

Mindfulness As A Tool for Enhancing Student Well-Being: Findings from A Pilot Study

Srishti Trehan^{1*}, Dr. Amra Ahsan²

ABSTRACT

This pilot study investigates the effectiveness of a mindfulness-based intervention (MBI) designed to promote well-being among adolescents aged 14 to 19 years. Utilizing a pretest-posttest design, the study enrolled 20 participants and measured changes in emotion regulation, psychological well-being, life satisfaction, and happiness. The mindfulness program consisted of five sessions, focusing on techniques such as mindful breathing, body awareness, and emotional recognition. Statistical analyses, including paired sample t-tests, revealed significant improvements in psychological well-being ($p < .001$), life satisfaction ($p = .002$), and happiness ($p < .001$), with medium to large effect sizes (Cohen's d ranging from .87 to 2.78). However, the results for cognitive reappraisal and expressive suppression were not statistically significant ($p = .062$ and $p = .137$, respectively), despite medium effect sizes. These findings suggest that the MBI may serve as an effective intervention for enhancing adolescents' overall well-being, though further research is necessary to explore the long-term effects and the nuances of emotional regulation. This study contributes to the growing body of evidence supporting the integration of mindfulness practices into educational and community programs aimed at promoting mental health among young people.

Keywords: *Mindfulness-Based Intervention, Adolescents, Well-Being, Emotion Regulation, Psychological Well-Being, Life Satisfaction, Happiness, Pilot Study*

Adolescence is a crucial developmental phase marked by significant emotional, psychological, and social changes. As students navigate academic challenges, peer relationships, and the pressures of preparing for adulthood, they often experience heightened stress and emotional turbulence (Silvers, 2022). These factors can negatively affect their well-being, making it essential to explore interventions that can equip them with tools to manage their emotions and promote mental health.

Mindfulness-Based Interventions (MBIs) have emerged as a promising approach to addressing these challenges (Porter, Oyanadel, et al., 2022). Mindfulness, defined as the practice of paying attention to the present moment with a sense of openness and non-judgment, has been linked to numerous psychological benefits (Amaro and Singh, 2020).

¹Ph.D. Research Scholar, Faculty of Behavioural Sciences, Shree Guru Gobind Singh Tricentenary University, Gurugram, Haryana

²Professor, Faculty of Behavioural Sciences, Shree Guru Gobind Singh Tricentenary University, Gurugram, Haryana

*Corresponding Author

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Through regular mindfulness practices, individuals can cultivate greater self-awareness, emotional regulation, and resilience in the face of stress. In educational settings, MBIs have shown potential in enhancing students' capacity to manage stress and improve their mental health (Yogeswaran and El Morr, 2021).

Research on MBIs suggests that they can significantly contribute to reducing symptoms of anxiety, depression, and emotional distress, while simultaneously enhancing positive outcomes like self-esteem and overall happiness (Kosugi, Ninomiya, et al., 2021). By fostering mindfulness, students may develop the ability to respond to challenges more calmly and with greater clarity, promoting a sense of well-being that can extend into various areas of life. Given the increasing recognition of mental health issues among adolescents, integrating mindfulness into school curricula could provide a proactive approach to fostering well-being at a formative stage (Schussler, Mahfouz, et al., 2021).

This pilot study seeks to evaluate the effectiveness of a mindfulness-based intervention in promoting well-being among students. Specifically, we investigate the impact of the intervention on four key variables: emotion regulation, psychological well-being, satisfaction with life, and happiness. By exploring these areas, this research aims to contribute to the growing body of evidence supporting the value of mindfulness in educational contexts and its potential role in enhancing students' mental health and overall well-being.

METHODOLOGY

Research Design

This study employs a one-group pretest-posttest design to investigate the impact of a mindfulness-based module. A convenience sampling method was used, targeting participants aged 14 to 19 years. Participants voluntarily enrolled in the online program after being informed about the nature of the study. All participants gave informed consent, and ethical guidelines were followed, including confidentiality of survey data. No identifying information was collected, and records were securely stored. Participation was entirely voluntary, with students free to complete the program and tests at their discretion.

Participants

The participants were Indian students, aged 14–19 years, who enrolled in the online mindfulness program via a Google form link. After registration, one-on-one interviews were conducted to explain the study's nature. Twenty participants were recruited and randomly divided into groups of five for the intervention.

Measures

- **Emotion Regulation Questionnaire (ERQ):** This 10-item self-report scale assesses the use of two emotion regulation strategies—cognitive reappraisal and expressive suppression. The ERQ was used to analyze how mindfulness training affected the participants' ability to regulate emotions (Gross and John, 2012).
- **Psychological Well-being Questionnaire (PWB):** An 18-item scale that measures six dimensions of well-being, including autonomy, environmental mastery, personal growth, positive relations, purpose in life, and self-acceptance. This questionnaire was used to assess the participants' psychological well-being (Ryff, 2002).
- **Satisfaction with Life Scale (SWLS):** A 5-item scale that assesses global life satisfaction. It was used to evaluate participants' overall satisfaction with life before

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and after the mindfulness-based intervention (Diener, Emmons, Larsen and Griffin, 1985).

- **Oxford Happiness Questionnaire (OHQ):** The 29-item OHQ measures personal happiness in day-to-day life. This scale was used to evaluate changes in participants' perceived happiness levels before and after the mindfulness intervention (Hills and Argyle, 2002).

Procedure

Before the intervention, participants completed a pretest measuring their emotion regulation and happiness levels. The mindfulness-based intervention then took place over five consecutive weeks, with one-hour weekly online sessions led by a clinical psychology associate. Each session introduced mindfulness techniques and exercises based on a specific weekly theme. Participants were encouraged to practice the techniques between sessions. After completing the five-week program, a posttest was administered to compare pre- and post-intervention scores for both emotion regulation and happiness.

Intervention

The intervention was designed to introduce participants to a range of mindfulness techniques aimed at improving emotional regulation, psychological well-being, life satisfaction, and happiness. The program consisted of five structured weekly sessions, each with a specific mindfulness theme.

1. **Session 1: Mindfulness of Breath:** The session introduced participants to the group and set goals for the intervention. The anchor breathing technique was taught, encouraging participants to focus on their breath as an anchor to the present moment. The five senses technique was introduced to enhance awareness of sensory experiences. Participants were given homework to practice gratitude and the techniques learned during the session.
2. **Session 2: Mindfulness of Body:** In this session, participants were introduced to the concept of mindfulness and its importance. The session featured the "Mindful STOP Technique," which involves stopping, taking a breath, observing, and proceeding mindfully. A body scan meditation helped participants develop awareness of physical sensations. Homework involved journaling three positive things and practicing the mindfulness activities at home.
3. **Session 3: Mindful Listening:** Participants practiced mindful listening, focusing on active listening techniques both in communication with others and with their inner voice. The "Iceberg" activity, which encourages deeper reflection on emotions beneath the surface, was also introduced. Participants were tasked with practicing the mindful listening technique at home.
4. **Session 4: Mindfulness of Emotions:** This session centered on understanding and expressing emotions. The "Be a Man/Be a Woman" activity explored societal expectations related to emotions. Participants practiced the "RAIN Technique," a mindfulness tool for working with difficult emotions by recognizing, allowing, investigating, and nurturing feelings. The homework involved creating a personal "internal weather report" to track emotional states.
5. **Session 5: Mindfulness of Thoughts:** The final session focused on cognitive mindfulness. Participants were introduced to the cognitive triad—thoughts, feelings, and behaviors—and discussed how thoughts shape emotions and actions. An activity on letting go of "stuck" thoughts helped participants address negative thought patterns. The session concluded with a reflection, and participants were encouraged to continue practicing letting go of stuck thoughts as homework.

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This structured, progressive approach allowed participants to explore different aspects of mindfulness, gradually building skills in self-awareness, emotional regulation, and cognitive flexibility.

Data Analysis

Data analysis was conducted using SPSS version 20. To assess the effectiveness of the mindfulness-based intervention, a paired t-test was employed to measure the differences between pre-test and post-test scores for the study's key variables: emotion regulation, psychological well-being, satisfaction with life, and happiness. This statistical method allowed for the comparison of means within the same group of participants before and after the intervention, providing insights into the impact of the mindfulness practices on their overall well-being.

RESULTS

Table 1: Descriptive Statistics for Study Participants

Sociodemographic Variables			
Age (years)	Minimum	Maximum	Mean ± SD
	14	19	16.30 ± 1.83
Gender n (%)	Male	Female	Total
	8 (40%)	12 (60%)	20 (100%)

Table 1 presents the descriptive statistics for the study participants, detailing the sociodemographic variables of age and gender. The age of participants ranged from 14 to 19 years, with a mean age of 16.30 years (SD = 1.83), indicating a relatively homogeneous age distribution within the group. Regarding gender distribution, 8 participants identified as male (40%), while 12 identified as female (60%), reflecting a slightly higher representation of females in the study. The total sample comprised 20 participants. These statistics provide essential insights into the demographic characteristics of the participants involved in the mindfulness-based intervention study.

Table 2: Paired Sample T-Test Results: Emotion Regulation, Psychological Well-Being, Life Satisfaction, and Happiness

Measure	M	S.D	95% Confidence Interval		t (17)	p	Cohen's d
			Lower	Upper			
Pretest CR	24.61	3.66	4.68	.12	1.99	.062	.47
Posttest CR	26.88	2.96					
Pretest ES	11.94	1.76	.25	1.69	1.56	.137	.36
Posttest ES	11.22	1.59					
Pretest PWB	79.22	3.81	17.41	12.14	11.83	<.001	2.78
Posttest PWB	94.00	4.63					
Pretest SWL	23.05	1.62	3.57	.98	3.70	.002	.87
Posttest SWL	25.33	2.05					
Pretest H	105.66	3.71	12.26	5.73	5.81	<.001	1.37
Posttest H	114.66	5.13					

Note. CR = Cognitive Reappraisal; ES = Expressive Suppression; PWB = Psychological Well-Being; SWL = Satisfaction with Life; H = Happiness.

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Table 2 displays the results of the paired sample t-tests conducted to evaluate the effectiveness of the mindfulness-based intervention on four key psychological measures: emotion regulation, psychological well-being, life satisfaction, and happiness.

The first measure, cognitive reappraisal (CR), showed a pretest mean of 24.61 (SD = 3.66) and a posttest mean of 26.88 (SD = 2.96). Although the increase in scores indicated an improvement, the difference was not statistically significant, with a t-value of 1.99 ($p = .062$) and a medium effect size (Cohen's $d = .47$).

In contrast, the expressive suppression (ES) scores revealed a pretest mean of 11.94 (SD = 1.76) compared to a posttest mean of 11.22 (SD = 1.59). The difference in scores was not statistically significant, as indicated by a t-value of 1.56 ($p = .137$) and a medium effect size (Cohen's $d = .36$).

The third measure, psychological well-being (PWB), exhibited significant improvements from pretest (M = 79.22, SD = 3.81) to posttest (M = 94.00, SD = 4.63). This change was statistically significant with a t-value of 11.83 ($p < .001$), indicating a large effect size (Cohen's $d = 2.78$), suggesting that the intervention had a profound impact on participants' psychological well-being.

For life satisfaction (SWL), the pretest mean was 23.05 (SD = 1.62), and the posttest mean increased to 25.33 (SD = 2.05). The t-test results indicated a significant difference with a t-value of 3.70 ($p = .002$), yielding a large effect size (Cohen's $d = .87$). This finding suggests that the mindfulness-based intervention positively influenced the participants' satisfaction with life.

Finally, happiness (H) scores showed a substantial improvement from a pretest mean of 105.66 (SD = 3.71) to a posttest mean of 114.66 (SD = 5.13). This increase was statistically significant ($t = 5.81$, $p < .001$) and had a large effect size (Cohen's $d = 1.37$), indicating a notable enhancement in the participants' overall happiness following the intervention.

DISCUSSION

The present pilot study aimed to evaluate the effectiveness of a mindfulness-based intervention on students' well-being, specifically focusing on emotion regulation, psychological well-being, life satisfaction, and happiness among adolescents aged 14 to 19. Our findings provide significant insights into the potential benefits of mindfulness practices in this demographic, highlighting notable improvements in psychological well-being, life satisfaction, and happiness post-intervention.

The results of the paired sample t-tests indicated significant improvements in psychological well-being ($p < .001$), life satisfaction ($p = .002$), and happiness ($p < .001$) from pretest to posttest. These findings align with existing literature suggesting that mindfulness-based interventions can enhance various aspects of well-being among adolescents (Porter, Oyanadel, et al., 2022; Langer, Medeiros, et al., 2020). The medium to large effect sizes observed for these variables (Cohen's d ranging from .87 to 2.78) further emphasize the practical significance of the intervention.

Conversely, our results for cognitive reappraisal and expressive suppression did not achieve statistical significance ($p = .062$ and $p = .137$, respectively), despite medium effect sizes. This suggests that while there may be a trend toward improvement in these areas, the

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intervention may not have been sufficient to elicit significant changes. It is worth noting that the nature of these constructs may require more intensive or prolonged intervention to yield substantial effects, particularly in the context of adolescents' emotional regulation skills.

The substantial improvements in psychological well-being, life satisfaction, and happiness suggest that the mindfulness-based intervention could serve as a valuable tool for promoting mental health among adolescents. Given the increasing prevalence of mental health issues within this age group, integrating mindfulness practices into school curricula or community programs may provide adolescents with essential skills to enhance their overall well-being.

Furthermore, the lack of significant change in cognitive reappraisal and expressive suppression underscores the complexity of emotional regulation. Adolescents may benefit from targeted strategies aimed at enhancing these specific skills, potentially through additional training or alternative approaches that delve deeper into emotional awareness and regulation techniques.

Future studies should explore the long-term effects of mindfulness-based interventions on adolescents' emotional regulation and well-being. Additionally, investigating potential moderators, such as age, gender, and baseline levels of psychological distress, could provide valuable insights into which subgroups benefit most from these interventions. Finally, examining the integration of mindfulness practices into existing educational frameworks could elucidate best practices for implementation in real-world settings.

CONCLUSION

In conclusion, this pilot study demonstrates the promising effects of a mindfulness-based intervention on enhancing psychological well-being, life satisfaction, and happiness among adolescents. Although the findings for cognitive reappraisal and expressive suppression were not statistically significant, they indicate areas for further exploration. Overall, mindfulness may offer a constructive approach to fostering resilience and emotional health in young people, highlighting the need for continued research and practical application in this domain.

REFERENCES

- Amaro, A., & Singh, N. N. (2020). Mindfulness: Definitions, attributes, and mechanisms. In *Mindfulness-based Interventions with Children and Adolescents* (pp. 11-33). Routledge.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment*, 49, 71-75.
- Gross, J. J., & John, O. P. (2012). Emotion regulation questionnaire. *Journal of personality and social psychology*.
- Hills, P., & Argyle, M. (2002). The Oxford Happiness Questionnaire: a compact scale for the measurement of psychological well-being. *Personality and individual differences*, 33(7), 1073-1082.
- Kosugi, T., Ninomiya, A., Nagaoka, M., Hashimoto, Z., Sawada, K., Park, S., ... & Sado, M. (2021). Effectiveness of mindfulness-based cognitive therapy for improving subjective and eudaimonic well-being in healthy individuals: a randomized controlled trial. *Frontiers in Psychology*, 12, 700916.
- Langer, Á. I., Medeiros, S., Valdés-Sánchez, N., Brito, R., Steinebach, C., Cid-Parra, C., ... & Krause, M. (2020). A qualitative study of a mindfulness-based intervention in

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- educational contexts in Chile: An approach based on adolescents' voices. *International journal of environmental research and public health*, 17(18), 6927.
- Porter, B., Oyanadel, C., Sáez-Delgado, F., Andaur, A., & Peñate, W. (2022). Systematic review of mindfulness-based interventions in child-adolescent population: A developmental perspective. *European Journal of Investigation in Health, Psychology and Education*, 12(8), 1220-1243.
- Porter, B., Oyanadel, C., Sáez-Delgado, F., Andaur, A., & Peñate, W. (2022). Systematic review of mindfulness-based interventions in child-adolescent population: A developmental perspective. *European Journal of Investigation in Health, Psychology and Education*, 12(8), 1220-1243.
- Schussler, D. L., Oh, Y., Mahfouz, J., Levitan, J., Frank, J. L., Broderick, P. C., ... & Greenberg, M. T. (2021). Stress and well-being: A systematic case study of adolescents' experiences in a mindfulness-based program. *Journal of Child and Family Studies*, 30, 431-446.
- Silvers, J. A. (2022). Adolescence as a pivotal period for emotion regulation development. *Current opinion in psychology*, 44, 258-263.
- Yogeswaran, V., & El Morr, C. (2021). Effectiveness of online mindfulness interventions on medical students' mental health: a systematic review. *BMC Public Health*, 21, 1-12.

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Conflict of Interest

The author(s) declared no conflict of interest.

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