

Impact of Anapanasati Meditation on Well-being of Secondary School Students in Teesta, Kalimpong District, West Bengal

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ABSTRACT

The study investigates the impact of Anapanasati meditation on the well-being of secondary school students in Teesta, Kalimpong district, West Bengal. Adolescents in rural areas often face rising stress, distraction, and emotional instability due to socio-cultural and technological pressures. Employing a mixed-methods design with a convergent parallel approach, the study combined quantitative and qualitative data to assess changes in student well-being. Thirty-two students were randomly assigned to control and experimental groups, with the latter receiving a 21-day guided meditation intervention structured into grounding, breath anchoring, and mindfulness practice phases. The Well-being Index by Chauhan & Sharma was used to measure quantitative outcomes, while semi-structured interviews captured subjective experiences. Findings revealed significant improvements in the experimental group across multiple dimensions of well-being, such as emotional, psychological, social, spiritual, physical, and self-awareness. Thematic analysis of qualitative data further highlighted benefits such as improved sleep quality, reduced stress and overthinking, academic readiness, inner peace, and stronger peer bonding. The study concludes that Anapanasati meditation is an accessible, low-cost, and non-invasive intervention with substantial potential to support adolescent well-being in school settings.

Keywords

Anapanasati meditation, Well-being, Adolescents.

Introduction

“Developing skills and flexibility in facing and effectively navigating the various weather conditions in your life is what we mean by the art of conscious living.”

– Jon Kabat-Zinn

The constant pressure of modern life, filled with growing stress and anxiety is not only affecting people’s well-being but also leading to more deaths and a serious drop in the quality of life. Despite remarkable advancements in the field of technology and improved comforts, the true essence of well-being deeply rooted in love, happiness and inner peace remains elusive and largely unestablished [1]. People’s life is accompanied by an alarming surge in emotional instability, heightened sensitivity, aggression, frustration, and social discord. Therefore, meditative practices are crucial at this hour and many medical sectors is incorporating meditation to enhance the quality of life in various settings [2].

Meditation is a practice that involves training the mind to focus and redirect thoughts, thereby inducing mental peace. It is a method for familiarizing the mind with virtue. As the mind becomes acquainted with virtue, it becomes calmer, free from mental worries and discomfort. Thus, it is necessary to train the mind through meditation [3]. Meditation has been practiced for thousands of years, typically involving the cultivation of mindfulness, which entails paying attention to the present moment without judgment. Various techniques achieve this, such as focusing on the breath, repeating a mantra, or observing bodily sensations [4]. In recent years, meditation has been increasingly utilized as an academic strategy for managing students’ emotional and behavioural issues [5]. School-based interventions, such as mindful meditative practices and positive psychology programs, have proven effective in enhancing well-being [6].

Secondary school students are in a period of adolescent, a critical period between childhood and adulthood (ages 10 to 19), is characterized by significant emotional, physical, and social changes, necessitating effective coping mechanisms [7]. During this time, children experience rapid growth, impacting

their feelings, thoughts, decision-making, and interactions with the world. Recent publications highlight troubling trends in adolescent health, indicating an urgent need for action. At present 1 in 7 adolescents globally suffer from a mental disorder, for with particularly high rates of depression and lower well-being. Rajat Khosla [8], had mentioned that the adolescents are powerful and incredibly creative forces for good when they are able to shape the agenda for their well-being and their future [9].

Anapanasati Meditation

Anapanasati meditation, meaning mindfulness of breathing in the Pali language, holds a unique and prominent place in the practice of Theravada Buddhism. Anapana is the initial step in the practice of Vipassana Meditation. It involves observing natural respiration as it comes in and goes out [10]. According to Buddhist texts, Prince Siddhartha Gautama, who later became Gautama Buddha, practiced this meditation from childhood.

Thera [11] highlighted the efficacy of meditative practices or mindfulness of breathing, in alleviating bodily and mental unrest or irritation. This meditation technique serves as a simple yet potent pathway to achieving initial states of concentration, whether used as a prelude to other exercises or as a standalone practice. Anapana fosters concentration by directing focus on the breath, thereby eliminating distractions that cause stress and strain, ultimately benefiting the individual's health. Regular practice of Anapana helps to mitigate stress and negativity, enhances interpersonal relationships, productivity, and profitability, leading individuals from narcissism towards mature social love and altruism. This personal transformation acts as a catalyst for broader social change and development [12].

In a comprehensive long-term prospective study, Khosla [8] documented significant benefits of anapanasati meditation for both individuals with normal mental health and those with mental disorders. These benefits included enhanced personality-based hardiness, and a reduction in stress-related physiological and psychological symptoms, as well as improved coping mechanisms for stress.

Concept of Well-Being: A Multidimensional Perspective

The modern conceptualization of well-being was formally introduced by the World Health Organization [13] in its constitution, defining health as a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity. This definition marked a shift from a purely biomedical model to a holistic understanding of health. Later, the WHO [14] further refined mental health as a state of well-being in which every individual realizes his or her potential, can cope with normal life stresses, can work productively, and is able to contribute to their community. While the WHO provided a structured definition, philosophical roots of well-being trace back to Aristotle's eudaimonia which meant flourishing through virtue and Eastern traditions such as Buddhist mindfulness practices, which emphasized balance and self-awareness [15].

Contemporary research identifies three primary dimensions of well-being: psychological, subjective, and physical. Psychological well-being (PWB), as defined by Ryff [16], includes six key elements: self-acceptance, autonomy, environmental mastery, personal growth, positive relationships, and purpose in life. Subjective well-being (SWB), introduced by Diener [17], focuses on life satisfaction, positive affect, and low negative affect, serving as an indicator of emotional health [18]. Physical well-being, often overlooked in psychological studies, encompasses nutrition, exercise, and sleep, all of which significantly influence mental health [19]. There are five significant types of well-being: emotional, physical, social, workplace, and societal. Keyes & Waterman [20] concluded that adult well-being fosters productivity, life satisfaction, socially acceptable behaviours, and good physical and mental health. Individuals with higher well-being function at a higher level, using their strengths, skills, and abilities to contribute to their well-being and that of others and society. Well-being may be defined as the positive functioning of physical, psychological, emotional, social, spiritual, and economic systems, resulting in a state of happiness, health, and prosperity [21].

The variety of studies have highlighted the positive impact of meditation across various age groups. Martin [22] discovered enhanced resilience and improved relationships in adult practitioners as an impact of mindfulness meditation. Singh and Singh [23] indicated that anapanasati meditation can lead to meaningful improvements in university student's physiological health indicators like RBR (resting breath rate). Kushwaha et al., [24] observed a significant improvement in overall well-being concluding that meditation and pranayama have a potential benefit for improving well-being among university students. Jonas et al., [25] suggested that more time meditating significantly predicted increased feelings of quiet and calm and marginally increased relaxation and sleepiness among participants. According to Wu et al., [26] a brief mindfulness meditation can effectively enhance emotion processing and maintain focus and peace without negative emotional impacts. Ahipanyo [27] further revealed that meditation has a significant impact on emotional quotient of university students. The study conducted by Shohin et al., [28] on meditation reported improvements in psychological well-being of participants facing issues of stress and low mood after receiving meditation awareness training. Crescentini et al., [29] in their study concluded that mindfulness meditation training significantly reduced attention problems in primary school children. Bleasdale et al., [30] highlighted the potential impact of meditation to foster social and emotional well-being in high school students with a significant reduction in perceived stress, anxiety, anger, fatigue and depression. Movahed et al., [31] in their study concluded that meditation practices improve the spiritual well-being on diabetic patients. Saunders et al., discovered five central themes like connections, self-discovery, stress relief, learning, and medical education as a result of meditative intervention as a part of an experiential mind-body skills course for first year medical students. Park et al., [2] confirmed that mindfulness meditation provides a route for preservice teachers to cultivate self-awareness, crucial for their personal and professional development. Sharma et al.,

[32] showed meditation's potential as a powerful stress-reduction technique that not only boosts creativity and physical stamina but also substantially improves students' confidence, concentration, memory power, focus, and study abilities.

The existing literature review has revealed a variety of studies on meditation and its effects on well-being conducted in various contexts, but there is a lack of experimental research using a mixed method approach specifically addressing these topics in the context secondary school students of West Bengal. Most of the studies conducted so far focuses on specific groups like adults having years of experiences [22], primary school children [29], college & university students [24], medical students, pre-service teachers [2], cancer survivors, type-2 diabetic amputees [31], there are limited studies on secondary school students.

While some studies although have investigated the effect of anapanasati meditation on emotional quotient [27] and physiological parameters [23] on university students, there is no study on its impact on well-being. While some studies have used quantitative [25] and qualitative approaches [28], there is a need for more research employing a mixed method approach to study the impact of anapanasati meditation on well-being of secondary school students in Teesta, kalimpong district, West Bengal. This identified research gap necessitates further research and paves a way to find out how the mindful meditative intervention impacts students' subjective experiences through a comprehensive quantitative and qualitative data analysis.

Rationale of the Study

In recent times, the growing influence of social media, increasing exposure to harmful substances and the lack of a supportive home and social environment have started to affect the daily lives of school going children, especially in rural areas. In places like Teesta, a small and often overlooked region in the kalimpong district of West Bengal, students are silently struggling with several hidden challenges. Many young learners are getting caught in cycles of stress, restlessness, distraction and emotional confusion. Problems such as mobile overuse, addiction to online games, gambling and even risky habits like substance abuse are becoming common while emotional awareness and mental well-being remains largely neglected. Schools in many such regions, continue to focus primarily on academic outcomes, often overlooking the emotional and psychological needs of students. As a result, many children grow up without learning how to manage their emotions, deal with anxiety or make mindful decisions. Though in Teesta many initiatives have been taken by the NGOs and community groups by organizing programs like anti-drug campaign, awareness programmes but these efforts have not been able to bring lasting positive change in the lives of these students.

Therefore, there is a need to study the impact of anapanasati meditation on well-being of secondary school students in Teesta, kalimpong district, West Bengal.

Research Questions

- i. How is the level of well-being between the experimental group and control group after the intervention among the secondary school students of Teesta.
- ii. How does the practice of anapanasati meditation impact the well-being of secondary school students in Teesta, kalimpong district, West Bengal.
- iii. How do the secondary school students of Teesta experience anapanasati meditation?

Objectives of the Study

- i. To study the change in the level of well-being due to the impact of anapanasati meditation on secondary school students in Teesta.
- ii. To find out the impact of anapanasati meditation on emotional, psychological, social, spiritual, self-awareness, physical well-being of secondary school students in Teesta.
- iii. To explore secondary school student's subjective experiences and the perceived impact of anapanasati meditation on their well-being.

Hypotheses

H₀1: There is no significant difference in the impact of anapanasati meditation on well-being among secondary students in Teesta.

H₀2: There is no significant difference in the impact of anapanasati meditation on a) emotional, b) psychological, c) social, spiritual, d) self-awareness, e) physical well-being among secondary students in Teesta.

Research Method

The present study employs mixed-method research approach, utilizing a mixed-method experimental design with convergent parallel as a core design to examine the impact of anapanasati meditation on the well-being of secondary school students in Teesta, Kalimpong district, West Bengal. It integrates both quantitative and qualitative data collection, analysis, and interpretation. For the quantitative strand the study has adopted a two-group pre-test post-test design to study the impact of anapanasati meditation. The population of the study consists of all the secondary school students in Teesta is 127. Out of which 32 secondary school students were taken as a sample (16 in experimental group and 16 in control group). The sampling technique used was simple random sampling. For the collection of quantitative data, the study used a standardized tool, Well-being Index by V.L Chauhan and Varsha Sharma. Further, in qualitative strand to explore secondary school student's subjective experiences and the perceived impact of anapanasati meditation on their well-being the study used a case study design. A total of 7 secondary school students were taken as a sample. The samples were selected using a purposive sampling technique. The qualitative strand employed has used tool as a semi-structured interview schedule.

Treatment

The intervention provided was anapanasati meditation, a mindful breathing practice guided by a well-being and happiness coach Miss Sunita Lama who has an experience of more than 8 years in

the field. The schedule was prepared as per her instruction inspired by a Vietnamese zen master Thich Nhat Hanh consisted of three phases. Phase I was the grounding practice for 7 days where the participant students were taught how to sit and trained on noticing breath focusing on the tip of nose. The main aim in the first phase was to make the student participants aware of their breath by recognising it. Phase II was using breath as an anchor for the next 7 days where the participant students were taught to observe the breath through box hand breathing or counting technique. The main aim of this phase was to make participant students follow their breath without altering it. Phase III was watching breath including the practices that were taught in phase I and II for the next 7 days. The main aim of this phase was to train the participant students watch their breath and bringing back the wandering thoughts by bringing attention to the present moment. For ethical consideration in this study the researcher first obtained consent from the students and their parents/guardians. The researcher ensured confidentiality and anonymity of the participant students. The participants were also provided with the options to withdraw from the study at any time without any repercussions. The researcher made sure that the collected data were kept confidential and used only for the research purpose. Finally, the reports, findings, methodology and data were utilized honestly without any manipulation.

Results

Table 1: Change in the level of well-being between the experimental (pretest and post-test) group and control (pretest and post-test) group.

Range of Score	Experimental Group		Control Group		Level of Well-being
	Pre-test	Post-test	Pre-test	Post-test	
	n (%)	n (%)	n (%)	n (%)	
186 and above	0	0	0	0	Extremely High
166 to 185	0	5(31%)	0	0	High
145 to 165	0	11(69%)	0	0	Above Average
117 to 144	0	0	0	0	Average
96 to 116	7(44%)	0	9(56%)	10(62%)	Below Average
76 to 95	9(56%)	0	7(44%)	6(38%)	Low
75 and below	0	0	0	0	Extremely Low

Table 1 highlights the comparative analysis of well-being levels between the experimental and control groups, both before (pretest) and after (post-test) the intervention. At the pretest stage, the majority of students in the experimental group were found to fall within the Low (56%) and Below Average (44%) levels of well-being, with none achieving above-average or higher categories. However, following the intervention, a positive shift was observed as 69% of students transitioned to the Above Average well-being category and the remaining 31% reached the High level. Notably, none of the students in the experimental group remained in the Low or Below Average categories post-intervention, indicating a significant enhancement in their overall well-being. In contrast, the control group showed no meaningful improvement between the pretest and post-test phases. The results suggest that the

intervention significantly appears to improve not only emotional balance and psychological resilience but also fosters greater social connectedness, spiritual depth, bodily awareness, and self-understanding all core components of holistic well-being. It seemed to have helped the participant student in turning their negative emotions into the positive one.

Impact of anapanasati meditation on well-being among secondary school students in Teesta

H₀1: There is no significant difference in the impact of anapanasati meditation on Well-being among secondary students in Teesta.

Table 2: Result of the t-test showing the impact of anapanasati meditation on Well-being among secondary school students in Teesta.

Well-being	Control group		Experimental group		t (30)	p
	M	SD	M	SD		
	98.6	10.29	158.4	7.27	18.99	<.001***

***p<.001

The results showed a clear and significant difference between the two groups i.e. control group and the experimental group. The control group had a mean well-being score of 98.6 with a standard deviation of 10.29, while the experimental group had a much higher mean score of 158.4 and a standard deviation of 7.27. The calculated t-value was 18.99 and the extremely low p-value (<0.001) suggesting that this difference is highly statistically significant. This indicates that the difference in well-being scores between the two groups is not due to chance but due to the intervention provided. Therefore, the null hypothesis (H₀1) is failed to be accepted. The results suggest that the Anapanasati meditation practice had a positive and significant impact on the well-being of the students who participated in the experimental group.

Impact of anapanasati meditation on emotional wellbeing among secondary school students in Teesta

H₀2: a) There is no significant difference in the effect of anapanasati meditation on Emotional wellbeing among secondary school students in Teesta.

Table 3: Result of the t-test showing the impact of anapanasati meditation on emotional well-being among secondary school students in Teesta.

Emotional Well-Being	Phase	Control group		Experimental group		t (30)	p
		M	SD	M	SD		
	Pre-test	10.0	2.42	10.2	1.94	0.24	0.811
Post-test	12.5	2.48	19.2	2.53	8.34	<.001***	

***p<.001

The experimental group had a pre-test emotional well-being mean score of 10.2 with a standard deviation of 1.94, which increased significantly to post-test mean of 19.9 with a standard deviation of 2.53. The large difference between the pre and post-test scores is reflected in the t-value of 8.34 and an extremely low p-value (<0.001) suggesting that this difference is highly statistically

significant. This p-value shows that the observed change is highly statistically significant. Therefore, it can be concluded that the intervention of anapanasati meditation had a strong and positive effect on improving the emotional well-being of the students in the experimental group. In contrast, the control group started with a pre-test mean score of 10.0 (SD = 2.42) and showed a slight increase to 12.5 (SD = 2.48) in the post-test. The t-value for this change is 0.24, and the p-value is 0.811, which is not statistically significant. Hence, while the control group did not experience a meaningful change, the experimental group showed a substantial and statistically significant improvement, indicating that anapanasati meditation was effective in enhancing emotional well-being. The results clearly support the rejection of the null hypothesis (H_0)^a and affirm the positive impact of the meditation intervention.

Impact of anapanasati meditation on psychological well-being among secondary school students

H₀2: b) There is no significant difference in the effect of anapanasati meditation on psychological wellbeing among secondary school students in Teesta.

Table 4: Result of the t-test showing the impact of anapanasati meditation on psychological well-being among secondary school students in Teesta.

	Phase	Control group		Experimental group		t (30)	p
		M	SD	M	SD		
Psychological Well-being	Pre-test	27.2	4.93	26.1	3.21	0.76	0.450
	Post-test	26.1	3.68	32.7	1.85	6.43	<.001***

***p<.001

The experimental group had a pre-test mean score of 26.1 for psychological well-being with a standard deviation of 3.21. After the intervention, their post-test mean score increased significantly to 32.7, with a reduced standard deviation of 1.85, indicating a more consistent improvement across participants. The t-value of 6.43 and a p-value demonstrate a highly statistically significant difference between the pre- and post-test scores. This clearly suggests that the anapanasati Meditation intervention was effective in enhancing the psychological well-being of the students in the experimental group. On the other hand, the control group had a pre-test mean score of 27.2 (SD = 4.93), which slightly declined to 26.1 (SD = 3.68) in the post-test. This change was not statistically significant, as indicated by the t-value of 0.76 and a p-value of 0.45. Thus, while the control group did not experience a meaningful change, the experimental group demonstrated a significant and positive improvement in psychological well-being. Based on these findings, the null hypothesis (H_0)² b is rejected. The study shows that anapanasati meditation had a significant effect on enhancing the psychological well-being including autonomy, environmental mastery, positive relations with others, personal growth and self-acceptance.

Impact of Anapanasati Meditation on Social Well-Being Among Secondary School Students

H₀2: c) There is no significant difference in the effect of anapanasati

meditation on social wellbeing among secondary school students in Teesta.

Table 5: Result of the t-test showing the impact of anapanasati meditation on social well-being among secondary school students in Teesta.

	Phase	Control group		Experimental group		t (30)	p
		M	SD	M	SD		
Social Well-being	Pre-test	27.2	6.05	27.1	5.08	0.06	0.95
	Post-test	26.8	3.85	45.3	4.11	13.10	<.001***

***p<.001

The experimental group had a pre-test mean score of 27.1 for social well-being with a standard deviation of 5.08. After the anapanasati meditation intervention, the post-test mean score significantly increased to 45.3 with a standard deviation of 4.11. This change is statistically significant, as indicated by a t-value of 13.10 and an extremely low p-value (<0.001) suggesting that this difference is highly statistically significant. This shows a very strong positive impact of the intervention on the social well-being of the students in the experimental group. In contrast, the control group began with a mean score of 27.2 (SD = 6.05) and slightly decreased to 26.8 (SD = 3.85) after the same period. The t-value of 0.06 and p-value of 0.95 indicate that the change was not statistically significant. This provides strong evidence that anapanasati meditation significantly enhances social well-being fostering social integration, social contribution, social coherence, social acceptance and social actualization.

Impact of Anapanasati Meditation on Spiritual Wellbeing among Secondary School Students

H₀2: d) There is no significant difference in the effect of anapanasati meditation on Spiritual wellbeing among secondary school students in Teesta.

Table 6: Result of the t-test showing the impact of anapanasati meditation on spiritual well-being among secondary school students in Teesta.

	Phase	Control group		Experimental group		t (30)	p
		M	SD	M	SD		
Spiritual Well-being	Spiritual	8.19	2.04	8.69	2.55	0.61	0.54
	Spiritual	8.44	1.36	15.81	3.08	8.75	<.001***

***p<.001

The experimental group had a pre-test mean score of 8.69 for spiritual well-being with a standard deviation of 2.55. After undergoing anapanasati meditation, the post-test mean score increased significantly to 15.81 with a standard deviation of 3.08. This change is statistically significant, with a t-value of 8.75 and an extremely low p-value (<0.001) suggesting that this difference is highly statistically significant indicating a strong positive effect of the meditation practice on students' spiritual well-being. On the other hand, the control group started with a mean of 8.19 (SD = 2.04) and showed only a slight increase to 8.44 (SD = 1.36) in the post-test. The difference was not statistically significant, with a t-value of 0.61 and a p-value of 0.545. Given the clear improvement

in the experimental group and the negligible change in the control group, the null hypothesis (H₀2) d is rejected. This confirms that anapanasati meditation has a significant positive impact on the spiritual well-being suggesting that student participant tends to be more purposeful, moral, caring and nurturing. The improvement in personal aspect seem to include a focus on the individual human spirit, global faith and interpersonal relationships.

Impact of Anapanasati Meditation on Self-Awareness among Secondary School Students

H₀2: e) There is no significant difference in the effect of Anapanasati Meditation on self-awareness among secondary students in Teesta.

Table 7: Result of the t-test showing the impact of anapanasati meditation on self-awareness among secondary school students in Teesta.

Self-awareness	Phase	Control group		Experimental group		t (30)	p
		M	SD	M	SD		
	Pre-test	15.5	2.83	16.2	3.06	0.66	0.51
Post-test	15.4	3.07	27.1	2.60	11.66	<.001***	

***p<.001

The experimental group had a pre-test mean score of 16.2 with a standard deviation of 3.06 for self-awareness. After participating in the anapanasati meditation intervention, the post-test mean score rose substantially to 27.1 with a standard deviation of 2.60. The statistical analysis yielded a t-value of 11.66 and an extremely low p-value (<0.001) suggesting that this difference is highly statistically significant and indicating a highly significant improvement in self-awareness due to the meditation practice. In contrast, the control group showed no meaningful change in self-awareness, with a pre-test mean of 15.5 (SD = 2.83) and a post-test mean of 15.4 (SD = 3.07). The t-value of 0.66 and p-value of 0.51 indicate no significant change in this group. Therefore, the null hypothesis (H₀2) e is rejected, confirming that anapanasati meditation has a significant positive effect on the self-awareness with an increase in self-confidence, self-reliance and self-potency.

Impact of Anapanasati Meditation on Physical Well-Being among Secondary Students

H₀2: f) There is no significant difference in the effect of anapanasati meditation on Physical wellbeing among secondary school students in Teesta.

Table 8: Result of the t-test showing the impact of anapanasati meditation on physical well-being among secondary school students in Teesta.

Physical Well-being	Phase	Control group		Experimental group		t (30)	p
		M	SD	M	SD		
	Pre-test	9.25	1.48	9.13	1.67	0.22	0.82
Post-test	9.38	1.59	17.63	2.63	10.74	<.001***	

***p<.001

The experimental group recorded a pre-test mean of 9.13 (SD = 1.67) in physical well-being. Following the Anapanasati Meditation intervention, the post-test means significantly increased to 17.63 (SD = 2.63). The computed t-value of 10.74 and

an extremely low p-value (<0.001) suggesting that this difference is highly statistically significant and improvement in physical well-being due to the intervention. On the other hand, the control group showed negligible change, with a pre-test mean of 9.25 (SD = 1.48) and a post-test mean of 9.38 (SD = 1.59). The t-value of 0.22 and p-value of 0.82 confirm that no significant improvement occurred in the control group. Based on the results, the null hypothesis (H₀2) f is rejected. The study found that anapanasati meditation has a significant positive effect on the physical well-being among the participant student with the increase in awareness related to healthy eating habits and daily exercises, improvement in sleeping patterns fostering sound sleep.

Secondary School Students' Subjective Experiences and The Perceived Impact of Anapanasati Meditation on their Well-being

The qualitative data were thematically analysed to understand students' subjective experiences and the perceived impact of meditation on their stress levels. The emergent themes are discussed below with representative excerpts.

Improvement in Sleep Quality

Several participant students reported significant improvement in the quality of their sleep after engaging in meditation practices.

The interviews revealed that one of the most immediate and consistently experienced benefits of meditation among participant students was an improvement in sleep quality. Participant students who had previously reported feelings of exhaustion and irregular sleep patterns began to experience deeper, more restorative rest following regular engagement in meditation practices. For instance, SS1 shared, *"I felt lethargic and would fall asleep early out of exhaustion. But after the sessions, my whole day is going great and in a positive manner,"* indicating not only better sleep but also improved daytime functioning and mood. SS2 similarly emphasized the improvement in sleep quality. SS3 elaborated on the role of specific meditation techniques in enhancing sleep, particularly guided breathing exercises. The participant further stated that the benefits extended beyond the night's rest to influence daily energy and emotional balance. Similarly, SS6 acknowledged that while their previous sleep pattern was stable, meditation introduced a new quality to their sleep. SS5 also affirmed the physical and psychological benefits of meditation on sleep. This improvement in sleep quality played a significant role in reducing stress, enhancing physical vitality, and promoting a positive outlook in the students' daily lives.

Enhanced Physical Well-being

Participants experienced noticeable physical benefits, such as reduced bodily discomfort and increased energy.

Participant students reported noticeable enhancements in their physical well-being following the meditation sessions. These physical changes were characterized by a reduction in bodily discomfort and a consistent increase in energy levels throughout the day. SS3 mentioned that these improvements with the regular

practice of guided breathing meditation, particularly before bedtime. The emphasis on feeling “*rejuvenated*” and experiencing a “*level of freshness*” previously unknown highlights the extent to which meditation supported physical restoration and day-long energy.

SS7 mentioned that by reflecting on the use of tapping techniques integrated into the breathing sessions helped to relieve pain in the body. The use of tapping as a somatic preparatory practice before meditation appeared to promote physical relaxation and reduce stress-induced bodily tension. Moreover, the participant observed a sustained physical benefit, stating, “*after these relaxation sessions, I wake up feeling more refreshed in the morning.*” This shows that meditation had a cumulative positive effect on the body’s functioning.

The study found that meditation in enhanced mind-body awareness and in promoted physical comfort through relaxation and self-regulation techniques. Participant students experienced relief in physical tension and increased their energy levels. The intervention contributed to participant students’ holistic well-being and preparedness to engage actively in daily academic and social tasks.

Morning Freshness and Day-Long Positivity

A common thread in the responses was the experience of waking up feeling “*refreshed*,” “*energetic*,” and “*good*.”

One of the recurring patterns in the participant students’ reflections was the experience of waking up with a renewed sense of energy. It helped them to maintain a positive outlook throughout the day. This transformation was after the incorporation of meditation into their daily routine. Participant students described feeling more refreshed in the morning, which contributed to an increased sense of vitality, readiness to engage in daily tasks, and a general improvement in their emotional state.

The study found that the intervention played a key role in enhancing morning clarity and positivity. The enhanced mornings were not isolated effects but formed the foundation for an energized and emotionally balanced day. This study found that the integrative role of meditation in improving participant students’ readiness, productivity, and resilience in academic and personal life.

Reduction in Stress and Overthinking

A prominent theme that emerged was the reduction in cognitive overload and anxiety, especially related to academic expectations. Participant students reported experiencing fewer intrusive thoughts and enhanced ability to manage stress.

The participant students’ reflections showed a significant reduction in overthinking and stress as a result of practicing meditation. SS1 described how focusing on the breath helped manage anxious thoughts related to exams and social expectations. This states that his practice reduced fear and brought mental calm. Similarly, SS2 shared that quiet breathing allowed their thoughts to fade, creating a sense of stillness and inner happiness. These accounts suggested that intervention of meditation helped alleviate excessive mental

activity. It promoted a calmer, more centred state of mind essential for emotional well-being and academic focus.

Emotional Regulation and Self-Awareness

Participant students reported an enhanced ability to regulate their emotions and respond mindfully to stressful situations.

The interview data reflect the development of emotional regulation and self-awareness among participant students as a result of intervention as well as regular meditation practice. SS1 shared a growing ability to observe emotional triggers and respond calmly rather than react impulsively, stating, “*I can feel the anger rising but now I know how to calm myself before I speak.*” Similarly, SS3 described how breathing techniques helped shift from irritation to composure. SS7 emphasized a deeper emotional insight. SS6 echoed this by acknowledging a newfound ability to “*control my thoughts and mind.*” Therefore, these reflections show that intervention of meditation enabled participant students to recognize emotional states, regulate their reactions, and engage in more thoughtful, constructive behaviour.

Improved Focus and Academic Readiness

Participant students expressed improved concentration, fewer study-related headaches and greater preparedness for academic tasks following the meditation intervention.

The participant student’s response indicated a clear improvement in concentration and academic preparedness after the meditation intervention. SS1 reported a transition from poor focus and study-related stress, including headaches, to a state of calm and improved attention. SS3 expressed optimism about maintaining enhanced focus during upcoming board examinations. It suggested a growing sense of academic confidence. Likewise, SS4 observed better concentration after intervention of meditation. These reflections suggest that meditation helped reduce cognitive distractions and mental fatigue among participant students. So, it provided support to students’ ability to engage more effectively in academic tasks.

Positive Shift in Emotional State and Personal Confidence

Many participant students described meditation as a source of inner peace, emotional balance, and positivity. They conveyed feelings of happiness, gratitude, and self-confidence.

The participant students’ reflections revealed a significant positive shift in emotional state and personal confidence as a result of meditation intervention. SS6 described feeling “*happy and relaxed*” with a sense of energy and gratitude. The participant student shared the feeling like a superhero, which highlight a boost in self-worth and confidence. SS7 shared a renewed sense of “*positivity and hopefulness about life*”. This indicates an emotional upliftment. SS6 also noted becoming “*more confident and attuned*” to their body. This indicates enhanced self-awareness. SS1 described overcoming fear and gaining the courage to try new things, realizing that “*mistakes are part of learning.*” The study from these insights found that meditation helped participant students to cultivate optimism, emotional strength, and the confidence to engage with life and studies.

Improved Interpersonal Relationships and Social Harmony

Another significant theme that emerged from the participant students' reflections was the improvement in their interpersonal relationships, particularly with peers and family members. The regular practice of meditation appeared to help participant students and enhance patience during interactions.

The data revealed that meditation contributed significantly to improved interpersonal relationships and social behaviour among participant students. SS1 shared that they no longer get easily irritated during interactions with friends and family. They are now able to remain calm and enjoy conversations without reacting impulsively. SS4 emphasized that meditation helped them manage anger more effectively, especially in social contexts. The participant students agreed that noting that previous reactions had negatively impacted their mental well-being. They further observed that mindful breathing allowed them to reflect before responding, which strengthened their social connections. SS7 also noted modest improvements in their interactions with others. The study found out that these accounts suggest that meditation fostered emotional control, patience, and empathy that enhanced participant students' ability to maintain respectful and harmonious relationships.

Inner Stillness and Mental Clarity

The theme emerged after the intervention was a state of mental stillness and absence of distractions achieved during meditation sessions.

The participant students' reflections indicated an experience of inner stillness and mental clarity during meditation. SS1 and SS7 both described reaching a "thoughtless" state, where distracting thoughts and worries temporarily faded. It allowed them to focus fully on their breath. This mental quietude provided a sense of relief and deep calm. SS6, who self-identified as typically restless, shared that meditation enabled them to feel "peaceful, relaxed and calm." The study found that intervention of meditation was effective in promoting a quiet, focused mind. The intervention also created moments of deep presence, even among individuals who are generally prone to distraction or restlessness.

Social Bonding

The qualitative data also reveal that meditation interventions helped participant students foster social bonding, breaking down typical classroom social divisions and promoting inclusivity.

SS5: "This practice has helped me get along better with others. One good thing about this session was that I made new friends. Normally, students like the last benchers and first benchers don't interact much, but during the sessions, we switched places, which helped create a bond."

This emphasized the community-building aspect of shared mindfulness practice. Group meditation offered a neutral and non-competitive space for participant students to interact, connect, and listen to one another. It contributed to stronger peer relationships

and a sense of classroom cohesion.

Discovery of Inner Peace and Calm Identity

Several participant students shared realizations about their inner calm, peace-loving identity, which they had not previously recognized. Through meditation, they uncovered a quieter, more balanced version of themselves.

The participants students' reflections revealed a self-discovery of inner calm and personal transformation through meditation intervention. SS2 shared that meditation led them to a calmer version of themselves, bringing peace and ease into their life. SS4 described the unexpected yet fulfilling realization of a "peace-loving side" of their personality, previously unknown to them. SS3 echoed similar sentiments, stating that they had discovered a more composed self, capable of managing problems with greater effectiveness. These reflections suggest that meditation intervention served not only as a tool for stress reduction but also as a way for inner exploration, self-awareness. It helped them realise the emergence of a more balanced and resilient personal identity.

Emotional Balance and Mindful Response

A recurring theme in the data is the development of emotional balance specifically, the ability to recognize, understand, and regulate emotions.

The data indicated that meditation fostered a greater capacity for mindful responses and empathy in interpersonal situations. SS2 shared that they had become more thoughtful and emotionally aware, especially in interactions with siblings. It demonstrated an increased sensitivity to others' feelings. SS4 emphasized the importance of *reflecting before reacting*. It shows intervention developed a shift from impulsivity to considered response. Similarly, SS3 described using breathing techniques during stressful moments to regain emotional control and respond with calmness. The study through these reflections found that meditation encouraged emotional self-regulation and encouraged participant students to be more empathetic and conscious to social communication. It helped them to improve both personal well-being and relational dynamics.

Discussion

This study found that a brief 21-day anapanasati meditation intervention significantly enhanced adolescent well-being across emotional, psychological, social, spiritual, and physical domains ($p < .001$), in line with prior research [27,28,32]. Qualitative insights further supported improvements in emotional regulation, focus, and resilience, strengthening findings by Jonas et al. [25] and Saunders et al. Movahed et al. [31] social and physical benefits were uniform, likely due to the accessibility of breath-based practices. The study also addressed concerns about self-report reliability [29] through consistent student and external observations. Overall, these findings affirm the potential of low-cost, scalable meditation programs in promoting adolescent well-being in diverse educational contexts [30]. Thus, the result of the

study emphasizes the potential impact of anapanasati meditation as accessible, low-cost and non-invasive intervention for well-being of students at educational settings.

Recommendations of the Study

- The West-Bengal government should recognize meditation-based programs like Anapanasati as valuable tools for promoting student well-being and should support their implementation in schools through policy and funding.
- Curriculum developers of West Bengal book writers should consider formally integrating meditation and mindfulness practices into the school timetable as part of value education, life skills, or health education.
- West Bengal boards should issue guidelines for schools to incorporate well-being sessions, including meditation, especially in regions with high academic pressure or social challenges.
- School administrators should take initiative to make well-being a priority by embedding short meditation practices into daily routines and school culture.
- Teachers should receive regular training on basic meditation techniques like Anapanasati, and how to guide short sessions effectively in classrooms.
- Teacher education programs (B.Ed. and M.Ed.) in West Bengal should include modules on mental health, emotional regulation, and meditation practices to prepare future educators.
- Schools should create designated quiet spaces or well-being rooms where students can practice meditation or simply relax when feeling stressed.
- School counsellors and well-being coordinators should be trained to integrate meditation into their regular interactions with students.
- Parents should be engaged through workshops and communication strategies that educate them about the benefits of meditation and how to support it at home.
- NGOs and local community groups should collaborate with schools to provide meditation-based support, especially in rural and underserved areas.

Conclusion

The experimental study conducted in Teesta, kalimpomg district, West Bengal, India, employed a mixed-method approach, used well-being Index tool to assess the effectiveness of anapanasati meditation on various well-being dimensions. The findings confirmed notable improvements in emotional, psychological, social, spiritual, and physical well-being, along with heightened self-awareness among students in the experimental group. The statistical analysis confirmed substantial increase in well-being, further affirming the meditation's efficacy across genders as well. The qualitative data of the students, gathered through interviews, reflected a shift in their self-perception, behavioural choices, and outlook toward life. These outcomes emphasize the transformative potential of integrating meditative practices into school education especially for adolescents.

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