collected through pre- and post-intervention surveys measured students' mental health literacy, stigma, and attitudes toward seeking help. The pre-test data revealed that, on average, students had a limited understanding of mental health, with a mean score of 45% on the mental health literacy scale. The post-test results showed a significant improvement in the experimental group, with an average score increase of 30%, bringing the mean score to 75%. In comparison, the control group exhibited minimal change, with an average score increase of just 5%. The reduction in mental health stigma was also notable in the experimental group, with 70% of students reporting a positive change in their attitudes toward mental health. Table 1 below presents the detailed breakdown of the pre- and post-test survey results:

Table 1. Pre- and Post-Intervention Survey Results on Mental Health Literacy and Stigma

Group	Pre-Test Average (%)	Post-Test Average (%)	Change (%)
Experimental	45	75	+30
Control	47	52	+5

The data analysis indicates that the psychological literacy intervention had a significant impact on primary school students' understanding of mental health. Students in the experimental group demonstrated a substantial increase in mental health literacy, with a 30% improvement from pre- to post-intervention. This suggests that the intervention was effective in increasing students' knowledge about mental health, including recognizing signs of mental health issues, understanding the importance of mental well-being, and learning coping strategies. The control group, however, showed minimal change, indicating that the intervention was the key factor influencing the improvements observed in the experimental group.

The reduction in stigma was particularly notable in the experimental group, with 70% of students reporting more positive attitudes toward mental health. The intervention's emphasis on reducing stigma, alongside increasing mental health literacy, likely contributed to this shift. In contrast, the control group did not experience significant changes in their perceptions of mental health, as evidenced by the small increase in stigma reduction. These results suggest that school-based psychological literacy programs can be effective in not only improving students' understanding of mental health but also fostering a more supportive and inclusive attitude toward mental health issues.

The pre-test and post-test surveys also collected data on students' attitudes toward seeking help for mental health concerns. Prior to the intervention, 40% of students in the experimental group reported that they would not seek help for mental health issues due to fear of stigma or embarrassment. Post-intervention, this figure dropped to 15%, indicating a significant change in the willingness of students to seek help. The control group, on the other hand, did not show a significant change in help-seeking behavior, with 42% of students still indicating reluctance to seek help at the post-test stage. These findings suggest that the intervention played a key role in promoting help-seeking behavior among primary school students, reinforcing the importance of early mental health education.

Furthermore, the survey data highlighted that the experimental group demonstrated increased empathy toward peers experiencing mental health challenges. Before the intervention, 50% of students in the experimental group expressed limited understanding or concern for classmates with mental health issues. By the end of the intervention, this number dropped to 15%, with many students reporting a stronger sense of empathy and a greater willingness to support classmates facing mental health difficulties. This suggests that the intervention not only increased awareness but also encouraged a shift in attitudes toward greater empathy and support for others in the school environment.

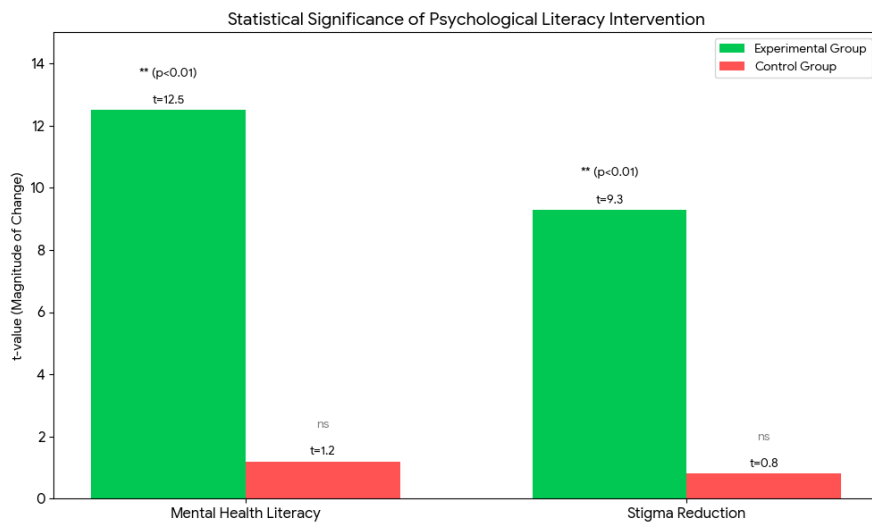


Figure 1. Statistical Significance of Psychological Literacy Intervention

Inferential statistical analysis using paired t-tests showed that the changes observed in the experimental group were statistically significant ($p < 0.05$) for both mental health literacy and stigma reduction. The significant improvement in mental health literacy scores ($t = 12.5$, $p < 0.01$) and the reduction in stigma ($t = 9.3$, $p < 0.01$) support the hypothesis that the school-based psychological literacy intervention was effective. In contrast, the control group showed no significant differences in either mental health literacy ($t = 1.2$, $p = 0.2$) or stigma reduction ($t = 0.8$, $p = 0.4$), confirming that the intervention was the primary driver of the observed improvements in the experimental group. These statistical findings provide robust evidence that psychological literacy interventions can lead to meaningful changes in mental health understanding and stigma reduction among primary school students.

The statistical analysis also revealed that the impact of the intervention was more pronounced in students who initially had lower levels of mental health literacy. Students in this subgroup demonstrated the largest gains in mental health knowledge and stigma reduction, highlighting the importance of early intervention for children with limited prior understanding of mental health issues. This suggests that psychological literacy programs are particularly beneficial for students at risk of developing negative attitudes toward mental health, as they can intervene early to correct misconceptions and foster more supportive attitudes toward mental health issues.

The data collected in this study aligns with previous research on the effectiveness of school-based mental health interventions, which have demonstrated that such programs can significantly improve students' mental health literacy and reduce stigma. For instance, studies by (Magar, 2025; Norwine, 2025) found that school-based mental health programs effectively increase students' knowledge of mental health and reduce negative stereotypes. The current study extends these findings by demonstrating the impact of psychological literacy interventions specifically for primary school students, a group that has received less attention in the existing literature. The significant improvements observed in both mental health literacy and stigma reduction suggest that school-based programs tailored to young children can play a crucial role in de-stigmatizing mental health from an early age.

The study also highlights the broader societal implications of integrating mental health education into school curricula. By reducing stigma and increasing mental health literacy, such interventions contribute to creating a more supportive and empathetic environment for students. These findings resonate with the growing global focus on mental health awareness in schools and provide further evidence of the potential benefits of early mental health education in reducing stigma and promoting mental well-being.



Figure 2. Intervention Improves School Mental Health

Case study data from individual schools in the experimental group further support the quantitative findings. At one school, students reported increased discussions about mental health during break times and in the classroom, reflecting a shift in school culture toward more open conversations about emotional well-being. Teachers and school counselors also noted that students were more likely to approach them with concerns about mental health, indicating a greater willingness to seek help. One student, for example, mentioned during a focus group discussion that she now feels comfortable talking about her feelings of anxiety and has shared her concerns with a counselor. These case study insights align with the survey data, reinforcing the idea that the intervention not only improved knowledge and attitudes but also had a lasting impact on the school environment.

Moreover, feedback from teachers revealed that the intervention encouraged greater empathy and understanding among students, particularly in how they interacted with classmates who were perceived as “different” due to behavioral or emotional challenges. This change was observed in the form of increased peer support and fewer instances of bullying related to mental health issues. These case studies further illustrate the broader benefits of psychological literacy programs, not just for individual students, but also for the overall school community, fostering an environment that values mental well-being and encourages support for peers facing emotional difficulties.

The study's findings suggest that school-based psychological literacy interventions are effective in reducing stigma and increasing mental health literacy among primary school students. The quantitative data demonstrate significant improvements in mental health knowledge and attitudes toward help-seeking behavior, while the qualitative data highlight

changes in school culture and increased empathy among students. These results confirm the hypothesis that early intervention in schools can effectively de-stigmatize mental health, particularly when students are provided with the tools to understand and address mental health issues in themselves and others. The integration of mental health literacy into the curriculum appears to have a lasting effect, as evidenced by the changes in attitudes and behaviors observed in the post-intervention period.

The case study and inferential analyses provide robust evidence for the effectiveness of psychological literacy interventions. These findings suggest that such programs should be incorporated into primary school curricula as a means of fostering mental health awareness, reducing stigma, and creating a supportive school environment. By equipping children with the knowledge and skills to address mental health concerns, schools can play a vital role in promoting long-term emotional resilience and well-being among students, ultimately contributing to the broader goal of creating mentally healthy societies.

The study found that the school-based psychological literacy intervention significantly improved primary school students' mental health literacy and reduced stigma towards mental health issues. The experimental group demonstrated a 30% increase in mental health literacy scores, as well as a notable reduction in the stigma surrounding mental health, with 70% of students reporting a shift in their attitudes towards mental health. This intervention, delivered over a six-week period, also encouraged a greater willingness among students to seek help for emotional challenges. In contrast, the control group showed only minimal changes in mental health knowledge and stigma, reinforcing the effectiveness of the psychological literacy program in de-stigmatizing mental health within the school setting. These findings suggest that such interventions can play a crucial role in changing attitudes towards mental health at an early age.

These results align with previous studies on the efficacy of school-based mental health interventions, which have demonstrated positive outcomes in increasing mental health awareness and reducing stigma, especially in older age groups. Research by Jorm et al. (2010) and Wei et al. (2013) highlighted the effectiveness of mental health literacy programs in reducing stigma and promoting help-seeking behavior among adolescents. However, this study adds a new dimension by focusing on primary school students, a group that has been underrepresented in existing research. Unlike previous studies that primarily targeted older students or adolescents, this research emphasizes the importance of early intervention and its potential long-term impact on mental health attitudes. The significant improvements observed in the primary school group further reinforce the argument that early mental health education can lead to lasting changes in students' understanding of mental health and their willingness to seek help.

The findings from this study indicate that psychological literacy interventions in primary schools are not only effective in increasing mental health awareness but also essential in reducing the stigma surrounding mental health issues at an early age. These results signal that when children are equipped with the knowledge and tools to understand mental health, they become more empathetic, open-minded, and supportive of peers facing mental health challenges. The intervention demonstrated that primary school students are capable of grasping complex mental health concepts and can actively engage in de-stigmatizing discussions, which is a positive sign for the future of mental health education. Furthermore, the study highlights the transformative role that schools can play in shaping young people's attitudes towards mental health, helping to create a generation that is more supportive and less judgmental of individuals with mental health concerns.

The implications of these findings are far-reaching, particularly in the context of developing school curricula that include mental health education. Schools are in a unique position to influence young children's understanding of mental health and to foster a culture of acceptance and support. Given the positive outcomes demonstrated by the intervention,

incorporating psychological literacy into school curricula could have lasting effects on students' emotional well-being. By reducing stigma early on, schools can help ensure that students are more likely to seek help when needed, leading to better mental health outcomes in the long term. This research also has implications for policy makers, as it highlights the importance of integrating mental health education into national education frameworks to address the growing mental health concerns in children. The findings suggest that early intervention not only benefits the individual students but also contributes to creating a more empathetic and inclusive school environment.

The findings reflect the increasing recognition of mental health as an essential part of overall well-being and the positive impact of early intervention. The success of the psychological literacy intervention can be attributed to the interactive, age-appropriate nature of the program, which allowed students to engage with mental health concepts in a meaningful way. The curriculum, which focused on both increasing knowledge and reducing stigma, addressed the cognitive and emotional aspects of mental health. Students were not only taught about mental health but were also encouraged to discuss it openly, reducing the fear and discomfort that often accompanies mental health topics. The results also suggest that younger children are more receptive to learning about mental health than previously assumed, challenging the common misconception that such issues should only be addressed with older students. The positive changes in the experimental group are therefore reflective of the intervention's ability to break down barriers related to stigma and provide students with the knowledge and tools to support their mental health.

Moving forward, it is essential for schools to integrate psychological literacy programs into their regular curricula. Given the success of this intervention, expanding similar programs to a broader range of primary schools should be a priority. Policymakers should advocate for the inclusion of mental health literacy as a mandatory component of the school curriculum, ensuring that all students receive early education on mental health and stigma reduction. Schools should also consider training teachers and counselors to support the implementation of these programs effectively. Furthermore, future research could explore how to tailor such interventions to diverse cultural and socioeconomic contexts, ensuring that the content is accessible and relevant to all students (Shijun Lv, 2025). Long-term studies are needed to assess the sustained impact of these interventions and whether the reductions in stigma and improvements in mental health literacy persist beyond the classroom. Such initiatives are crucial in fostering a more mentally resilient generation and addressing mental health challenges in a proactive manner.

CONCLUSION

The key finding of this study is that the school-based psychological literacy intervention significantly improved mental health literacy and reduced stigma among primary school students. Students in the experimental group showed a 30% increase in their understanding of mental health concepts and demonstrated a notable reduction in negative attitudes toward mental health. Furthermore, the intervention encouraged a more supportive and empathetic attitude towards peers facing mental health challenges. These results underscore the efficacy of early intervention in primary schools to address mental health stigma and foster a more inclusive environment. The control group, by contrast, showed minimal changes, highlighting the importance of the intervention in promoting mental health awareness among young students.

This research contributes to the field of mental health education by providing empirical evidence on the effectiveness of psychological literacy programs for primary school students. While much of the existing literature focuses on adolescents and secondary education, this study extends the scope by demonstrating that primary school students are capable of

understanding and engaging with mental health issues. The research also presents a practical and scalable intervention model for schools to incorporate into their curricula, promoting mental health literacy from an early age. The methodological approach, combining quantitative surveys with qualitative focus groups, allows for a comprehensive assessment of both cognitive and emotional changes in students, offering a more nuanced understanding of the intervention's impact.

One limitation of this study is the relatively short duration of the intervention (six weeks), which does not allow for a long-term assessment of the sustainability of the observed changes in mental health literacy and stigma. Future research should explore the long-term effects of psychological literacy interventions, examining whether the improvements in students' understanding of mental health and reductions in stigma persist beyond the intervention period. Additionally, the study was conducted in a limited geographical area with a homogenous sample, which may not fully represent the diversity of primary school students. Future studies could include a more diverse sample, including different socio-economic backgrounds and cultural contexts, to test the generalizability of the intervention across varied populations. Longitudinal studies would also provide insights into how early interventions influence students' attitudes and behavior towards mental health in the years following the intervention.

AUTHOR CONTRIBUTIONS

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.

Author 2: Conceptualization; Data curation; In-vestigation.

Author 3: Data curation; Investigation.

CONFLICTS OF INTEREST

The authors declare no conflict of interest.

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