IJBMC
International Journal of Body, Mind and Culture

Volume 13, Issue 6, Article e2026-1451
DOI: 10.61838/ijbmc.v13i6.1451

Article type:
Qualitative Research

Stakeholder Perspectives on Mindfulness-Based Interventions for Anxiety in Primary School Children: A Qualitative Study

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Article history:

Received 17 Mar 2026
Revised 22 Apr 2026
Accepted 01 May 2026
Published online 01 June 2026

How to cite this article:
Li, J., & Bin Minghat, A. D. (2026). Stakeholder Perspectives on Mindfulness-Based Interventions for Anxiety in Primary School Children: A Qualitative Study. International Journal of Body, Mind and Culture, 13(6), Article e2026-1451. https://doi.org/10.61838/ijbmc.v13i6.1451

ABSTRACT

Objective: This study aimed to explore stakeholder perspectives on mindfulness-based interventions (MBIs) for managing anxiety-related behaviours and coping strategies among primary school children.

Methods and Materials: A qualitative study was conducted using semi-structured interviews and reflective journal analysis. Six stakeholders, including three primary school teachers and three parents of children with mild to moderate anxiety-related difficulties, were selected through purposive sampling. In addition, reflective journals from three students who participated in school-based mindfulness sessions were analyzed. Data were examined using Braun and Clarke's thematic analysis approach. Coding was conducted inductively, and themes were developed through repeated reading, comparison of interview transcripts, and triangulation with student journals.

Findings: Three main themes were identified: perceived impact of MBIs on anxiety-related behaviours, development of coping strategies, and implementation challenges. Teachers and parents perceived that mindfulness practices, particularly mindful breathing, body awareness, and reflective pauses, helped children remain calmer during exams, classroom discussions, and family stress. Student reflections also indicated improved emotional awareness, reduced fear during tests, and greater use of breathing techniques for self-regulation. Participants reported that coping strategies learned during mindfulness sessions were transferred beyond the classroom into home and social situations. However, key barriers included limited school time, insufficient teacher training, inconsistent parental support, and sociocultural concerns affecting sustained engagement.

Conclusion: MBIs were perceived as useful for supporting emotional regulation and coping among primary school children with anxiety-related difficulties. However, successful implementation requires teacher training, parental involvement, and context-sensitive integration into school routines.

Keywords: Mindfulness-Based Interventions, Anxiety, Primary School Children, Emotional Regulation, Qualitative Study.

Introduction

Anxiety in children is a serious public health issue, with an estimated 6.5% of children and adolescents suffering from internalising disorders that impact on emotional well-being, academic performance, peer relations and future psychological health (Lawrence et al., 2021). Primary school anxiety is commonly expressed through feelings of excessive worry, poor concentration, avoidance and hypervigilance, which can impact learning and social interactions with peers. Increasing evidence from behavioural science literature suggests early symptoms of anxiety are linked to emotional regulation problems, heightened physiological arousal and environmental stressors such as educational pressures, peer and family relationships (Spytska, 2024; Lin & Guo, 2024). These insights suggest a need for early, age-appropriate support interventions that address symptoms and emotional and environmental factors that impact children's well-being.

One such support strategy, mindfulness-based interventions (MBIs), have become more popular in clinical and educational contexts. Mindfulness is broadly defined as a deliberate, moment-to-moment awareness or attention, coupled with an acceptance of thoughts, feelings and sensations (Goldberg, 2022). In educational settings, mindfulness practices (e.g., breathing, focusing attention, body awareness) are frequently taught as a preventive and supportive strategy to improve emotional regulation, attention and self-control skills. This use of mindfulness in schools is not the same as targeted clinical interventions delivered in clinical settings, where mindfulness might be part of a treatment protocol for individuals with established anxiety disorders. In elementary schools, MBIs tend to be delivered as universal or selective interventions to promote children's wellbeing and resilience, rather than stand-alone interventions for clinical treatment.

Existing empirical research has demonstrated that school-based MBIs can help children to improve their emotional regulation, attention and classroom participation (Kuyken et al., 2022). Mindfulness practices have also been linked with improved classroom behaviour, improved peer relationships and better coping skills. However, many of these studies have tended to focus on quantitative measures of intervention outcomes, such as reduction in symptoms, or improved academic performance or behaviour. Although such research provides valuable evidence about the effectiveness of the interventions, relatively less research has explored the perspectives of the stakeholders targeted by the interventions, such as teachers, parents and children. This is important because the success of interventions in school settings is based not only on the design of the intervention, but also how it is received, modified and implemented in real-life educational settings.

Another key consideration relates to the selection of children with mild to moderate anxiety. A number of studies have referred to levels of anxiety severity, but have not adequately explained how they are determined in non-clinical school environments. In this study, children were identified via teacher referrals from public school counsellors, who identified these children on the basis of behavioural rather than clinical diagnostic criteria. This method accommodated the reality of the school system where early intervention and support strategies are often put in place before the child is referred for clinical assessment. This leaves us with children who are showing distinct anxiety-related symptoms that have an impact on school performance, rather than those who have been diagnosed with anxiety disorders.

Recent literature in the field of mindfulness also suggests the role of contextual factors and experiences in sustaining MBIs. While past research highlights the involvement of teachers and parents in the practice of mindfulness, the relationships between stakeholder engagement, school structures and implementation are rarely considered. Issues such as time constraints, teacher training and support, parental engagement and support, and attitudes toward mindfulness in society and culture may play a big part in implementation and sustainability. These real-world factors are especially relevant to primary school implementation, which relies heavily on the partnerships between schools and parents.

This research uses qualitative methods to learn more about the perspectives and experiences of those involved in school-based mindfulness programs for children with mild to moderate anxiety symptoms. This is an ideal method to explore the application, understanding and experiences of mindfulness practices in their naturalistic educational environment. It enables us to explore

children's understanding and experiences of mindfulness strategies, teachers' experiences of introducing mindfulness practices in the classroom, and parents' perceptions of the effects of mindfulness practices outside the classroom.

Through highlighting the voices of the stakeholders, this study seeks to add process-based knowledge to the mindfulness literature and supplement the overwhelmingly outcome-based evidence. This study is also guided by Self-Determination Theory (SDT), which offers a valuable lens through which to examine how mindfulness practices can be used to promote children's autonomy, competence and emotional self-regulation. Through this perspective, this study seeks to offer a more situational understanding of the role of school-based mindfulness as a supportive strategy in the management of anxiety, and the conditions for its continued use in primary school.

Research Objective

To understand stakeholders' perspectives on the effects mindfulness-based interventions (MBIs) have on anxiety-related behaviours and coping strategies in primary school students who have mild to moderate anxiety-related difficulties.

1. To explore the coping strategies perceived to be learnt by primary school students participating in mindfulness-based interventions (MBIs).
2. To understand barriers to the implementation of mindfulness-based interventions (MBIs) to manage anxiety in primary school.

Research Questions

RQ: What are the perceptions of the impact of mindfulness-based interventions on anxiety-related behaviours and strategies among primary school students?

This broad research question drives the qualitative investigation of stakeholders' experiences based on semi-structured interviews and thematic analysis of student reflections. The research aims to understand perceptions of change and the implementation processes, rather than cause and effect. The following sub-questions were devised to guide the qualitative approach of the study:

RQ1: How do teachers, parents, and students perceive the influence of mindfulness-based interventions (MBIs) on anxiety-related behaviours and emotional regulation in primary school students?

RQ2: What coping strategies are perceived to be developed by primary school students through participation in mindfulness-based interventions (MBIs)?

RQ3: What challenges affect the successful implementation of mindfulness-based interventions (MBIs) in primary school settings for anxiety management?

Literature Review

Anxiety in Children

Childhood anxiety is a well-established multidimensional construct known to absorb cognitive, emotional, and physiological aspects that have a tremendous impact on day-to-day functioning. Available literature has strong links between anxiety and deficits in social interaction skills, academic, and emotional control (Ariwkhan, 2024; Burnley et al., 2023). Neurobiological findings also suggest that the dysfunction of amygdala-prefrontal circuitry and increased cortisol levels are some of the factors that increase the sensitivity of stress and impairment of regulatory functions in children (Tian et al., 2021).

Nevertheless, a large part of this literature is pathology-focused and reductionist, laying more stress on internal processes and less on the influence of environmental and situational influences like pressures at school and family dynamics (Lawrence et al., 2021). This develops a disjointed perspective on childhood anxiety, in which biological reasons are poorly combined with personal experience. This restriction makes it necessary to consider methods that would deal not only with internal regulating mechanisms but also with external forces that can affect children experiencing anxiety. Figure 1 represents factors modulating childhood anxiety and its direct impact.

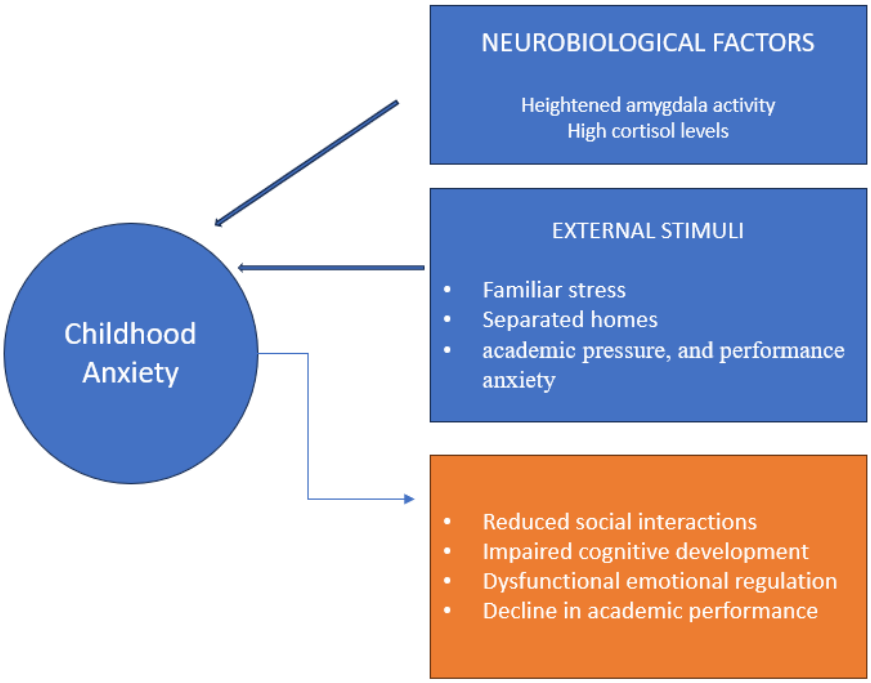

Figure 1

Factors modulating childhood anxiety and its direct impact

Mindfulness-Based Interventions (MBIs) and Role of Schools in Mental Health

The trend of mindfulness-based interventions (MBIs) has become popular as an alternative coping strategy in the context of anxiety management, owing to their emphasis on mindfulness and psychic presence and lack of judgment towards thoughts and feelings. The empirical research indicates that MBIs have the potential of improving emotional regulation, self-awareness, and control of attention and lead to an improvement of psychological functioning (Kriakous et al., 2021). MBIs in a school environment have been connected with better classroom behaviour, classroom engagement, and general well-being, which makes them scalable interventions within an educational system.

Although these encouraging results are obtained, the literature is largely biased toward quantitative outcome measures and tends to focus on reducing symptoms rather than defining which mechanisms and circumstances of different contexts can affect effectiveness. According to some studies, mindfulness practices do not always have the same appeal to all student groups, and the cultural adaptation and relevance to the context are valuable (Daigle, 2022). Therefore, despite the considerable popularity of promoting MBI as a useful tool, there is still no clear understanding of the terms under which the MBI is most useful and sustainable in school settings. Figure 2 shows Mindfulness Based Practices and its inter-relatedness with anxiety in students.

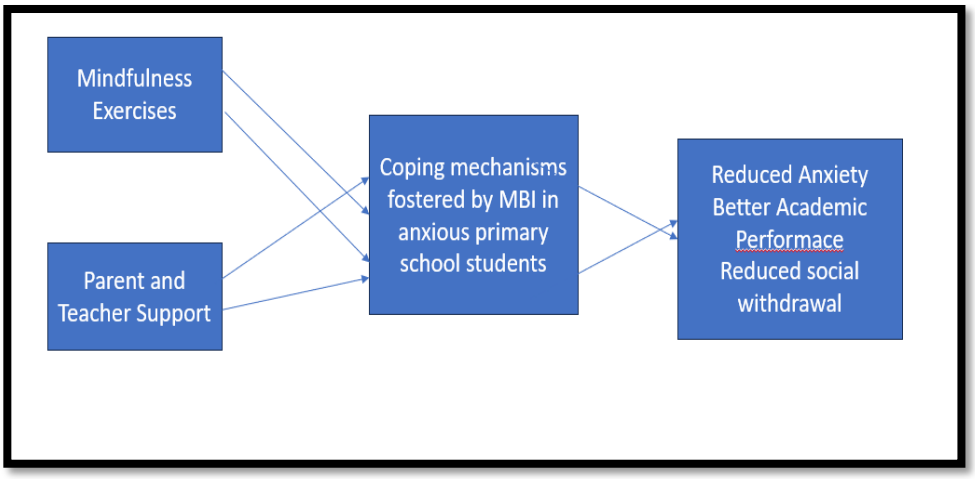

Figure 2

Mindfulness Based Practices and its inter-relatedness with anxiety in students

Qualitative research in mindfulness studies and its Impact on Emotional Regulation

Mindfulness studies qualitative research provides a useful tool of investigating process and experience oriented aspects of interventions that are frequently ignored in quantitative studies. Qualitative approaches can be used to gain a better insight into ways individuals perceive and internalise mindfulness practices through different methods, including interviews, thematic analysis, and reflective journals (Lochmiller, 2021). This is especially true when it comes to children, when subjective experiences and factors of development become extremely important in defining the outcomes.

According to existing literature, MBIs are beneficial in emotional regulation as they prompt people to be non-reactive toward emotions and observe and respond to them (Hoge et al., 2021). A significant portion of this evidence comes out of controlled or clinical conditions, however, and does not shed much light on the processes operating in actual education situations. Besides, little is known about the role of external stakeholders, especially parents and teachers. Although researchers admit that parental support and teacher facilitation can mediate the success of MBIs (Caetano et al., 2024), little is known about the dynamics between these variables and children. Such difficulties as unstable parental engagement, time limitations, and cultural views on mindfulness also make implementation more complex.

Theoretical Framework

Little has been done so far in applying the theoretical frameworks to research on mindfulness, especially as applied to children. Self-Determination Theory (SDT) is also a valuable framework to consider how the MBIs can help to have an impact on the psychological outcomes. SDT assumes that well-being improves as the fundamental psychological needs in the domains of autonomy, competence, and relatedness are met (Malboeuf-Hurtubise et al., 2024). In this context, the practice of mindfulness may be conceptualized as leading to increased self-consciousness and control of emotions, which in turn facilitates these two basic needs.

Although emerging literature indicates that mindfulness and well-being have a positive connection in the framework of SDT, the empirical implementation is yet to be developed and integrated further into intervention research. Specifically, the role of MBIs in operationalising these psychological needs in education and how implementation can implement them differently is under-explored, as well as how implementation can have different effects. Moreover, the relationship between SDT constructs and the contextual factors (teacher support or school settings) has not been studied in detail.

The gap in the literature indicates a lack of studies that attempt to implement SDT as a conceptual characterization, along with studies that examine the applicability of the theory in explaining the relationship

between and why MBIs contribute to anxiety and coping processes in children. It is necessary to combine theoretical knowledge with empirical findings to develop a more consistent and explanatory view of interventions based on mindfulness.

Methods and Materials

Study Design

The qualitative research method was employed to discuss the effect of MBIs on the level of anxiety in children that will help them develop coping strategies against the latter. Creswell & Poth (2016) confirm that qualitative data analysis is quite appropriate to comprehend the subtle aspects of the relationship among psychological constructs. This paper used the qualitative design of semi-structured interviews with teachers and parents of children with mild-moderate anxiety disorders in order to elicit information on the effectiveness of MBIs. This further gave the researchers a loose concept when analyzing narratives to explore further on the emerging themes (Kallio et al., 2016). The interviews were taped and transcribed manually and coded and color-coded commonalities to cluster them into themes. As an example, all the codes like calmness during exams, use of breathing techniques and less panic responses were put under the general theme of the effect of MBIs on anxiety levels. Likewise, those codes pertaining to mindful breathing, body awareness, and self-regulation strategies were classified within the category of coping mechanisms. This coding system provided transparency as it was clear how the raw data were associated with the development of themes.

The thematic analysis was further analyzed and applied to answer the overall research question. The qualitative design was taken to facilitate intensive examination of the experiences and meanings of the participants, which cannot be adequately met using quantitative designs.

This was a very small purposive sampling (three teachers, three parents and three student reflective journals) for an exploratory study. This enabled a detailed exploration of stakeholder perspectives, but the size of the sample greatly limits the transferability and generalisability of the results. The study is therefore more focused on context, interpretation and understanding rather than representativeness and causality, and the findings should be viewed as exploratory and contextually specific.

Participants and Sampling

Six participants were recruited for this study, including three primary school teachers and three parents of children identified as having mild to moderate anxiety-related problems. Two teachers were classroom teachers (S1 and S2) and one was the school counsellor (S3). Children were identified by the counsellor at the public school through referrals based on school counselling data, consistent observations, and teacher reports of anxiety-related symptoms including test anxiety, social isolation, worry and emotional instability. These signs were used as a criterion for identifying students in need of school-based emotional support rather than a diagnosis of anxiety disorders. The participants were contacted and debriefed about this study and eventually consented to participation. They were chosen by purposive sampling criteria which is ideal for a small sample size in qualitative research (Patton, 2014). All the participants received training before the interview to maintain consistency in data collection. Additionally, the reflective journals of 3 students will be analyzed post informed consent, who attended the counselling sessions conducted by the counsellor involved in this study. The feedback has been kept anonymous to maintain privacy. The transcripts of the feedback have been screened to deduce findings related to the effectiveness of MBIs, pre and post-intervention. The sample size has been used in accordance with the principles of qualitative research in which focus is made on depth as opposed to generalizability. The small and targeted sample size of this study did not aim to reach thematic saturation. But data collection stopped when there was sufficient depth to detect the patterns of interest for the research questions, as is typical for explorative studies.

Three student journals were purposively sampled after parents gave informed consent and the school gave permission. The journals were written contemporaneous student reflections of school-based mindfulness sessions conducted by the school counsellor, rather than retrospective journals written for the purpose of the study. Journal entries captured students' immediate reflections of their mindfulness experiences, emotional reactions and coping strategies

and were triangulated with teacher and parent interview data.

Data Collection

Of the six interviews, four were carried out in-person within the school environment, and two via video conferencing at the discretion of the interviewees. The interviews ranged in duration from 15-20 minutes and each had a semi-structured interview guide tailored to teachers or parents. The questionnaires consisted of open-ended questions (Appendix 1) to reveal the explicit responses based on the experiences and perceptions of both categories of participants as per (Bryman, 2016). The feedback concerning the impact of MBIs on the management of anxiety levels, coping mechanisms developed, and the challenges that prevent full-fledged implementation of MBIs in classroom settings was documented. The interview questions were designed to align with the existing literature reported on the effectiveness of MBIs. The interviews were audio recorded with participant consent and kept. Each audio was transformed into a transcribed verbatim to analyze themes out of the data from interviews. The reflective journals of 3 students (Appendix 2) were thoroughly studied to extract the point of view to find relatedness with the findings. These students have prior experience in attending counselling sessions in primary school settings and have been trained under MBI sessions. Each interview was tape recorded with consent and transcribed verbatim so that the data is accurate.

The reflective journals were reviewed as additional qualitative data sources to understand the student experience without conducting interviews with children, and eliminate the risk of children feeling uncomfortable or anxious. These journals were used in conjunction with the interview transcripts to triangulate and gain confidence for thematic analysis.

Data Analysis

Thematic analysis was chosen as the method to identify, analyse, and report commonness and patterns within the qualitative data of the obtained interviews (Appendix 3, Table 1). This method validated by Braun & Clarke (2006), was followed by six different phases of analysis such as familiarisation with the data, initial codes to be generated. The coding was done in an inductive style in which the codes were derived out of the data instead of them being pre-established. Familiarisation was achieved through the repeated reading of the transcripts after which preliminary open coding was done where meaningful units of text were labelled. These codes were then identified according to similarities and patterns into wider categories.For instance, the student statement, “Students who used to panic during exams now seem more composed after mindfulness sessions” (S1), was first coded as decreased panic in exams and better control of emotions. This was then grouped with other codes such as calmer classroom behaviour, reduced emotional responses and increased self-confidence under the subtheme emotional regulation, and then the above mentioned theme. Likewise, the parent statement, “I saw my daughter quietly breathing during a family argument” (P2), was initially coded as generalisation of breathing techniques to home life, which was later grouped with other codes such as generalisation of coping strategies under the subtheme generalisation of coping strategies, which contributed to Theme 2: Developing Coping Strategies with MBIs. This process allowed us to track from data to theme.

To achieve uniformity and thoroughness in analysis, a coding framework was developed by repeatedly improving the coding framework using constant comparison of the interview transcripts and reflective journals. This study sought to boost dependability by having a second reviewer independently code a subset of interview transcripts and reflective journals (around 30% of the total data set) according to the initial code structure. Discrepancies, especially related to the differentiation between emotional regulation and coping strategies, were resolved through discussion. There were some minor adjustments to code definitions to enhance consistency and minimise bias. This enhanced the credibility and confirmability of the themes.

A brief overview of the emerging preliminary themes, including interpretations of the emotional regulation, coping, and barriers to implementation, was presented to teachers and parents for member checking. They were asked if the results reflected their viewpoints and if any critical viewpoints were missing. Responses largely supported the interpretations, but one parent stressed the importance of home practice relying heavily on parental reminders, which contributed to greater emphasis of family support in Theme 3. This method of triangulation is fulfilled by analysing the themes across three sources of data: teacher interviews, parent

interviews, and student reflective journals. For example, the theme of emotional regulation was backed by teacher comments about reduced anxiety and aggression in the classroom, parent testimonies about reduced anxiety at home, and students' own reflections about using breathing exercises to reduce anxiety during exams. This enhanced the trustworthiness of the results and mitigated the risk of over-relying on one interpretation.

The analytical process was carried out in a way to ensure that reflexivity of the researcher was maintained in order to reduce bias. The researcher did a lot of self-reflection to recognize the preconceptions concerning mindfulness and anxiety. To make the decisions more objective, the coding decisions were reviewed and checked again, and the interpretations were based purely on the participant data. Also, congruence of different data sources (interviews and reflective journals) was used to enhance the credibility and confirmability of the results. Table 1 represents codes and themes.

Table1

codes and themes

Raw Quote	Initial Code	Subtheme	Final Theme
"Students who used to panic during exams…"	Reduced exam panic	Emotional regulation	Impact of MBIs
"I saw my daughter quietly breathing…"	Home application of breathing	Transferable coping	Coping mechanisms
"School schedule is so packed…"	Time constraints	Structural barriers	Implementation challenges

Document Analysis

From the semi-structured interviews with the primary school teachers and parents, some relevant facts emerged concerning the effectiveness of MBIs on students. The participants working closely with students suffering from mild-to-moderate anxiety were selected for this interview. This is because interviewing students directly might lead to manipulation of data, or make them even more anxious during the interview. The three emergent themes from the key findings are the impact of MBIs on anxiety levels, coping mechanisms and MBIs, and challenges in the implementation of MBIs

Ethical Considerations

This research involved human subjects, so approval was sought from the Institutional Review Board Han et al. (2021). All methods were carried out in accordance with institutional ethical guidelines for research with adults and children in the school environment. Written consent was obtained from all parent and teacher participants before the interviews, and parental consent for the use of the three student journals. They were advised of their right to withdraw at any point without penalty, and the confidentiality of the interview audio recordings and transcripts. Special considerations were taken with regard to students' journals since they were minors. The journals were not created specifically for the research study, but were part of the regular school counselling program. School permission and parental consent were sought prior to accessing the journals. A school counsellor removed all identity information and the journals were coded anonymously (A1, A2, and A3) before analysis. Pseudonyms and participant codes were used to maintain confidentiality. Student names, school names or family information was not included in the reporting. Conversations about anxiety and emotional wellbeing were conducted sensitively to prevent additional anxiety. Recordings, transcripts and extracts of journals were securely stored on researcher-only, password-protected devices and will be disposed of after the required timeframe.

Findings and Results

The transcripts from interviewing the participants involved in this study revealed three emergent themes: The impact of MBIs on anxiety levels in primary school students**,** mastering coping mechanisms through MBIs, and challenges in the implementation of MBIs. The themes have been elaborately discussed in this section, by quoting the excerpts from the interview and classifying them into emergent themes. Further, the research implications have been analysed to highlight the relevance of the themes of the study.

Theme 1: Impact of MBIs on Anxiety Levels in Primary School Students

A common theme among the participants was that mindfulness sessions supported children to stay calm in stressful academic contexts, such as during exams and classroom discussions. Educators reported students

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were less reactive and more regulated after mindfulness activities for instance, S1 reported, "Students who often panicked during exams are calmer after mindfulness sessions." Likewise, parents noted similar effects. P1 observed, “I notice my son is less anxious and more responsive to others after mindfulness training." These examples suggest that participants believed mindfulness practices facilitated emotional regulation and self-confidence during anxiety-inducing situations, rather than anxiety itself. Students were noticed to show calmer behavioural patterns which helped them plan their responses better while addressing problems. Moreover, there was a significant improvement in academic performance. In this context, S1 quotes: "Students who used to panic during exams now seem more composed after mindfulness sessions.", This observation shows that MBIs are involved in better emotional regulation in students, which directly answers RQ1, as it shows a decrease in the manifested anxiety behaviours. Similarly parents also approved of the fact that the changes observed after training with MBIs were noteworthy and impactful enough to be noticed at home. P1 states that "After starting mindfulness, my son seems less anxious and more willing to interact with others". This reaction implies that the practices of mindfulness are not only confined to the emotional regulation of individuals but also social functioning, which points to the overall contribution of MBIs to the adaptation of behaviour. This goes in line with the argument that there is anxiety reduction accompanied by enhanced interpersonal engagement. This observation was echoed in the journal published by the students, who confirmed that they felt more confident and less stressed post attending MBI sessions. Improved communication was another significant change observed after MBI sessions. Therefore, it points out that MBIs are capable of inducing positive affirmations in students by allowing the propagation of calmness from teachers to students. On this note, S1 confirms this fact by quoting "I feel less scared when I talk in front of the class because I know how to calm them down now.". Thus, at an early developmental stage, the students can have a social learning on how inducing calmness can foster better expression, and help them overcome inhibitions during group activities. As confirmed by P3 who states that " I like my daughter doing mindfulness; it makes her happy and helps her focus ". From this statement, it becomes clear that the ability to focus or awareness at the moment becomes enhanced with the help of mindfulness sessions. Additionally, this feeling of happiness stems from the ability to work collaboratively and prevents panic attacks during challenging situations such as examinations, competitions, and group discussions. Overall reduced anxiety levels and better emotional regulation are some of the major findings from the interview. These facts were supported by A1 in his reflective journal. A1 states "After learning mindfulness, I feel calmer. I use deep breathing exercises when I feel nervous, and it helps me focus on my work. The counselor taught us to notice our feelings without getting stuck on them. Now, during exams, I tell myself, ‘I can do this,’ and I concentrate better. I even finished my last exam without feeling as scared.". This self-reported experience supports the internalisation of mindfulness strategies which means that the students are not only feeling less anxious but also practicing coping strategies. This is a direct support of RQ1 and how MBIs help in gaining autonomy in emotional regulation, which is a major SDT construct. Thus, MBIs facilitate positive feedback on mindfulness activities by relying on the enthusiasm expressed by students while participating. These yield enhanced social outcomes, being regulated by calmness.

All of these results, in turn, prove that mindfulness practice were helpful in decreased anxiety levels and better emotional control in the students of primary schools, which, in its turn, directly answers RQ1.

Theme 2: Mastering Coping Mechanisms through MBIs

Participants perceived mindfulness strategies to teach children coping skills that could be applied both in and out of the classroom. Examples included breathing techniques, body scanning, taking a step back and identifying physical feelings of stress. Teacher participant S2 said, "They now know how to pause and breath and deal with situations." Parents also reported these behaviours at home. P2 explained, “I saw my daughter breathing during a family fight, which she hasn't done before in the past." These examples indicate mindfulness strategies were regarded as coping strategies that could be applied at home and school. For instance: simple gestures such as body scanning, visualization, and mindful breathing emerge as some techniques that appear easy, yet prove to be effective when applied in stressful situations. In this case, these

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techniques can easily prevent unnecessary conflicts between peer groups due to misunderstandings in communication, and de-escalate the stressful environment for students. Hereby S2 states that ""They now know how to take a step back, breathe, and address situations calmly". The practical coping mechanisms are evidenced by this finding, and they directly answer RQ2. The capacity to suspend and control reactions points to a better self-regulatory ability which is the main focus of mindfulness practice and emotional management. In support of S2, P2 also confirms that similar behaviors are expressed by children faced with anxiety at home. P2 states "I saw my daughter quietly breathing during a family argument, which she never used to do before". This point suggests that the mindfulness practices can be applied to non-classroom settings where they are likely to be transferred and, therefore, MBIs develop sustainable coping behaviours in real-life scenarios. Moreover, P3 quotes " When I see her feel upset, she takes time out to focus on her breathing like she does in class. I have to admit MBI has made her calmer and relaxed in stressful situations". Similar trends were identified in reflective journals whereby mindfulness techniques decelerate stressful thoughts, and equip students with transferable skills for coping. This allows them to self-regulate their emotions while being consistently calm and focused. Reflective journal 2 highlighted a similar observation where the participant states "The mindfulness sessions helped me realize that everyone feels nervous sometimes. Madam showed us how to sit quietly and focus on our breath. It's like the bad thoughts about failing to go away for a while. In my last exam, I stayed calm, and I did much better than before. Now, I don't feel as scared when tests come up." This shows how competitive anxiety was overcome by practicing breathing techniques, which ultimately will lead to enhanced academic performance in students. Similarly, in reflective journal 3, A3 confirms that "Madam taught us how to do a body scan and pay attention to each part of our body. It made me aware when I was tense. I use this technique before exams now, and it relaxes me. I also write down positive things I've done, like when I studied well, and it makes me feel better. This time, I didn't cry before the test, and I even smiled when I saw some questions I knew the answers to!" This case illustrates how organised mindfulness practices are learned by students and internalised and put into practice, which supports the idea that MBIs can be used to build conscious self-regulation strategies. Furthermore, it substantiates the argument that coping strategies are learnt and practised through repetition. This emphasizes the bodily movements, postures, and breathing practices that help alleviate anxiety and stress faced during critical analysis of problems.

Combined, these findings suggest that MBIs are helpful to form transferable coping behaviors, which justifies RQ2 and demonstrates their usefulness in both academic and personal settings.

Theme 3: Challenges in the implementation of MBIs

A number of factors were reported as limiting the sustainability of mindfulness practices in primary schools. The most frequently identified barriers were a lack of time in the school timetable, a lack of teacher training and a lack of parental support at home. Teacher participant S3 said, "The curriculum is so crowded; it's difficult to carve out a time for mindfulness." Parents also reported concerns around sustainability, with P3 commenting, "I fear my child may not be interested in mindfulness if it is not practised throughout the school day." These results indicate the success of mindfulness practices in primary schools relies not just on school-based implementation but also broader support for mindfulness from the school system and from parents. A primary school teacher S3 proves this fact by saying "The school schedule is so packed; finding a dedicated time slot for mindfulness is a challenge." The given finding points to the structural barriers to implementation that directly respond to RQ3. It indicates that institutional limitations are a major issue in curbing the efficiency and sustainability of MBIs in schools. This implies that time constraints and overpacked schedules of students are a major issue. Reflective journals have been observed to echo similar issues. This observation was supported by the feedback of A1 who complains of limited guidance on practicing mindful behaviours within the limited time frame of the mainstream curriculum. "I wanted to keep practicing mindfulness at home, but I'd forget because of homework and other activities. My family didn't understand what I was trying to do, so they didn't encourage me. It was hard to stay motivated when I didn't see instant results. Over time, I realized that even a few minutes of practice helped, so I started doing it in small steps, like taking mindful breaths before I started studying." This reaction implies the issues of consistency

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and external support, which means that the effectiveness of MBIs is not only based on their implementation in the school environment but also on support at home. This problem has been validated by both subject teachers and counselors who express their concerns about inadequate training, which limits their ability to effectively implement MBI techniques in classrooms. Lack of confidence and resources hence emerge as another challenge that comes in the way of implementation of MBI in school settings. In addition, parental concerns about consistency have also emerged as a challenge against the adoption of MBIs. In this context, P3 expresses "I'm worried my child might lose interest in mindfulness if it's not practiced regularly in school." This issue implies the significance of a continuous interaction and the importance of parental participation in keeping the mindfulness practices effective in the long run. The problems were highlighted and validated in Reflective Journal 3. A3 states that "Keeping up with mindfulness at home was tough. I'd forget what the counsellor madam had taught us, and my parents didn't always remind me to practice. Sometimes, I didn't see the point because I wasn't sure it was helping". This shows that there are serious doubts among parents as well as children as to whether mindfulness practices could be sustained in the absence of regular MBI sessions in schools. In general, these results show that MBIs are effective yet the application of the practices is limited due to institutional, cultural, and practical barriers thus answering RQ3.

Discussion and Conclusion

This study is not about the clinical effectiveness of mindfulness-based interventions (MBIs) but rather stakeholders' perceptions of the impact of mindfulness. This study used qualitative interviews and student reflections rather than psychometric measures, so the results should be understood as perceptions of change and lessons learned, rather than causality (anxiety reduction). This is an important consideration for the use of MBIs in primary schools.

RQ1: How do teachers, parents, and students perceive the influence of mindfulness-based interventions (MBIs) on anxiety-related behaviours and emotional regulation in primary school students?

The results of this research are similar to the existing literature that supports the usefulness of mindfulness-based interventions in decreasing anxiety in children. Past research (e.g., Goldberg, 2022; Kuyken et al., 2022) also supports the results of emotional regulation and psychological well-being after mindfulness training. This evidence is further elaborated by the current findings, which offer the qualitative data on the experience and implementation of these changes in practical school situations. This observation aligns with Ruiz - Íñiguez et al., (2020) Mindfulness-Based Interventions (MBIs) was effective in yielding positive outcomes among diverse non-clinical and clinical populations of young individuals particularly among those based in the U.S. This allows students across the globe as well as first world countries to show resilience in high-stakes environments such as in social gatherings, collaborative projects, or stressful situations (Guendelman, 2021). Nevertheless, in contrast to most of the research done with quantitative research approaches, the current research emphasizes the mechanisms by which anxiety is alleviated, especially through internalisation of the mindfulness techniques in the form of breathing and body awareness (Diplock et al., 2024). This gives a more detailed insight into the processes involved in intervention efficacy. Moreover, improved academic performance is noted in students who have indulged in practicing and exhibiting calmer behavioral trends and improved academic performance because of participation in MBI sessions. Drawing on this observation the short term and long-term effects of MBI can be mapped via Figure 3.

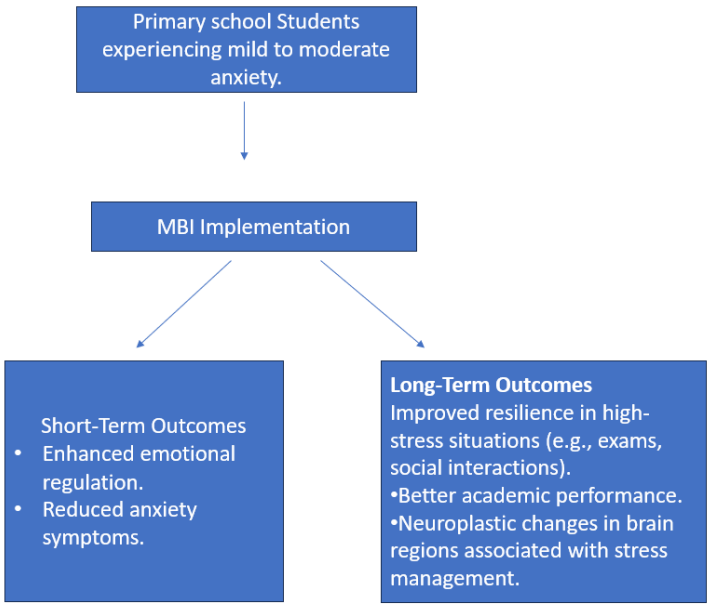

Figure 3

Short term and long term effects of MBI to alleviate anxiety in primary school student

Self-Determination Theory is helpful in interpreting participants' experiences, specifically in terms of self-regulation of emotions and the development of confidence. For instance, students using breathing strategies and increasing their confidence during a stressful situation may demonstrate increased autonomy and perceived competence. Greater peer and classroom engagement may also reflect increased feelings of relatedness. But these factors were not explicitly measured in this study, so SDT should be seen as a descriptive rather than verified explanatory framework.

RQ2: What coping strategies are perceived to be developed by primary school students through participation in mindfulness-based interventions (MBIs)?

MBIs are responsible for the induction of transferable coping strategies, that are practical enough for primary school students. Several mechanisms can be involved in this process which include conscious control of breathing, mindful scanning of bodily gestures, and formation of mental schemas to self-regulate the emotions when faced with stressful conditions. The results are in line with the previous studies that mindfulness promotes adaptive coping mechanisms, including attentional control and emotional regulation (Hoge et al., 2021). Nonetheless, this research is the first to show how these strategies can be applied into real-life scenarios such as in academic and family environments thus indicating the ecological legitimacy of MBIs in schools. In such contexts, the theory of MSBR comes into play which states that emotions can be regulated and attention can be controlled if mindfulness strategies are adopted (Broderick, 2021). This would prove effective in downgrading negative and intrusive thought processes, and introduce a focused yet calmer perspective to the students at an early developmental stage. This strategy implies a better awareness of the present situation, and positive learning outcomes to be exhibited while appearing for examinations, or dealing with peer-problems (Figure 4). Focusing on emotion regulation as a major outcome of MBI, the Process Model of emotion regulation plays a vital role in underscoring the logic for the same (Olderbak et al., 2023). The process in which students learn to process their emotions in an unbiased way by pausing for a moment helps them to respond to the problems in an adaptive manner. By focusing on the process of experiencing and generation of emotions, the five-strategy model helps with modification of situation, deployment of attention, modulating responses and monitoring changes in cognitive abilities (Olderbak et al., 2023). This in turn improves performance in academics and results in optimum self-regulatory skills in children (Kavitha et al., 2023).

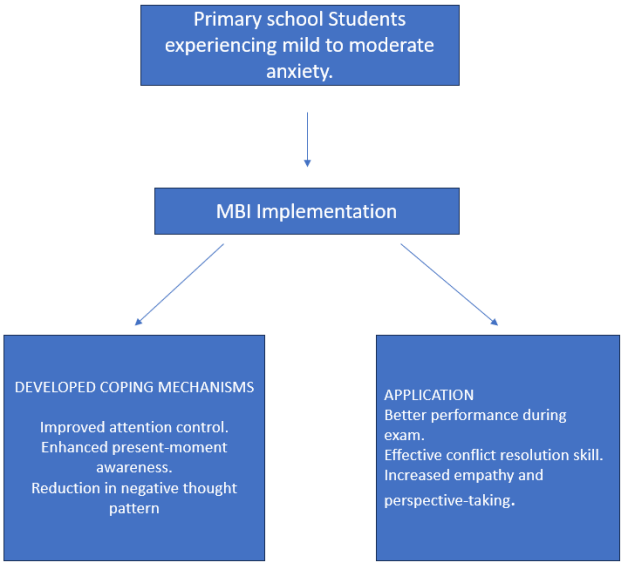

Figure 4

Applications of coping mechanisms developed due to MBI

This promotes the idea of relaxation that is echoed in the reflective journals of A3 where controlled body scanning was used to identify the physical tension underlying examinations, and relaxation was used to create awareness in the moment for improved performance. In addition, conflict resolution skills are fostered in a proactive manner to limit impulsive responses. This was reflected in the observations of S2 whereby taking a step back and breathing, and addressing situations calmly helped the students to deal with conflicts. Weisz & Cikara (2021) agree that showing empathy during social dilemmas, promote help taking behaviour and taking other's perspectives can be two main outcomes of mindfulness strategies such as short term meditation. Though there are ambiguities regarding the long-term effectiveness of MBIs, a study by Goldberg (2022) highlights the positive impact of repetitive MBI practices of 8 weeks duration on health, emotional dysregulation, and attention. In contrast, some critics feel that MBIs face generalisability issues in students belonging to diverse socio-cultural backgrounds. Palitsky & Kaplan (2021) argue that students who do not relate to contemplative cultural traditions might not resonate with the coping mechanisms provided in MBI sessions. However, keeping provisions for culturally relatable examples can prove to increase engagement and learning outcomes for primary school students faced with contextual anxiety in processing facts. This was reflected in P3's feedback where mindful techniques brought about portability of coping mechanisms such as pausing during family arguments beyond the classroom. This shows how MBIs can serve as an accessible tool that needs to be scaled to achieve desired behavioural well-being in primary school students with mild to moderate anxiety issues.

RQ3: What challenges affect the successful implementation of mindfulness-based interventions (MBIs) in primary school settings for anxiety management?

Although MBI is relevant in reducing anxiety and fostering coping mechanisms in primary school students, but certainly not without some challenges as highlighted in Figure 5. Firstly, one might be faced with a tight school curriculum that has limited time frames for exploring mindfulness activities. Most schools ignore the integration of MBI strategies and rather prefer to focus on enhanced academic performance among students. This overburdens the teachers to meet expected academic goals, leading to inconsistent efforts at alleviating anxiety and failed stress management in students. In this context, Burakgazi (2025) validates this information by confirming that institutional policies can alter the extent of success of any intervention strategy as per Bronfenbrenner's Ecological Systems Theory. This proves that systemic factors play a crucial role in the successful implementation of MBIs. In addition, Maynard

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et al. (2017) point out that insufficient resources and time are responsible for inconsistency in the adoption of mindfulness programs within academic institutes. Moreover, cultural resistance among students can hinder the acceptance of MBIs in schools. For instance: There are significant differences in involvement of parents in implementation of mindful practices within Eastern and Western cultures, with Han et al. (2021) showing how Confucian culture prefers comparatively higher positive reinforcement of MBI practices. Lack of training in teachers is yet another significant factor that prevents wholehearted acceptance of MBIs in primary schools. The inference can be drawn from the observation of Roeser et al. (2022) who asserts that in comparison to teachers without sufficient training, classroom organization was better among teachers trained under Mindfulness-Based Emotional Balance (MBEB) programs. This indicates that self-compassion, engagement, and motivation are rendered better by trained teachers. The Self Determination Theory completely aligns with this proposal. Lack of confidence in educators and incompetence in the implementation of intervention strategies is directly related to reduced motivation for the same (Nguyen et al., 2022). Therefore, to achieve maximum outreach to students, teachers themselves need to be equipped enough to facilitate MBI sessions in school settings without the aid of a therapist. For instance: Hwang et al. (2017) states that trainings for practicing mindfulness training among preschool teachers cause lesser problem behaviors in students and tend to show more obedience, while children with mild intellectual disabilities show positive peer dialogue. In contrast, critics argue that these challenges can be easily overcome in primary school settings, as they might not be effective enough over the long term. For instance: The incorporation of yoga sessions in physical education classes is an easy way to introduce mindfulness within tight time schedules in pre-existing curriculums (Ivaki et al., 2021). This helps in increased engagement and acceptance among students who struggle to find time under academic pressure. However, this is dependent on institutional efforts and parental support. In all, acceptance of MBI in primary school curricula appears as a multifaceted approach challenged by logistic factors and diverse learning needs. The current results on the connection between institutional constraints and stakeholder engagement are in contrast to the past research Maynard et al. (2017), Nguyen et al. (2022), which also revealed similar barriers to implementation. This implies that both systemic and contextual factors are important in determining the efficacy of MBIs, and not the design of interventions.

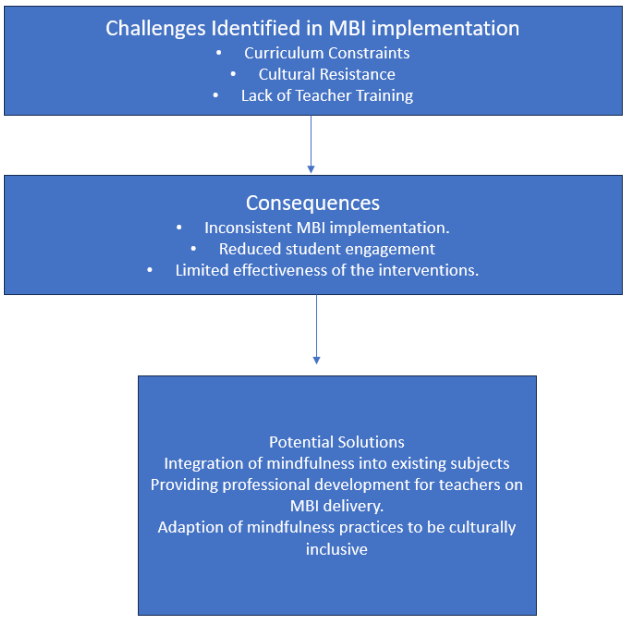

Figure 5

Flowchart showing consequences of challenges in implementation of MBI

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This paper contributes a number of works into the current body of knowledge of mindfulness and behavioural science. To start with, it offers qualitative data regarding the experiential processes by which MBIs can affect anxiety and coping in primary school children, which is a gap in largely quantitative studies. Second, it incorporates the views of stakeholders (teachers, parents, and students) and provides a more comprehensive picture of intervention efficacy. Third, through the implementation of the Self-Determination Theory, the study will have a theoretical contribution by elucidating the role of mindfulness practices in facilitating the psychological need fulfillment. Such insights can be practically used to design context-sensitive and sustainable mindfulness intervention in learning institutions.

Conclusion

This study examined stakeholder views on the ways mindfulness-based interventions (MBIs) may help primary school children with mild to moderate anxiety-related problems. The study did not assess clinical outcomes, instead exploring teacher, parent and student perceptions of improvements in emotional regulation, coping, and barriers to implementation of mindfulness practices in the classroom. Stakeholders reported mindfulness practices such as breath work, body scan and reflective pause strategies were perceived to be beneficial for stress management, awareness of emotions and coping strategies in and out of the classroom. However, constraints such as time restrictions, teacher training, support from parents, and sociocultural values were also recognised as key factors impacting the adoption of mindfulness practices. This research adds to the literature by offering qualitative, process-level insight into the nature of mindfulness practices in the context of education, complementing the more quantitative, outcome-oriented literature. Self-Determination Theory was applied to interpret how the mindfulness practices may connect to emotional self-regulation, confidence and relatedness. However, autonomy, competence and relatedness were not assessed, and thus, these interpretations are speculative. Beyond the theory, the results indicate that implementation strategies that include teacher training, school support and parental involvement are important for sustaining mindfulness practices in primary schools. These may enhance the feasibility and sustainability of school-based mindfulness programs. The study is an exploratory qualitative study using a small purposive sample, so the findings are perceived to be contextualised views, rather than generalisable evidence of effectiveness. This study does not assert effectiveness of MBIs in reducing anxiety, but rather the perceptions of mindfulness practices and the factors that may affect their effectiveness in primary schools.

Limitations of the study

This study offers valuable insights into stakeholders' views of mindfulness-based interventions (MBIs) for reducing anxiety in primary school students; but it has some limitations. The study had a small sample (six participants: three teachers and three parents, plus three student reflective journals), restricting the perspectives and generalisability of the data. The use of purposive sampling could have led to a bias in the sample, as participants were more likely to be favourable towards mindfulness programs. The study was based on self-reported measures from teachers, parents and students' reflective journals, which were subject to response and interpretive bias. Also, no interviews were conducted with children; while reflective journals offered some student input, they were not as rich as interviews. The study was also site-specific and cross-sectional, which did not allow for the analysis of long-term effects, nor its generalisation to other school communities. Finally, there was no use of a standardized anxiety measure or clinical diagnostic tool, as children were referred by teachers and observed in counselling sessions. So, any findings about anxiety reduction are based on stakeholder perceptions rather than quantitative measures, and should be considered exploratory and context-specific rather than generalisable evidence of effectiveness.

Recommendations for Future Research

The limitations of the methodology of this study to future studies include the fact that they used small and homogenous samples and thus are not applicable to other educational and socio-cultural settings. It is especially suggested that longitudinal designs will be helpful to investigate the long-term effect of mindfulness-based interventions (MBIs) on anxiety and coping over time, outside the short-term effects. Also, comparative studies of cross-cultural matters would be able to identify the versatility and applicability of MBIs in diverse cultural contexts. With the growing

importance of the use of technology, future research is also suggested to consider the incorporation of digital mindfulness aids, including the use of apps, to enhance access and involvement among children. In addition, bifurcated methods would improve the strength of the results based on qualitative depth and quantitative validation, which would offer a more significant appreciation of the intervention outcome.

Acknowledgments

The authors express their gratitude and appreciation to all participants.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

The study protocol adhered to the principles outlined in the Declaration of Helsinki, which provides guidelines for ethical research involving human participants. Ethical considerations in this study were that participation was entirely optional.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

Funding

This research was carried out independently, with personal funding, and without financial support from any governmental or private institution or organization.

Authors' Contributions

All authors equally contribute to this study.

References

Ariwkhan, A. (2024). Reasons for aggressive behavior of students in educational institutions and its psychocorrection. *American Journal of Social Sciences*, *4*(6). https://doi.org/10.37547/ajsshr/Volume04Issue06-22

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, *3*(2), 77-101. https://doi.org/10.1191/1478088706qp063oa

Broderick, P. C. (2021). *Learning to breathe: A mindfulness curriculum for adolescents to cultivate emotion regulation, attention, and performance*. new harbinger publications. https://www.newharbinger.com/9781684036714/learning-to-breathe/?srsltid=AfmBOopYFw7NZBG7dgZowF6nfc1YDfsHOLCtLHLlN_KmwGceO1KjNqAn

Bryman, A. (2016). *Social research methods*. Oxford university press. https://ktpu.kpi.ua/wp-content/uploads/2014/02/social-research-methods-alan-bryman.pdf

Burakgazi, S. G. (2025). The ecological model of human development. In *Exploring adult education through learning theory* (pp. 325-342). IGI Global. https://doi.org/10.4018/979-8-3693-5812-2.ch013

Burnley, A., St Clair, M., Bedford, R., Wren, Y., & Dack, C. (2023). Understanding the prevalence and manifestation of anxiety and other socio-emotional and behavioural difficulties in children with Developmental Language Disorder. *Journal of neurodevelopmental disorders*, *15*(1), 17. https://doi.org/10.1186/s11689-023-09486-w

Caetano, B., Chorão, A., Alves, S., Canavarro, M. C., & Pires, R. (2024). Mindfulness-based interventions for parents: A systematic review of target groups, effects, and intervention features. *Mindfulness*, *15*(10), 2429-2447. https://doi.org/10.1007/s12671-024-02451-1

Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications. https://www.ceil-conicet.gov.ar/wp-content/uploads/2018/04/CRESWELLQualitative-Inquary-and-Research-Design-Creswell.pdf

Daigle, E. C. (2022). Building Emotionally Skilled Teachers: A Mixed-methods Study Exploring the Impact of MBI on Perceptions of Self-management, Enhanced Mindfulness, Well-being, and Stress. https://digitalcommons.sacredheart.edu/edd/8/

Diplock, B. D., Ellis, J. W., Perry, J. R., Sahgal, A., Soliman, H., Moroney, C. E., Bilodeau, D. E., & Selchen, S. (2024). Efficacy of a brief mindfulness-based intervention for brain tumor survivors experiencing depressive symptoms: a pilot study. *Cancer Survivorship Research & Care*, *2*(1), 2407120. https://doi.org/10.1080/28352610.2024.2407120

Goldberg, S. B. (2022). A common factors perspective on mindfulness-based interventions. *Nature reviews psychology*, *1*(10), 605-619. https://doi.org/10.1038/s44159-022-00090-8

Guendelman, S. (2021). *Emotion Regulation, Social Cognitive and Neurobiological mechanisms of Mindfulness, from Dispositions to Behavior and Interventions* Lebenswissenschaftliche Fakultät]. DOI:10.18452/22265

Han, Z. R., Ahemaitijiang, N., Yan, J., Hu, X., Parent, J., Dale, C., DiMarzio, K., & Singh, N. N. (2021). Parent mindfulness, parenting, and child psychopathology in China. *Mindfulness*, *12*(2), 334-343. https://doi.org/10.1007/s12671-019-01111-z

Hoge, E. A., Acabchuk, R. L., Kimmel, H., Moitra, E., Britton, W. B., Dumais, T., Ferrer, R. A., Lazar, S. W., Vago, D., & Lipsky, J. (2021). Emotion-related constructs engaged by mindfulness-based interventions: A systematic review and meta-analysis. *Mindfulness*, *12*(5), 1041-1062. https://doi.org/10.1007/s12671-020-01561-w

Hwang, Y.-S., Bartlett, B., Greben, M., & Hand, K. (2017). A systematic review of mindfulness interventions for in-service teachers: A tool to enhance teacher wellbeing and performance. *Teaching and teacher education*, *64*, 26-42. https://doi.org/10.1016/j.tate.2017.01.015

Ivaki, P., Schulz, S., Jeitler, M., Kessler, C. S., Michalsen, A., Kandil, F. I., Nitzschke, S.-M., Stritter, W., Voss, A., & Seifert, G. (2021). Effects of yoga and mindfulness practices on the autonomous nervous system in primary school children:

A non-randomised controlled study. *Complementary therapies in medicine*, *61*, 102771. https://doi.org/10.1016/j.ctim.2021.102771

Kallio, H., Pietilä, A. M., Johnson, M., & Kangasniemi, M. (2016). Systematic methodological review: developing a framework for a qualitative semi-structured interview guide. *Journal of advanced nursing*, *72*(12), 2954-2965. https://doi.org/10.1111/jan.13031

Kavitha, M., Chandrashekharayya, S., Anagha, V., & Kashinakunti, S. (2023). Correlation between serum cortisol levels and practice of yoga and meditation in medical students. *Biomedicine*, *43*(6), 1738-1743. https://doi.org/10.51248/.v43i6.3551

Kriakous, S. A., Elliott, K. A., Lamers, C., & Owen, R. (2021). The effectiveness of mindfulness-based stress reduction on the psychological functioning of healthcare professionals: A systematic review. *Mindfulness*, *12*(1), 1-28. https://doi.org/10.1007/s12671-020-01500-9

Kuyken, W., Ball, S., Crane, C., Ganguli, P., Jones, B., Montero-Marin, J., Nuthall, E., Raja, A., Taylor, L., & Tudor, K. (2022). Effectiveness of universal school-based mindfulness training compared with normal school provision on teacher mental health and school climate: Results of the MYRIAD cluster randomised controlled trial. *Evidence Based Mental Health*, *25*(3), 125-134. https://doi.org/10.1136/ebmental-2022-300424

Lawrence, P. J., Parkinson, M., Jasper, B., Creswell, C., & Halligan, S. L. (2021). Supporting the parents of children and young people with anxiety and depressive disorders is an opportunity not to be missed: a scoping review. *The Lancet Psychiatry*, *8*(10), 909-918. https://doi.org/10.1016/S2215-0366(20)30315-1

Lin, J., & Guo, W. (2024). The research on risk factors for adolescents' mental health. *Behavioral Sciences*, *14*(4), 263. https://doi.org/10.3390/bs14040263

Lochmiller, C. R. (2021). Conducting thematic analysis with qualitative data. *The qualitative report*, *26*(6), 2029-2044. https://doi.org/10.46743/2160-3715/2021.5008

Malboeuf-Hurtubise, C., Taylor, G., Lambert, D., Paradis, P.-O., Léger-Goodes, T., Mageau, G. A., Labbé, G., Smith, J., & Joussemet, M. (2024). Impact of a mindfulness-based intervention on well-being and mental health of elementary school children: results from a randomized cluster trial. *Scientific reports*, *14*(1), 15894. https://doi.org/10.1038/s41598-024-66915-z

Maynard, B. R., Solis, M. R., Miller, V. L., & Brendel, K. E. (2017). Mindfulness-based interventions for improving cognition, academic achievement, behavior, and socioemotional functioning of primary and secondary school students. *Campbell systematic reviews*, *13*(1), 1-144. https://doi.org/10.1002/CL2.177

Nguyen, D., Kleeman, N. J., Yager, Z., Parker, A. G., Shean, M. B., Jefferies, W., Wilson-Evered, E., Pucinischi, C. P., & Pascoe, M. C. (2022). Identifying barriers and facilitators to implementing mindfulness-based programmes into schools: A mixed methods study. *Applied Psychology: Health and Well-Being*, *14*(4), 1172-1188. https://doi.org/10.1111/aphw.12329

Olderbak, S., Uusberg, A., MacCann, C., Pollak, K. M., & Gross, J. J. (2023). The process model of emotion regulation questionnaire: Assessing individual differences in strategy stage and orientation. *Assessment*, *30*(7), 2090-2114. https://doi.org/10.1177/10731911221134601

Palitsky, R., & Kaplan, D. M. (2021). The role of religion for mindfulness-based interventions: Implications for dissemination and implementation. *Mindfulness*, *12*(8), 2076-2089. https://doi.org/10.1007/s12671-019-01253-0

Patton, M. Q. (2014). *Qualitative research & evaluation methods: Integrating theory and practice*. Sage publications. https://study.sagepub.com/patton4e

Roeser, R. W., Mashburn, A. J., Skinner, E. A., Choles, J. R., Taylor, C., Rickert, N. P., Pinela, C., Robbeloth, J., Saxton, E., & Weiss, E. (2022). Mindfulness training improves middle school teachers' occupational health, well-being, and interactions with students in their most stressful classrooms. *Journal of Educational Psychology*, *114*(2), 408. https://doi.org/10.1037/edu0000675

Ruiz-Íñiguez, R., Santed Germán, M. Á., Burgos-Julián, F. A., Díaz-Silveira, C., & Carralero Montero, A. (2020). Effectiveness of mindfulness-based interventions on anxiety for children and adolescents: A systematic review and meta-analysis. *Early Intervention in Psychiatry*, *14*(3), 263-274. https://doi.org/10.1111/eip.12849

Spytska, L. (2024). Anxiety and depressive personality disorders in the modern world. *Acta Psychologica*, *246*, 104285. https://doi.org/10.1016/j.actpsy.2024.104285

Tian, T., Young, C. B., Zhu, Y., Xu, J., He, Y., Chen, M., Hao, L., Jiang, M., Qiu, J., & Chen, X. (2021). Socioeconomic disparities affect children's amygdala-prefrontal circuitry via stress hormone response. *Biological psychiatry*, *90*(3), 173-181. https://doi.org/10.1016/j.biopsych.2021.02.002

Weisz, E., & Cikara, M. (2021). Strategic regulation of empathy. *Trends in cognitive sciences*, *25*(3), 213-227. https://doi.org/10.1016/j.tics.2020.12.002

Appendix 1

1.1. Questionnaire for primary school teachers

1. What was the perception of anxiety levels of students before MBI sessions were included in the curriculum?
2. Can you recall any noticeable changes in the behaviours of students post-MBI sessions? Would you like to elaborate on this a bit?
3. What were the observed coping strategies that children frequently adopted from these MBI training?
4. Did you face challenges while implementing MBI in mainstream classrooms?
5. What are the changes you would prefer for better acceptance of MBIs within students in classroom settings?

1.2. Questionnaire for parents of children suffering from mild-to-moderate anxiety

1. Before the MBI sessions were conducted, how did your child react to stressful situations, such as in examinations or competitions?
2. To what extent did you observe noteworthy changes in your child post their participation in MBI sessions? Was there any significant alteration in responses to anxiety or stress?
3. How often do you notice your child implementing mindful habits at home while dealing with tough situations? What was the most typical coping mechanism exhibited?
4. In this process, did you feel any challenges in the way of supporting MBI practices at home?
5. Are there any additional resources you can suggest to help your child practice mindfulness?

Appendix: 2

Table 1: Key findings from semi-structured interviews

Participants	Participant Code	Emergent Themes	Interview Quotes
Primary School Teachers	S1	Impact of MBIs on Anxiety Levels in Primary School Students	"Students who used to panic during exams now seem more composed after mindfulness sessions."
	S2	Mastering Coping Mechanisms through MBIs	"They now know how to take a step back, breathe, and address situations calmly."
	S3	Challenges in the implementation of MBIs	"The school schedule is so packed; finding a dedicated time slot for mindfulness is a challenge."
Parents	P1	Impact of MBIs on Anxiety Levels in Primary School Students	"After starting mindfulness, my son seems less anxious and more willing to interact with others."
	P2	Mastering Coping Mechanisms through MBIs	"I saw my daughter quietly breathing during a family argument, which she never used to do before."
	P3	Challenges to implementation of MBIs	"I'm worried my child might lose interest in mindfulness if it's not practiced regularly in school."
	S1	Impact of MBIs on Anxiety Levels	"I feel less scared when I talk in front of the class because I know how to calm them down now."
	P3		"When I see her feel upset, she takes time out to focus on her breathing like she does in class. I have to admit

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	Mastering Coping Mechanisms through MBIs	MBI has made her calmer and relaxed in stressful situations"
P3	Impact of MBIs on Anxiety Levels in Primary School Students	"I like my daughter doing mindfulness; it makes her happy and helps her focus."

APPENDIX 3

Daily Journal

18.05.024

Can you recall some episodes when you felt uncomfortable and helpless about your gestures?

I remember myself suffering from breathlessness whenever my mathematics examination was nearer. I used to spend sleepless nights practicing sums, but failed miserably. Initially I thought of approaching my friends for help, but soon isolated myself from them to avoid shame. This worsened situations at home, I started involving in fights with my mother more often.

What was your experience after attending MBI sessions?

After learning mindfulness, I feel calmer. I use deep breathing exercises when I feel nervous, and it helps me focus on my work. The counselor taught us to notice our feelings without getting stuck on them. Now, during exams, I tell myself, 'I can do this,' and I concentrate better. I even finished my last exam without feeling as scared.

Do you want to continue with your MBI practices?

I wanted to keep practicing mindfulness at home, but I'd forget because of homework and other activities. My family didn't understand what I was trying to do, so they didn't encourage me. It was hard to stay motivated when I didn't see instant results. Over time, I realized that even a few minutes of practice helped, so I started doing it in small steps, like taking mindful breaths before I started studying.

Figure 6: Reflective journal of A1

Daily Journal

18.05.024

Can you recall some episodes when you felt anxious?

Sometimes, I feel really nervous, even when there's nothing scary happening. My heart beats super fast when the teacher asks me to speak in front of the class, and I feel like my mind goes blank. When I have tests, I get so worried that my tummy starts to hurt. I also feel scared to talk to new people because I think they might not like me. When I get anxious, I feel like I can't breathe properly, and my hands get really sweaty. It's like I can't think straight, and I just want to hide somewhere. At home, I sometimes cry because it feels like the worries in my head are too big to handle.

What was your experience after attending MBI sessions?

The mindfulness sessions helped me realize that everyone feels nervous sometimes. Madam showed us how to sit quietly and focus on our breath. It's like the bad thoughts about failing to go away for a while. In my last exam, I stayed calm, and I did much better than before. Now, I don't feel as scared when tests come up

Do you want to continue with your MBI practices?

I want to get better at remembering to use mindfulness whenever I feel nervous. I also want to find a way to practice mindfulness at home without feeling embarrassed. Maybe I can ask my parents to do it with me so it feels less awkward.

Figure 7: Reflective Journal of A2

Daily Journal

18.05.024

Can you recall some episodes when you felt anxious?

I think I was most anxious before my viva examinations. Being poor in academics, I faced great difficulty in remembering facts. On top of it, anxiety caused me to feel stomachaches, nauseous, breathless and dizzy. I used to vomit and faint sometimes as well. I sometimes thought of ways to skip examinations, even if it lead to failing the assignment.

What was your experience after attending MBI sessions?

Madam taught us how to do a body scan and pay attention to each part of our body. It made me aware when I was tense. I use this technique before exams now, and it relaxes me. I also write down positive things I've done, like when I studied well, and it makes me feel better. This time, I didn't cry before the test, and I even smiled when I saw some questions I knew the answers to!

Do you want to continue with your MBI practices?

Keeping up with mindfulness at home was tough. I'd forget what the counsellor madam had taught us, and my parents didn't always remind me to practice. Sometimes, I didn't see the point because I wasn't sure it was helping".

Figure 8: Reflective journal of A3