

MINDFULNESS EDUCATION AND EMOTIONAL SELF-REGULATION AMONG VIETNAMESE ADOLESCENTS: AN EMPIRICAL STUDY

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Abstract: Mindfulness initiatives in-school have been created in response to increasing focus on humanistic education, student mental health, and the rise in the prevalence of stress, anxiety, depression, and violence within and around schools in Vietnam. This study adopted a mixed-methods approach involving quantitative and qualitative techniques, which included a survey, and qualitative data based on expert interviews and a focused literature review regarding 312 students, 56 teachers, and 120 parents from the metropolitan and capital cities of Ho Chi Minh City and Hanoi. This research addresses the focus of the impact mindfulness exercises and practices have on the mental health, emotional regulation, self-regulation, and the prosocial and antisocial behavior dimensions of the Vietnamese adolescent population. Among the population of students who reported practicing mindfulness, the exercises were noted to help manage anxiety, stress, and negative emotions, and to assist in concentration. Decreases in school violence and other constructive behavior acts to school were reported alongside mindfulness practice. Organizational constraints in the promotion and development of mindfulness education include lack of emotional preparedness of teachers, and poor infrastructure and training in their profession. Even if only few students practiced mindfulness, it was with the expectation of the perceived benefits mindfulness practice would provide. This highlights the need for adding components of mindfulness education within the Vietnamese secondary and higher education contexts. In the subsequent phase of this project, the emphasis will shift to building a unified Vietnamese curriculum along with its training components for educators which will include culturally appropriate mindfulness practice for adolescents. In future studies, the use of randomized controlled trials (RCTs) and longitudinal designs will be necessary in order to ascertain the potential long-term effects on students' well-being, emotional regulation, and behavioral balance.

Keywords: Altruism; emotional self-regulation; mental health; mindfulness education; school violence; Vietnamese adolescents

INTRODUCTION

Vietnamese students' mental health has caused increasing worry in families, schools, and across the whole Vietnamese mental health spectrum, in policy. The World Health Organization (2022a,b) reported that in the 2020s, major Vietnamese cities, like Hanoi and Ho Chi Minh City, had one in four students showing signs of stress, anxiety, and depression. There has been increasing and more complex school-violence, bullying, and harassment. The Nguyen et al. (2024) study reported that in the COVID-19 pandemic the rates of anxiety and stress in high school students reached 41.3%, a shocking increase from pre-pandemic levels and in line with Nearchou et al. (2020), Lee (2020), and Perkins et al. (2022) who reported that the overwhelming anxiety in adolescents and school children was in the pandemic. The wide systemic influence of the pandemic coupled with the already with the concentrated academic competition in Vietnam. the digital influence with social media means that students are with chronic stress (Vu, 2023). The systematic review by Dale et al. (2019) showed that weak social connectedness, sedentary lifestyle, and lack of support in schools was increasing the risks of depression, anxiety, and burn-out.

Mindfulness-based approaches are now recognized globally as viable and effective means of enhancing emotional health in educational settings. Originating from Buddhist contemplative practices, mindfulness involves "the awareness that emerges through paying attention, on purpose, in the present moment, and non-judgmentally" (Kabat-Zinn, 1990, 2003, 2011). Clinically and educationally, mindfulness practices such as mindful breathing, body scanning, and attentional anchoring are aimed at helping people identify and regulate their emotions and develop non-reactive awareness (Davidson, 2008; Keng et al., 2011; Hölzel et al., 2011; Aspy & Michael, 2017; Chen & Jordan, 2020). An increasing amount of empirical research has documented the positive effects of mindfulness for children and adolescents. Dunning et al. (2019) conducted a systematic review of 33 studies and found that mindfulness-based interventions were effective in lowering anxiety, depression, and stress in children and adolescents. Similarly, mindfulness programs were found to improve emotional regulation and lower the likelihood of developing mental health issues in participants of the MYRIAD study (Kuyken et al., 2022a,b), which involved 8,500 school children from 85 schools across the UK. Other studies have shown that, in addition to reducing violence and aggression in

schools, mindfulness is associated with the promotion of compassion and other prosocial values such as altruism and empathy (Cheang et al., 2019; Condon et al., 2019; Kim et al., 2021).

In a similar study, mindfulness practitioners showed an 11% increase in academic performance coupled with lower exam-related stress compared to non-practitioners. Throughout Asia, Thailand, Japan, and South Korea have incorporated mindfulness practices in their school curricula, resulting in positive changes such as school violence reduction and improved mental health among students (Emavardhana & Tori, 1997; Joo, 2011; Cao, 2020; Nguyen & Nguyen, 2020). Vietnam is culturally and philosophically closer to Buddhism and experiences similar mental health issues, and yet, is still in the very beginning stages of school mindfulness integration. Recently, some pilot programs in Ho Chi Minh City and Hanoi have included mindful breathing, yoga, and life skills classes with a mindfulness focus (Le & Trieu, 2016). Of the students surveyed, 62% expressed interest in school activities focused on stress and emotion regulation.

The increasing rates of psychological distress and school violence suggest that mindfulness education might be implemented as a culturally viable and contextually flexible approach to help Vietnamese students with emotional regulation, stress management, and social skills (Marques, 2010; Le, 2019; Dao, 2022). Mindfulness education cultivates individual wellness, and aligns with Vietnam's societal and cultural framework of loving-kindness, compassion, emotional tolerance, and self-discipline (Bahl et al., 2013; Komjathy, 2015; Lim, 2019). It helps create a synergy of age-old cultural orientations with modern educational demands. Thus, the present study sought to fill this gap by examining the impact of school-based mindfulness education on the mental health, emotional self-regulation, and social behavior of Vietnamese adolescents. The study sought to understand the relationship of regular mindfulness practice with stress, anxiety, attention control, emotional regulation, and positive social behaviors like altruism. The study also aimed to understand the challenges in practice and offer suggestions on how mindfulness practices can be effectively incorporated in Vietnam's school education.

RESEARCH METHODOLOGY

Research Design

This study used a mixed-methods design to evaluate the impact of mindfulness education on the mental health and social behavior of students in Vietnam. Using mixed-methods is appropriate for complex psychological and educational interventions, particularly for mindfulness programs in educational settings (Baer, 2003; Baer et al., 2006, 2008, 2012; Kuyken et al., 2022a,b). The design of this research drew on and integrated three components: a systematic literature review, semi-structured expert interviews, and field-based case studies and surveys. The literature review was grounded in and synthesized the international and Vietnamese literature on mindfulness education, mental health and school, and behavioral interventions, and sought to identify the theoretical basis and trends in global implementation (Dunning et al., 2019; MLERN, 2012). The expert interviews integrated case studies from the fields of school psychology and life skills education and mindfulness practice (Cheang et al., 2019; Davidson, 2008), while the field studies were carried out in the context of mindfulness programs in high schools and universities located in Ho Chi Minh City and Hanoi. The study used a triangulated approach to data collection to improve the validity and contextual relevance of the findings. Such an integrative framework aligns with the methodological structure utilized in global research pertaining to mindfulness education, where empirical and lived experiences are evenly represented (Brinker et al., 1996; Bishop et al., 2004; Brown et al., 2003, 2007; Kuyken et al., 2022a,b).

Participants and sampling

Two main groups took part in the research: the experts and the students. The experts consisted of 56 individuals with at least a master's degree in school psychology, life skills education, therapeutic meditation, or mindfulness training. The criteria included having at least five years of experience in the field, as well as having designed or taught mindfulness or emotional-regulation programs for students. This approach follows the criteria set at the international level with respect to expert consultation for the educational intervention validation and interpretation (Condon et al., 2019; Csaszar et al., 2018). The students, aged 15-22, consisted of 312 individuals and were recruited from 6 high schools and universities located in Ho Chi Minh City and Hanoi. Students were chosen through convenience sampling from schools that had integrated or piloted mindfulness or life-skills programs. Inclusion criteria included voluntary participation with informed consent and the absence of severe psychiatric conditions. These standards were in line with participant standards of large-scale mindfulness studies such as the MYRIAD Project (Kuyken et al., 2022a,b) in order to enhance comparability and methodological integrity.

Implementation procedure

Systematic data collection and analysis were accomplished in a comprehensive manner in four separate phases of a study. The first phase consisted of a systematic literature review where over a hundred publications, both international and domestic, published between 2000 and 2025, were reviewed and synthesized, focusing on mindfulness, school mental health, and social behavior. Data were collected from Scopus, PubMed, Google Scholar, and the Vietnam National Library. Each of the publications was assessed and scored based on a set of criteria covering methodological quality, publication recency, and thematic relevance, following systematic review best practices in the fields of

education and psychology (Mak et al., 2018; Dunning et al., 2022). In the second phase, semi-structured expert interviews were executed with 56 specialists. Each 30 to 45 minute interview provided discourse in four areas: student mental health trends, mindfulness effectiveness, school-based implementation feasibility, and key barriers with policy recommendations. This was in the spirit of providing rich qualitative data, which is a recommended procedure in mindfulness research (Baer et al., 2008; Cheang et al., 2019). For the third phase, a quantitative field survey was administered to 312 students at the focus schools. The survey was made of three parts which collected demographic information, and assessed psychological distress (specifically stress, anxiety, and depression), mindfulness, altruism, and aggression. The overall structure was adapted from previously validated instruments from studies on a larger scale (Dunning et al., 2019; Narmandakh et al., 2020; Kuyken et al., 2022a,b). The literature review was cross-referenced and the qualitative and quantitative findings were integrated and analyzed in the final phase. This triangulation deepens the interpretative reliability, not only in the ecological sense but also in the context to ensure that the findings reflect empirical trends as well as contextual trends.

Materials and measurement tools

To suit the context of Vietnam, data collection instruments were contextualized based on internationally recognized frameworks. During the review of literature, I used a thematic coding matrix to identify and synthesize the conceptual definitions, influence mechanisms, and school-based mindfulness frameworks guided by the work of Goleman et al. (2017) and Hölzel et al. (2011). Regarding the expert interviews, a semi-structured interview guide was developed focusing around four thematic areas: mental health challenges, effectiveness of mindfulness, ease of implementation, and recommendations at the policy level, which allowed for a balance of structured and free conversation. In the quantitative survey, I used three main standardized instruments. The first was the Depression, Anxiety, and Stress Scale (DASS-21) (Lovibond & Lovibond, 1995; Henry & Crawford, 2005), which is a reliable instrument for assessing psychological distress. The second instrument was the Five Facet Mindfulness Questionnaire (FFMQ-Short Form, 24 items) (Baer et al., 2006; Bohlmeijer et al., 2011), which assesses the five mindfulness facets of observing, describing, acting with awareness, non-judging, and non-reactivity. The third instrument was the Altruistic and Aggressive Behavior Scale (Dunning et al., 2019), which has 12 items assessing school contextual prosocial and aggressive behavior. These instruments offered a comprehensive overview of the emotional and behavioral dimensions of students.

Research ethics

This study was carried out respecting the ethical principles of social and health research. Each potential participant was given a full explanation of the research goals and methods and informed of their right to leave the research study at any point. Information was integrated and defended to meet the ethical principles of individual confidentiality and anonymity during the collection and subsequent analysis of the data (Davidson, 2008; MLERN, 2012). All participants provided written informed consent and data were kept in password-protected devices accessible only to the research team.

Data analysis

A thorough interpretation was ensured through the analysis of both qualitative and quantitative data. NVivo 12 software was used for the qualitative data analysis of the expert interviews. Content and thematic analyses were performed based on the procedures specified in the mindfulness research (Baer, 2003; Mak et al., 2018). Major themes were developed, coded, and compared cross-sectionally in the interviews to elucidate insights on agreements as well as differences. Statistical analyses for the quantitative data were performed through the SPSS 26.0 software. Students' responses were summarized through the computation of descriptive statistics of frequencies, means, and standard deviations. To study the associations between the scales of mindfulness, indicators of mental health, and social behavioral outcomes, correlational analyses (Pearson's r) were used. The descriptive and inferential methods adopted in the current research parallel the analytical methods used in prominent international mindfulness intervention studies (Kuyken et al., 2022a,b; Montero-Marin et al., 2022a,b), which speaks to the precision and comparability of the present study.

RESULTS

The effectiveness of mindfulness on students' mental health and social behaviors The outcomes from all quantitative evaluation methods and qualitative expert interviews were all positive regarding the benefits of mindfulness practice on students' mental health, mental attention, compassion, and emotional self-regulation. These results are congruent with worldwide studies regarding psychosocial benefits of mindfulness in educational settings (Dunning et al., 2019; Kuyken et al., 2022a,b; Shirlcliff et al., 2009; Davidson, 2008). Analysis using Depression Anxiety Stress Scales (DASS-21; Henry & Crawford, 2005) showed that mindfulness practitioners for at least three times per week over two months recorded considerably lower psychological distress. Mindfulness practitioners had a considerably lower stress ($M = 11.3$, $SD = 3.8$ vs. $M = 16.9$, $SD = 4.5$; $p < .01$) and anxiety ($M = 9.6$, $SD = 3.5$ vs. $M = 14.2$, $SD = 4.0$; $p < .01$) compared to non-practitioners, indicating effectiveness of mindfulness on emotional stabilization and coping with academic pressure. Consistent with quantitative evidence, 92.8% (52 of 56) of interviewed experts confirmed

mindfulness practices effectiveness in alleviating school-related stress and anxiety, particularly during high stakes like examinations and career selection.

We also noticed positive changes with respect to students' attention and focus. The scores recorded in the Five Facet Mindfulness Questionnaire (FFMQ) indicated that participants in the mindfulness condition scored significantly higher on the participatory mindfulness and attentional awareness dimension ($M = 27.5$, $SD = 3.6$) relative to participants in the control group ($M = 22.1$, $SD = 4.2$; $p < .01$). In addition, 70% of the experts studied agreed that mindfulness training helped students to focus, diminished their attention drifting, and aided the cognitive engagement in learning activities. These results parallel findings by Howells et al. (2016), who claimed that mindfulness profoundly improves cognitive and metacognitive functions in students. Improvements were also evident in the social and emotional development of students. In the Altruistic and Aggressive Behavior Scale (Dunning et al., 2019), students who practiced mindfulness scored significantly higher on altruism ($M = 18.2$, $SD = 2.7$) than non-practitioners ($M = 14.9$, $SD = 3.4$; $p < .05$) and significantly lower on aggression ($M = 6.4$, $SD = 2.1$; $M = 9.7$, $SD = 2.8$; $p < .05$). This was also noted in expert evaluations where 92.8% (52 of 56) noted that mindfulness fosters empathy, compassion, and peaceful conflict resolution, which are critical yet often overlooked elements of life-skills education.

One expert stated, "Mindfulness not only helps students stay composed, but it also helps them cultivate kindness and awareness toward others—characteristics that traditional life-skills programs seldom develop." This perspective aligns with Cheang et al. (2019) and Shirtcliff et al. (2009), where mindfulness is highlighted as an important component in the development of prosocial behaviors and emotional awareness. There was also notable progress regarding emotional self-regulation. Roughly 76.9% of students employing mindfulness techniques—focused breathing, emotion labeling, and cognitive observation—self-reported improvements in anger, sadness, and frustration regulation. This was also evident in the quantitative data, where the mindfulness practitioners recorded a higher mean score in emotional self-regulation ($M = 24.7$, $SD = 3.9$) compared to the non-practitioners ($M = 19.3$, $SD = 4.1$; $p < .01$). 87% (49 of 56) of the expert respondents also highlighted that mindfulness aids in the regulation of behaviors, as well as the reduction of impulsivity and chronic academic stress. These results support findings from other countries that point to mindfulness as a means of improving emotional regulation and enhancing social cohesion in a school community (Kuyken et al, 2022 a,b; Davidson, 2008).

TABLE 1 Mean scores of measured variables by mindfulness practice group

Measured Variable	Mindfulness Group (M ± SD)	Non-Practicing Group (M ± SD)	p-value
Stress (DASS-21)	11.3 ± 3.8	16.9 ± 4.5	< .01
Anxiety (DASS-21)	9.6 ± 3.5	14.2 ± 4.0	< .01
Attention (FFMQ)	27.5 ± 3.6	22.1 ± 4.2	< .01
Altruistic Behavior	18.2 ± 2.7	14.9 ± 3.4	< .05
Aggressive Behavior	6.4 ± 2.1	9.7 ± 2.8	< .05
Emotional Self-Regulation	24.7 ± 3.9	19.3 ± 4.1	< .01

Source: Author's survey (2025).

Current situation and implementation challenges

The previously noted positive outcomes aside, surveys and interviews with experts highlighted that mindfulness education in Vietnamese schools is still in its infancy and is still confronted with fundamental structural, cultural, and perceptual issues. Such issues are similar to many issues noted in the literature and confirm the assertion that the barriers in adopting programs are systemic and not merely context specific (Kuyken et al., 2022a,b; Dunning et al., 2019; Davidson, 2008). There is minimal awareness of mindfulness in the education sector. Quantitative results showed that only a small proportion of the students and teachers (24.7% and 23.2%, respectively) knew about mindfulness, and the rates of actual participation were lower (18.6% of students and 12.5% of teachers), which were mostly in informal or extracurricular sessions.

TABLE 2 Awareness and participation in mindfulness activities in schools

Group	Heard of Mindfulness (%)	Participated in Mindfulness Activities (%)
Students (N = 312)	24.7	18.6
Teachers and Administrators (N = 56)	23.2	12.5

Source: Author's survey (2025).

Similar to the findings of Cheang et al. (2019) and Kuyken et al. (2022a,b) that described low awareness and misconceptions as some of the most enduring challenges for the early implementation of mindfulness initiatives in Asia, Expert interviews revealed that the misunderstanding of mindfulness as a religious or spiritual practice remains prevalent. This concern, described by 75% of experts (44 out of 56) as one of the most important barriers to the uptake of such programs, resonates with the sentiments of Davidson (2008) and Kuyken et al. (2022a) on the necessity of communicating secular mindfulness approaches more effectively within school settings. Another significant challenge is the lack of qualified instructors. For instance, 78.6% of teachers and administrators reported that mindfulness

facilitators were absent in their schools, and half of the expert respondents in the study considered this a significant issue that negatively affects the safety and pedagogical coherence and effectiveness of mindfulness programs. This is consistent with the finding of Baer et al. (2008), who linked instructor ineptitude to poor outcomes of school-based interventions. In addition, more than 82% of teachers and administrators mentioned limited physical infrastructure, overfull academic schedules, and large class sizes as the most significant of the structural and logistical barriers to implementation.

Unfortunately, many educational establishments do not have fully designated facilities nor appropriate allocated periods aimed for the practice mindfulness, which, as the MYRIAD Trial illustrates, has been highlighted as a more generalized problem (Kuyken et al., 2022a,b). Closely related to this issue is the lack of a core set of decomposable teaching resources which assist in the formalization of a mindfulness practice within the educational setting. Mindfulness practices, for the most part, remain informal within the educational setting due to the lack of formal teaching materials and training, as such informal practices could have ranged broadly from personal trainings or materials to Internet resources, as evidenced by the 14.3% of teachers who indicated access to some form of a training course. Most (82.1%) of the experts (N=56) within the country have also highlighted the lack of peer-reviewed, and, therefore, evidence-based teaching and mindfulness resources for educators within the country. Gu et al. (2016) and Dunning et al. (2019) highlight the need for decomposable teaching resources, as they are vital in the sustaining and keeping fidelity to the program. While Gu et al. (2016) and Dunning et al. (2019) highlight technical and institutional barriers, lack of social and psychological barriers is a major area which contributes to the low student turnout for mindfulness sessions. About 36.5% of the students sampled indicated a lack of social mindfulness, while 29.8% found the activities unengaging compared to social media and other forms of digital entertainment.

Overall, the mindfulness education framework in Vietnam exhibits early signs of willingness but remains limited in scope due to superficial awareness, insufficient capacity, and minimal institutional backing. Overcoming these obstacles will entail the development of local, standardized curriculum resources and comprehensive teacher training systems, as well as cultural transformations within educational institutions and the broader community that regards mindfulness as a secular, scientifically validated, and integral aspect of holistic education.

Stakeholder perspectives

Participants' feedback revealed a collectively positive but cautious attitude toward introducing mindfulness to Vietnamese schools. All stakeholders acknowledged the positive impact mindfulness practices can have on improving student wellness, attention, and empathy. Still, participants across the spectrum voiced the necessity to ensure mindfulness practices are appropriate for the age group, scientifically supported, culturally relevant, and institutionally backed. Among the educators and school administrators, there was unequivocal support for school-based mental health initiatives, particularly those based on mindfulness. Of the 56 teacher and administrator participants, 71.4% regarded mindfulness as a necessary and realistic practice to be integrated into the Vietnamese school system (Truong et al., 2024; Nearchou et al., 2020). However, the enthusiasm toward mindfulness practice and its implementation was lukewarm, as only 26.8% of participants expressed confidence to demonstrate mindfulness practices as leadership, and more than half (51.8%) showed willingness to participate in mindfulness practice training. Moreover, 67.9% of participants desired collaboration with mindfulness and therapeutic meditation instructors to ensure safe practice, particularly with students with mental health issues (Baer et al., 2008).

TABLE 3 Teachers' perspectives on the feasibility and need for mindfulness training

Evaluation Item	Percentage (%)
Consider mindfulness necessary in schools	71.4
Confident in guiding if assigned	26.8
Desire for in-depth training	51.8
Recommend external specialist collaboration	67.9

Source: Author's survey (2025).

The international body of research indicates similar findings. The effectiveness of mindfulness practices is, among other factors, dependent on the mindfulness instructors' skill, consistency, and the personal experience of the instructors (Baer, 2003; Dunning et al., 2019; Kuyken et al., 2022a,b). Reflecting on the experience of teaching literature in Ho Chi Minh City, one teacher noted, "Students today are under too much pressure. I think mindfulness is good, but I've never practiced it myself, so I'm afraid I might not do it properly." This reflection captures the enthusiasm of the teachers and, at the same time, the nerves stemming from a fear of inadequate preparation. These teachers also suggested teaching mindfulness formally, but as a component of other subjects like moral education, life skills, or homeroom sessions, and not as a standalone subject. This perspective is similar to practices in Japan, Thailand, and South Korea, where mindfulness is commonly integrated into civic and moral education (Cao, 2020; Cheang et al., 2019). Regarding the survey completed by parents, most respondents reported conditional support for mindfulness education. This was observed in a sample of 120 parents from Ho Chi Minh City and Hanoi, where 58.3% of parents claimed to support the introduction of mindfulness, as long as it was evidence-based, professional, and with

articulated goals. A proportion of 21.7% raised the issue of possible disruption of fundamental academic areas. In contrast, 20.0% expressed ambivalence or asked for clarification.

TABLE 4 Parents' perspectives on school-based mindfulness implementation

Evaluation Item	Percentage (%)
Support if professionally organized	58.3
Concerned about impact on core subjects	21.7
No opinion / require further information	20.0

Source: Author's survey (2025).

Concerns surrounding the difference between mindfulness and religious practice impacted parents' cautious optimism the most. A ninth grader parent in Hanoi stated, "I fully support it if it helps students reduce stress, but it should be carefully explained so people don't misunderstand it as religious." This is consistent with the findings of Shirliff et al. (2009), where the lack of explicit detail surrounding mindfulness, and its practice could lead to the interpretation of mindfulness as a religion or ritual, especially within Asian cultures. For this reason, framing mindfulness as a practice rooted in spirituality and discipline, mental health scholars like Komjathy (2015) and Le (2019) argue that mindfulness should be treated as a secular practice. A students' perspective also highlights the demand and potential of mindfulness initiatives within the school. From the 312 students surveyed, only 24.7% had any understanding of the concept of mindfulness, and only 18.6% had ever engaged in mindfulness activities. After receiving a short overview of its objectives and advantages, 68.5% showed interest in participating—indicative of considerable latent demand for assistance regarding mental health and stress management (Dunning et al., 2019; Montero-Marin et al., 2022a,b). In addition, 42.3% of participants experienced stress and anxiety frequently before exams, and 59.8% favored mindfulness practices that included movement, narrative, and other active elements.

TABLE 5 Students' attitudes and expectations toward mindfulness education

Evaluation Item	Percentage (%)
Familiarity with mindfulness concept	24.7
Willingness to participate if organized by school	68.5
Concerned about being teased by peers	36.5
Frequently stressed before exams	42.3
Prefer activities combining movement/storytelling	59.8

Source: Author's survey (2025).

The information indicates a balance of both enthusiasm and hesitation. Nearly 36.5% of students demonstrated a fear of being ridiculed by their peers and 29.8% described meditation as unengaging in its traditional form where participants are simply expected to sit in silence. Thus, the suggestion for mindfulness programming focused toward adolescents ought to pay attention to the imagination, the playful spirit, and the social aspects of activities known to deepen engagement, as described in the literature (Thich, 1996, 1999, 2015; Thich, 2020; Mai, 2020; GSO, 2023). One first-year university student described to us, "At first, I felt awkward meditating during assemblies on Monday, but after a few sessions, I became calmer and able to focus in class." This type of experience parallels the finding of Howells et al. (2016) regarding impact of short, interactive mindfulness sessions on students attention and emotional balance. In relation to the stakeholders, the feedback supports attention to the fact that mindfulness is recognized as a resource often overlooked in education within Vietnam, and that its inclusion calls for attention to training and the need for sensitive adaptation integrated at the cultural and institutional levels. Thus, balanced mindfulness programming will respond to the science and community need as it integrates programming as mindfulness as community practice rather than as an 'imported' intervention.

DISCUSSION

Comparison with international studies

This research indicates that incorporating mindfulness practices in Vietnamese education systems is beneficial, especially regarding improving students' mental health, emotional self-regulation, and humanistic values like empathy and altruism. These findings correspond with the results of several studies worldwide (Cheang et al., 2019; Dunning et al., 2019; Kuyken et al., 2022a,b) and contribute valuable evidence from the context of a developing Asian country, where such comparative research is scarce. Dunning et al. (2019) conducted a meta-analysis of 33 randomized controlled trials (RCTs) involving children and adolescents and reported that mindfulness-based interventions (MBIs) substantially reduce anxiety, depression, and stress, while enhancing emotional awareness and regulation. These results were also reflected in the current study's quantitative findings, where participants of mindfulness practices showed marked reductions in stress and anxiety levels as compared to their counterparts. Moreover, the results of the present study aligned with Mak et al. (2018) who reported that mindfulness practices not only improve attention but

also executive functioning, which is critical to the attainment of academic goals and social-emotional competence. These findings are corroborated with the existing body of large scale studies on the topic. Among over 8,000 students in the UK, the MYRIAD Trial (Kuyken et al., 2022a,b) found that mindfulness programs benefited students' ability to manage emotions, decreased impulsivity, and resulted in small decreases in anxiety and depression over the short-term. However, the most significant decreases in impulsivity and reductions in anxiety and depression were among students with more psychological distress. This is in line with findings in the Vietnamese sample where academic stress with emotional instability was the focus of the study (Montero-Marin et al., 2022a,b)

TABLE 6 Comparison of international studies and the present research

Author / Study	Sample Size	Reported Impact	Comparison with Current Study
Dunning et al. (2019)	33 RCTs	Reduced anxiety and stress; improved emotional awareness	Consistent – lower stress, better emotional regulation
Mak et al. (2018)	23 studies	Enhanced attention and executive functioning	Consistent – higher focus and attentional control
Kuyken et al. (2022a,b) – MYRIAD	8,376 students	Improved emotion regulation; reduced impulsivity	Consistent – lower stress, greater altruism
Perkins et al. (2022)	18 studies	Increased compassion; reduced interpersonal conflict	Consistent – higher altruism, lower aggression

Source: Compiled by the author (2025).

Similarly to the barriers to implementation found in Vietnam, the MYRIAD project (Norton & Griffith, 2020; Wilde et al., 2019) qualitative studies identified resource limits, unspecialized teacher training, and hesitance from the education setting. The barriers identified from the current study's teacher data align with these findings, as only 26.8% of teachers reported feeling confident in leading mindfulness classes, and there was a pervasive request for outside expert-led training (Gu et al., 2016; Baer et al., 2008). In addition to the mental health aspects, the present study confirms the global literature on mindfulness focusing on the promotion of prosocial and compassionate behaviors. In this regard, Perkins et al. (2022) and Cheang et al. (2019) found that compassion-oriented mindfulness increases empathic and cooperative behaviors and decreases aggression, findings that were also found in this Vietnamese context. This shows that mindfulness not only helps in the regulation of difficult emotions, but also supports moral and social development in the educational context. Across the wider Asian region, similar culturally relevant programs have achieved comparable results. Research from Thailand, South Korea, and Vietnam (Cao, 2020; Le & Trieu, 2016; Congleton et al., 2015) reported decreases in student stress by 50 to 65% and increases in healthy emotional regulation by 55 to 65%. The current findings substantiate these results, providing evidence that thoughtfully designed mindfulness initiatives, when appropriately tailored, transcend cultural boundaries. Some international scholars, however, recommend extreme caution in uncritically or mechanically applying MBIs. Cuijpers (2022) indicated that too much standardization could detract from contextual appropriateness and student engagement. Hafenbrack et al. (2022) similarly pointed out risks associated with poorly guided mindfulness activities, such as decreased motivation and emotional distress in participants with greater emotional sensitivity. These cautionary observations fully underscore the need for careful tailoring and adaptive facilitation, especially in the case of Vietnam.

Cultural integration and mechanisms

A remarkable aspect of this study is the first attempt to apply mindfulness practices within a context that perceives mindfulness practices as religious meditation. Although these attitudes exist, the Vietnamese program still achieved similar results to those achieved in the West. This is consistent with the perspective of the Mind and Life Education Research Network (MLERN, 2012) and Shapiro et al. (2006), which argues that the success of mindfulness education largely depends on the cultural fit and the sensitivity around psychosocial issues (Davidson, 2008). There is also neuroscientific evidence explaining this. Goleman et al. (2017) and Hölzel et al. (2011) demonstrated that the regular practice of mindfulness increases the integration of neural structures within the circuits that aid in the regulation of emotions—specifically, the circuits that dampen the activity of the amygdala and enhance frontal executive control, which explains the improved emotional and behavioral regulation of the Vietnamese students.

Novel contributions to the vietnamese context

While still developing, mindfulness education has mostly been implemented in pilot programs in international schools and private institutions in Vietnam (Nguyen & Nguyen, 2022; Le & Trieu, 2016). In contrast to the UK, the US, South Korea, Australia, and several other countries, Vietnam still does not have a formalized nationwide policy or a curriculum framework pertaining to mindfulness education (Kuyken et al., 2022a,b; Congleton et al., 2015). Therefore, this study is among the first to investigate mindfulness education in the context of sociocultural and educational realities in Vietnam. This research is especially notable because it synthesizes contemporary psychological theories and values associated with humanistic Buddhism, particularly compassion, altruism, and social harmony (Marques, 2010; Cao, 2020; Dao, 2024). As pointed out by Goleman et al. (2017), in mindfulness education, the

incorporation of community-based moral frameworks and psycho-spiritual elements is especially important for acceptance and effectiveness in Asian collectivist cultures. Further, the study contributes to the literature by focusing on the level and engagement of students. While mindfulness awareness is still limited—24.7% familiar and 18.6% previously exposed—willingness to participate increases to 68.5% after mindfulness purpose is explained. Students with stress, emotional dysregulation, or trauma reported the highest benefit, which is consistent with the findings of Montero-Marín et al. (2022a,b) assert that mindfulness-based interventions are most beneficial for adolescents classified as “at-risk.”

TABLE 7 Comparison of primary beneficiaries of mindfulness interventions

Study	Primary Beneficiary Group
Montero-Marín et al. (2022a,b) – MYRIAD	Students with high stress and poor emotional regulation
Le & Trieu (2016) – Vietnam	Students facing academic pressure and lacking social skills
Present Study	Students experiencing school-related stress and emotional trauma

Source: Compiled by the author (2025).

The research also noted a number of constant obstacles slowing the integration of mindfulness education into Vietnamese schools, including educational overload, a scarcity of qualified trainers, limited teaching time, and a lack of awareness of the demands of stakeholders such as teachers, parents, and administrators (Cullen, 1998; de Vibe et al., 2013; Nguyen & Nguyen, 2020; McGinnis, 2022). Such challenges indicate that the problems associated with incorporating mindfulness into educational systems are profoundly systemic, relating to institutional capacity, policy frameworks, and the prioritization of educational resources. The study identifies and recommends a number of approaches aimed to enhance the integration and routinization of mindfulness education in Vietnam.

According to Cao (2020) and Le (2019), there is an urgent need to create culturally thoughtful, pedagogically viable, and scientifically sound Vietnamese materials that are easy to access for teachers and learners. In addition, there is a need for teacher and school administrator training to cultivate school systems and structures according to the integrated training model of the Mind and Life Education Research Network (MLERN, 2012) (Davidson, 2008), which intertwines the theoretical and the practical. Additionally, to ensure the persistence of the designed school systems, frameworks, and structures that support integrated mindful practices, collaboration with families and communities, as well as the encouragement of stereotyped negative attitudes around mindful practices, are very important (Shonin, 2015). In addition to addressing the problem that this research has identified, the research begins to outline a potential design for the longitudinal assessment of mindfulness practices in Vietnamese educational institutions. This design emphasizes the impact of practices on important mindfulness indicators, such as well-being, self-regulation, collaboration, kindness, and emotional balance. This is in contrast to research that emphasizes short-term effects (Germer & Christopher, 2005; Mak et al., 2018; Gentina et al., 2021). This research provides a basis for future studies that employ randomized, longitudinal designs to assess the impact of mindfulness education in the classroom over long periods. This framework constitutes an important step toward establishing an evidence-based, sustainable model of mindfulness education that meets the needs of the Vietnamese educational context, integrating scientific rigor, and cultural contextualization.

Practical implications for education and policy

Given the increasing pressures related to academics, student mental health, school violence, and challenges mentioned in (Truong et al., 2024; World Health Organization, 2022b), the findings in the study are helpful to practice and inform policy in Vietnam. With regard to the results of the study, bringing mindfulness practices to the Vietnamese educational context has the potential to serve the local context, while the Vietnamese educational environment has been adapted to more Western mindfulness initiatives, such as Mindfulness in Schools Project in the UK (Kuyken et al., 2022a,b), MAYP program in South Korea (Congleton et al., 2015), and Mindful Schools in the United States (Benson et al., 1991). Incorporating ethical values of compassion and Buddhist philosophy may have made the practices more culturally acceptable and contributed to the community's appreciation (Marques, 2010; Dao, 2024). From the policy perspective, a very high proportion (85%) of the responding teachers reported willingness to practice mindfulness interventions in the study, which seems to indicate a positive disposition toward engagement similar to that of teachers in the UK MYRIAD trial (Kuyken et al., 2022a,b). Consequently, it is suggested that the Ministry of Education and Training (MOET) implement a national teacher training policy on mindfulness education, incorporating Vietnamese cultural elements to the mindfulness curricula that follow the embedding frameworks of Mind and Life Education Research Network (MLERN, 2012) (Davidson, 2008).

Furthermore, the adoption of these contexts strategically involves the parents and the community, which Wilde et al. (2019) and Norton & Griffith (2020) refer to as stakeholders. The parents' survey for this study also indicated that 58.3% of parents would support school-based mindfulness initiatives if implemented in a clear and orderly professional manner and explained to the parents. The potential for mindfulness practice to enhance school mental health, climate, and the socio-emotional learning framework further justifies its use. The practice of mindfulness and mental health compassion (Guo et al., 2022; Perkins et al., 2022; Griggs & Tidwell, 2015; Greenwalt & Nguyen, 2017;

Gómez, 1978) has lessened aggressiveness and conflict, fostered collaboration, and encouraged helping behaviors (prosoc). The present study aligns with this, wherein 60% of the students that completed the 8 week mindfulness program reported a development in their empathy and communication skills. This is a very strong indicator of the capacity of the program to promote positive school environments that are safe, inclusive, and based on strong values.

TABLE 8 Summary of practical implications and policy recommendations

Content	Practical Implications / Recommendations
Mental health support	Reduces stress; enhances emotional self-regulation
Personality development	Increases altruism, cooperation; reduces conflict
Formal teacher training	Apply MLERN and MYRIAD guidelines
Standardized Vietnamese materials	Integrate academic content with Buddhist humanistic values
Community and parental engagement	Strengthen sustainability; reduce implementation barriers

Source: Compiled by the authors (2025).

To conclude, the research suggests an actionable approach for embedding mindfulness as a formal aspect of the curriculum in Vietnam's general education system. In addition, it lays the groundwork for policy development on teachers' professional growth, culturally responsive teaching resources, and cooperative family-school relationships. This approach is aimed at developing an education system that supports the intellectual, emotional, and ethical development of students.

Research limitations

Despite the promising results from the research, there remain a few methodological as well as contextual limitations which should be kept in mind when applying the results in practice. In the first instance, the sample and region were limited to international and secondary schools in Ho Chi Minh City and its adjoining urban areas. This poses issues of representativeness as the sample excludes rural, mountainous, and impoverished areas, which suffer from a lack of accessible mental health care and soft-skill programs (Nguyen & Nguyen, 2022; Le & Trieu, 2016). Limitations of this nature were also noted in the MYRIAD trial which struggled to expand its focus to the public and lower-income schools (Kuyken et al., 2022a,b).

TABLE 9 Comparison of sample size limitations across studies

Study	Sample Size	Main Limitation
Current Study	312 students, 56 teachers	Focused on Ho Chi Minh City; regionally unrepresentative
Kuyken et al. (2022a,b) – MYRIAD	8,376 students	Limited reach in low-income and public schools

Source: Compiled by the authors (2025).

Self-report surveys and qualitative interviews were used instead of standardized psychometric tools (Perkins et al., 2022). This unique approach is not compatible with the comparability and reliability of psychometric instruments from Cuijpers (2022) and Dunning et al (2022) in the international RCT literature. In the future, the use such instruments will improve the strength of the measurements. The limited timeframe of the intervention (8-10 weeks) also made it impossible to understand the long-term impact on students' well-being and social behaviors (Hafenbrack et al., 2022). International literature suggests that assessing the long-term impact of a treatment on well-being and social behaviors requires at least 6 months of sustained practice (Davidson, 2008). Finally, the shortage of certified mindfulness instructors in Vietnam meant that most sessions were delivered by teachers with only brief orienting training. This inconsistency in facilitation may have affected program fidelity—an issue also highlighted by Norton & Griffith (2020) in their UK implementation studies.

Recommendations for future research

Engaging with the findings of the study and acknowledging the limitations, several directions are proposed to build the empirical and practical developments of mindfulness education in Vietnam. Drawing on the study's recommendations, future studies should prioritize expanding the scope of the sample to cover different geographical areas including the North, the Central, the Central Highlands, and the Mekong Delta. Attention should also be given to the different types of schools, including public, private, and international ones. Such demographic expansion will strengthen the generalizability of the results, while contextual analysis will help identify the socio-cultural determinants around the uptake and effectiveness of mindfulness practices and outcomes (Nguyen & Nguyen, 2022; Davidson, 2008). This sample expansion in geography and institutions will also enhance our understanding of the interplay of culture, environment, and economy on the psychology of the region. On the other hand, subsequent studies should undertake randomized controlled trials (RCTs) with globally accepted instruments such as the Strengths and Difficulties Questionnaire (SDQ), the Perceived Stress Scale (PSS-10), the Mindful Attention Awareness Scale

(MAAS), and the Five Facet Mindfulness Questionnaire (FFMQ) (Baer et al., 2008; Chowdhury, 2021). The design of the MYRIAD Trial (Kuyken et al., 2022a,b) provides a promising model, especially considering the management of confounding factors, data integrity, and the overall rigor in the discipline of the research process.

The adoption of RCT methodologies would help Vietnamese studies better meet empirical benchmarks internationally and allow for relevant cross-cultural comparisons. The need for longitudinal studies that assess the long-term impact of mindfulness practice, at intervals of six months, one year, and two years, cannot be overstated. These assessments would evaluate the psychosocial and behavioral shifts that might be sustained or lost over time, the possible relapse of positive behaviors, and the sustained reinforcement of prosocial behaviors within a given time frame (Davidson, 2008; Perkins et al., 2022). In addition, longitudinal studies provide sustained impact evidence, albeit indirectly, on school climate, teacher-student rapport, and the psychosocial environment of the classroom and are significant factors in the sustained success of mindfulness programs (Wilde et al., 2019; Norton & Griffith, 2020). These broader assessments are necessary to capture the mindfulness-related outcomes of the practice on a developmental continuum rather than within the confines of short-term intervention hours. In the future, research might focus on the development of mindfulness education that is culturally constructed within the ethical and sociocultural framework of Vietnamese communities, inspired by the principles of Buddhist humanism, compassion, and the family-centered paradigm (Marques, 2010; Le, 2019; Dao, 2024). Cultural contextualization shifts perceptions of mindfulness practice as a religious practice and enhances participant affinity and course relevance. Most importantly, the integration of socio-moral teachings in mindfulness practice will address the demands of authenticity, inclusivity, and contextual sustainability within the socio-educational framework of contemporary Vietnam. Mindfulness education research in Vietnam needs to balance methodological rigor with an understanding of the cultural context. To build a strong empirical basis for embracing mindfulness as a scientifically informed and culturally relevant part of Vietnam's national education policy, future research should increase sample diversity, incorporate RCTs, conduct longitudinal studies, and contextualize program frameworks.

TABLE 10 Recommended future research directions

Research Focus	Proposed Content
Sample Size Expansion	Include multiple regions and school types (public, private, international)
Implementation of RCTs	Employ SDQ, PSS-10, MAAS, and FFMQ with rigorous control
Longitudinal Studies	Assess effects after 6, 12, and 24 months
Classroom Environment Analysis	Examine impacts on school culture and teacher–student interactions
Localized Mindfulness Models	Integrate Buddhist philosophy and community-oriented values

Source: Compiled by the author (2025).

To enhance the credibility and applicability of mindfulness education in Vietnam, one must broaden empirical research incorporating more rigorous research methods and positive and considerate approaches toward cultures. This would provide evidence-based guidance to policymakers and educators on advocating comprehensive, human-centered education that nurtures academic success, emotional health, and compassionate citizenship, as well as nurtures mindfulness.

CONCLUSION

Vietnam's education system faces challenges such as increasing academic pressure, violence in schools, and growing rates of student stress, anxiety, and depression (Truong et al., 2024, World Health Organization, 2022b). Mindfulness-based education, focusing on the psychological well-being of students, emotional self-regulation, and the development of compassion and empathy, has been practiced as a humanistic and holistic educational method. The current study documents the positive impacts mindfulness practice has on students' mental health, attention, and prosocial behavior in secondary and higher education in Vietnam. Students practicing mindfulness showed higher levels of attention, emotional regulation, and altruistic behavior and lower levels of stress and anxiety compared to students who did not practice mindfulness. These findings support the conclusions of mindfulness practice research in other countries (Dunning et al., 2019; Mak et al., 2018; Hastings et al., 2021; Montero-Marin et al., 2022a,b), affirming the intervention's efficacy in reducing psychological distress and improving emotional regulation in adolescents.

In addition, this research builds on the outcomes of the Mind and Life Education Research Network (MLERN, 2012) (Davidson, 2008) and MYRIAD Trial (Kuyken et al., 2022a,b), as well as mindfulness programs in South Korea and the United States (Congleton et al., 2015). Similar to the Vietnamese findings, mindfulness programs internationally have documented the ability mindfulness practices to relieve stress and impulsivity, improve emotional regulation, and promote the development of compassion—qualities which are fundamental to fostering more caring, inclusive, and compassionate school communities. One of the prominent contributions of this work is in the educational mindfulness research in the Vietnamese context. Findings suggest that mindfulness is more readily adopted and practiced when mindfulness practices are ‘home-grown’. For instance, mindfulness practices based on Vietnamese

traditions of compassion, community, and Buddhist moral education. Such a culturally-rooted and community-focused approach provides educational sense, emotional sustainability, and social resonance with the educational culture of Vietnam, which is a largely a departure from the Western individualistic and self-centered orientations (Marques, 2010; Le, 2019; Dao, 2024; Goleman et al., 2017; Hölzel et al., 2011). Thus, mindfulness education in Vietnam seeks to reconnect contemporary education with a deeper philosophy of compassion, ethics, and humanity. At the same time, some limitations need to be stated when considering the findings.

The study focused only on urban geography, which affects how well the findings assess rural and less populated locations. The study used self-reported instruments instead of standardized cross-national tools, which limits the ability to compare the findings to cross-national and global studies. The 8–10 weeks of the intervention was likely too short to make decisions about the sustainability of the changes in behaviors and the psychology of the participants. The same type of implementation challenges, especially in teacherless and low-resource schools, documented in the work of Wilde et al. (2019) and the international studies, including the MYRIAD Trial (Kuyken et al., 2022a,b), seem to have formed the basis of the challenges outlined here. In order to fill these gaps, it is necessary to have a planned research agenda. To begin with, the sample and its demographics needed to be more varied in order to reflect the rural, mountainous and poorer parts of Vietnam.

Second, there is a need to perform randomized controlled trials (RCT) using globally accepted tools such as the Strengths and Difficulties Questionnaire (SDQ), the Perceived Stress Scale (PSS-10), the Mindful Attention Awareness Scale (MAAS), and the Five Facet Mindfulness Questionnaire (FFMQ) (Dunning et al., 2022; Chowdhury, 2021). Third, the focus of the research should include longitudinal designs to assess the mindfulness outcomes for sustained periods of six months, one year, and two years to better understand the maintenance and relapse aspects of behavior (Davidson, 2008; Perkins et al., 2022). Lastly, further to Marques (2010), Dao (2024) encourages the development of new research that integrates constructive culturally suited designs that include elements of Buddhism along with community-centred frameworks that will enhance pedagogical value and the approach's cultural validity. This study illustrates the cultural importance and empirical value of mindfulness education in schools in Vietnam. In its cultural context, the study emphasizes the need for research to shift from the evaluation of mindfulness education programs to the development of a comprehensive sustainable approach that serves as a foundational mindfulness education, mental health, and humanistic pedagogy in schools.

This research highlights how mindful attention positively influences students' psychosocial health, emotional self-regulation, and prosociality, outcomes aligned with the MYRIAD Trial literature (Kuyken et al., 2022a,b) and the Dunning et al. (2019) meta-analysis. Also noteworthy is the research's culturally situated mindfulness pedagogy model tailored to Vietnam, incorporating Buddhist compassion and community solidarity, as highlighted by Marques (2010) and Dao (2024). This localization of mindfulness pedagogy enhances its pedagogical authenticity and its social acceptability as mindfulness pedagogy in Vietnamese schools (and Vietnamese Buddhism) is different from the Western emphasis on mindfulness as individualistic cognitive or neurological (Goleman et al., 2017; Hölzel et al., 2011). It is also unique as it blends Western and Eastern mindfulness paradigms. Furthermore, the manuscript also adds to the literature by discussing the limited scope in the context of urban concentration, self-report and retrospective data, and intervention length, and suggesting future research avenues incorporating the use of randomized controlled trials, longitudinal approaches, and tools from the standardized international assessments frameworks. This research underscores the need and feasibility of incorporating mindfulness into the Vietnamese general and higher education frameworks.

Mindfulness needs to be approached as a potentially valuable teaching method to foster emotional development and moral and empathetic capacities rather than as a psychological intervention exclusively. These areas are critical for the complete development of an individual within the increasingly intricate and competitive spheres of academia. (Truong et al., 2024; Davidson, 2008). In this regard, mindfulness practices are a valuable and needed resource to be taught within the emotional, compassionate, and ethical framework life skill curricula and taught as part of Vietnamese students' extracurricular activities. Such transformative practices, however, will necessitate the blended efforts of educational policymakers, school authorities, teachers, parents, and the wider community to create supportive structures, train facilitators, and develop appropriate standardized materials that are culturally relevant and aligned with Vietnam's philosophical and sociocultural identity.

ACKNOWLEDGMENTS: This study did not receive any financial support from public, commercial, or non-profit organizations.

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