

# An Evidence Based Review Of The Impact Of Mindfulness Meditation On Mental Health Of Children And Preadolescents

Shivani K Shah<sup>1</sup>, Mahima Gupta<sup>2</sup>

<sup>1</sup>Ph.D. Scholar, Amity Institute of Education, Amity University Noida, Uttar Pradesh, India

<sup>2</sup>Professor, Amity Institute of Education, Amity University Noida, Uttar Pradesh, India

Email: shivanik5252@gmail.com

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## Abstract

The well-being quotient of a child determines the quality of adult life with regard to emotional, social and mental health and professional success. Studies have shown that overall well-being is achieved through enhanced emotional regulation and coping skills. Thus, well-being has been linked to emotional regulation and Mindfulness Meditation has been seen as an effective vehicle for facilitating emotional regulation. Of late mental health has been the key focus area across the globe. There has been a drive to promote well-being of students through management of mental health. Handful of research carried out in this field and has suggested school based mindfulness training to promote well-being. The pre-adolescent age is ideally suited to receive and imbibe mindfulness training for enhancement of overall well-being. However, very limited research in the pre-adolescent age group has been carried out so far. Research based reliable evidence is needed to establish the outcomes of mindfulness meditation training for the pre-adolescents. This article attempts to review the impact of Mindfulness Meditation on children including pre-adolescents and highlight various outcomes. Suggestions for future research in the younger age group are also made so as to help in the development of more effective mindfulness programs in schools.

**Keywords:** Mindfulness Meditation, Pre-adolescents.

## INTRODUCTION

In the modern times of globalization, the endeavour has been to connect people and businesses across the world and move the life towards better living. But on the contrary, this fast paced competitive living has brought everyone to their knees forcing us all to lead a fragmented and alienated life (Ngar-sze Lau, 2009). The number of young people complaining of depression, anxiety, stress and low attention span is increasing day by day. More and more young population is getting engulfed into the spiral of negative emotions, most of them suffering in silence not knowing how to deal with the situation. Past few years have seen people opening up about their mental health issues and seeking various ways to deal with the menace. In our ancient education system strengthening of the mind, body and soul was a very integral part of the curriculum, which got lost down the line. Now, once again there has been a realization by our educationists of our ancient legacy of mindfulness meditation. The last few decades have seen a spurt in the practices of mindfulness meditation by various professionals in varied fields like hospitals, prisons and various corporate houses. Schools and colleges have also realized and have been introducing mindfulness practices in their curriculum in small ways. There has been no doubt that mindfulness intervention benefits young pupil. But there has been lot of debate on the right age for introducing this programme in children. The aim of this article is to review the impact of mindfulness meditation on the mental health and holistic well-being of children including pre-adolescents. Till date most of the studies involved adolescents and adults and very little research study has taken place at the level of pre-adolescents.

**Objective:** To study the impact of mindfulness meditation on mental health and overall well-being of children including pre-adolescents.

## Research Questions

1. How does mindfulness meditation impact mental health and overall well-being of children including pre-adolescents?
2. What is the efficacy of mindfulness meditation in regular schools?

## Definitions

**Mindfulness Meditation:** Mindfulness Meditation is defined as “the awareness that develops by focussing on the breath and being in the present moment non-judgementally.” By focusing on the breath, we become aware of the body and mind as it is from moment to moment, and thus alleviate the pain, both physical and emotional. (Kabat-Zinn, 1994, p. 4)

**Pre-adolescence:** It is the period of human development just before adolescence, and corresponds usually to the period between approximate ages of 9 and 12 (Merriam Webster). Pre-adolescence is usually associated with its unique set of challenges and anxieties (Wikipedia).

## Effects of Mindfulness Meditation on Children and Pre-adolescents

The section below encapsulates the key findings of research carried out by 14 social scientists who have carried out studies to investigate the impact of mindfulness meditation amongst school children including pre-adolescents.

In 2009, Ngar-sze Lau, carried out a study on positive effects of mindfulness practice on holistic education and its inclusion in school curriculum to promote intuitive knowledge, spirituality, mind-body-spirit synergy, relationship management and overall well-being amongst school children

In 2020, R. Amundsen, C. Hamilton, D. McGann, L.M. Riby and M. Hope, completed their studies on efficacy of mindfulness meditation as a route to greater life satisfaction, better emotional regulation and developing positive outlook amongst Primary school children. A mindfulness programme called ‘Living Mindfully’ was administered to a group of school children in the age group of Nine to Ten over six weeks by class teachers. The self-assessment of mindfulness ( $d=.65$  and  $.72$ ), emotional regulation and positive outlook ( $d=.55$  and  $.64$ ) and life satisfaction ( $d=.65$  and  $.72$ ) by 108 children drawn from three schools revealed significant improvement in these attributes in the experimental group vis a vis control group.

In 2022, Karen L. Thierry, Karen S. Norris and Rhonda L. Vincent, studied the effects of mindfulness based curriculum on Second grade Kindergarten students and found that the experimental group displayed higher levels of emotion recognition, social awareness, relationship management and problem solving competencies vis a vis control group.

In 2010, Kimberly and Lawlor, carried out a study on effects of mindfulness based education curriculum amongst pre and early adolescents. The study revealed significant increase in positive affect and optimism and improvement in social and emotional competencies amongst the experimental group as compared to the control group. Significant decrease in aggression and oppositional behaviour were also reported.

In 2019, Nathaniel A. Shanok, Nancy Aaron Jones, Carol R and Krystal D. Mize, carried out a scientific study on how mindfulness meditation can alter neurophysiological manifestations of anxiety and depression amongst pre-adolescents. 66 Elementary school students in the Seven to 10 year age group demonstrated changes in the entire cortex and also in the central and frontal regions of the brain. The students also reported reduced depression scores and mood disorder characteristics.

In 2009, Thomas J. Kramer et al, evaluated how mindfulness training fosters prosocial competencies and behaviours amongst Kindergarten students. Results indicated positive improvement in prosocial behaviours and decreases in internalizing behaviours.

In 2010, Anu G. S., developed an Emotional Intelligence Enhancement Package (EIEP) for administering to Primary school students with the objective of building up of emotional competencies. The results indicated that the package was highly effective and recommended inclusion of EIEP in school curriculum.

In 2010, Lisa Flook, Susan L. Smalley et al, carried out research on effects of Mindfulness Awareness Practices (MAPs) on improvement of Executive Functions (EF) amongst Elementary school students. The children in the MAPs group showed gains in behavioural regulation, metacognition and overall executive control of social and emotional behaviour.

In 2016, Annemaria Weber, Milena Uhlemayr, Niko Kohls et al, studied the effects of a 12-week mindfulness based stress reduction programme on students of Fifth grade. Pre-post-comparison indicated a significant improvement of self-assessed emotional regulation and physiological distress levels amongst the experimental group.

In 2011, Baijal, Shruti, Jha, Amishi P., Kiyonaga, Anastasia et al, investigated the effect of Concentrative Meditation Training (CMT) on pre and early adolescents. However, the results were inconclusive and further studies were recommended to examine the relationship between CMT and academic achievement as also its impact on social and emotional competencies.

In 2005, Maria Napoli, Lynn Holley and Paul Rock Krech, evaluated the impact of Mindfulness Training on measures of attention of First, Second and Third class students. Significant changes were observed in the scores of the experimental and control groups post intervention as per the Attention Subscale (ACTeRS). A reduction in test anxiety scores and a raise in attention scores were also reported.

In 2011, Nidich et al., investigated the influence of daily 12 minute sessions of Transcendental Meditation (TM) on academic performance of Third to Seventh class students and observed an increase in reading, vocabulary, language and learning skills. Significant difference in Maths and English scores were also observed in students who underwent TM sessions vis a vis those who didn't.

In 2010, Mendelson et al., studied the impact of 12 weeks of Mindfulness training on pre-adolescent students in United States. Results indicated significant improvement in stress management and reduction in rumination, intrusive thoughts and emotional arousal.

In 2005, Wall, conducted Five weeks of mindfulness activities and Tai Chi for 6th to 8th grade students in United States. Results suggested that students who went through the programme experienced calmness of mind, relaxed mental state, better sleep, reduced irritability and enhanced sense of well-being.

## Findings Of The Study:

### The Impact of Mindfulness Meditation on General Well-being

Evidence based research carried out in the field throws up following findings with respect to impact of mindfulness meditation on various aspects of well-being of school children including pre-adolescents:-

- A 12-week mindfulness based stress reduction programme for 5th graders not only made them calmer but also made resulted in increased focus and concentration during academic classes.
- Daily session of Transcendental Meditation for 3 months amongst third to seventh grade students led to improvement of academic performance of the students, i.e., higher scores in Maths and English.
- Mindfulness intervention resulted in improvement of skills that are critical for social awareness and relationship management amongst young kindergarten children.
- Mindfulness mediation intervention resulted in improvement in prosocial behaviours and reduction of internalizing behaviours.
- Mindfulness Awareness Practices led to improvement of executive functions (EF) like behavioural regulation, metacognition amongst school children.

- Mindfulness meditation intervention significantly altered neurophysiological symptoms of anxiety and depression, amongst pre-adolescents and was also helpful in reducing mood disorders characteristics.
- A 12-week mindfulness programme for pre-adolescents in the US led to significant improvement in stress management and reduction in rumination, intrusive thoughts and emotional balance.
- A six-week mindfulness programme for school children in the age group of 9 to 10, administered by class teachers, resulted in improvement of positive outlook, like satisfaction and emotional regulation at the end of the programme.
- Mindfulness based curriculum for second grade students resulted in better emotional recognition and problem solving over a period of time.
- Mindfulness training enhances overall well-being of children and promotes holistic learning, intuitive knowledge, mind-body-spirit integration and relationship management.

## Suggestions For Future Research

Major drawback in the field of research is that most of the published work is based on the intervention programmes in the pilot stage and the studies have been carried out in short duration time frame. Thus, the benefits are of short term duration with no conclusions on its sustained benefits in students life. Most of the studies have taken place in western school settings, with practically few studies in the Asian countries which are far different culturally from each other. The origin of practice of meditation in India as contained in written records dates back to 1500 BCE, the practice of Dhyana or Jhana is referred as the training of the mind. Any studies carried out in the Asian context will have different results as students will adapt to the interventions more easily into their lives due to cultural background. The majority of the studies could not use randomized groups and lacked equivalent control groups limiting the interpretation in many ways.

The intervention programmes have majorly evaluated the data based on student self-reports or teacher reports. In both the cases biases cannot not be ruled out. The validity of the results, given that teachers were aware of the students taking the meditation intervention, is also questionable (Napoli et al. 2005).

The number of studies conducted for senior age groups (adolescents) far outnumbers the studies in the age of 7-11 years. Thus, accurate deductions cannot be made based on few studies that have been carried out for pre-adolescents.

If researchers investigating the impact of meditation were able to demonstrate brain related changes in students through neurological assessment, then it could form a very powerful basis for its introduction in school children, specially pre-adolescents. The duration, frequency and administration of the intervention programme (by in-house teachers or outsourced experts) in young children also needs to be ascertained.

A review of the studies carried out in the past revealed that the results were more positive with higher duration and frequency and whenever the in-house teachers administered the programme. All these aspects need to be ascertained in Indian school scenario so as to see the feasibility of its integration in the school curriculum.

Therefore, it shall be fair to deduce that more evidence has yet to be collected to answer the question, “What is the efficacy of mindfulness meditation in regular schools with respect to their mental health and overall well-being?”

## Conclusion

The research in mindful meditation training for pre-adolescents is still in a nascent stage and a lot needs to be done to come to any definitive conclusion. The findings give tentative deductions with respect to the effectiveness of mindfulness meditation programmes for school children in the pre-adolescent age group. The study suggests that its practice does lead to improvement in students’ mental health and overall well-being . Benefits with respect to regulation of negative affect (stress, anxiety,

depression, anger, guilt, etc) have been found to be more pronounced than generation of positive affect (self-confidence, sense of achievement, motivation, initiative, peace, happiness, etc) in adolescents based on adequate studies that have taken place for this age group. Existing evidence does suggest that various meditation techniques followed in schools have varying degrees of positive impact on children with respect to their mental health and overall well-being, social and emotional competence as well as academic performance. More studies, however, need to be conducted in this field.

## REFERENCES

- [1] Kabat-Zinn, J. (1994). *Wherever you go, there you are: Mindfulness meditation in everyday life*. New York: Hyperion.
- [2] Preadolescence Definition & Meaning - Merriam-Webster
- [3] Preadolescence – Wikipedia <https://en.wikipedia.org/wiki/Preadolescence>
- [4] Cultivation of Mindfulness: Promoting Holistic Learning and Wellbeing in Education . Ngar-Sze Lau (2009).
- [5] Mindfulness in primary school children as a route to enhanced life satisfaction, positive outlook and effective emotion regulation R Amundsen I, L M Riby I, C Hamilton I, M Hope I, D McGann 2; 2020.
- [6] A Mindfulness-Based Curriculum Improves Young Children’s Relationship Skills and Social Awareness. Karen L. Thierry, Rhonda L. Vincent & Karen S. Norris; (2022)
- [7] The Effects of a Mindfulness-Based Education Program on Pre- and Early Adolescents Wellbeing and Social and Emotional competence. Kimberly A. Schonert-Reichl & Molly Stewart Lawlor, 2010.
- [8] Mindfulness meditation intervention alters neurophysiological symptoms of anxiety and depression in preadolescents. Nathaniel A. Shanok, Carol R, Krystal D.Mize and Nancy Aaron Jones (2019)
- [9] Promoting Social and Emotional Learning in Second Grade Students: A Study of the Strong Start Curriculum. Thomas J. Kramer, Paul Caldarella, Lynnette Christensen, Ryan H. Shatzer ;2009.
- [10] Developing an emotional intelligence enhancement package for Primary school students with special reference to emotional competencies. Anu G S; 2010.
- [11] Effects of Mindful Awareness Practices on Executive Functions in Elementary School Children. Lisa Flook, Susan L. Smalley et al. 2010.
- [12] Mindfulness in schools (AISCHU): A concept to integrate mindfulness into the classroom. Annemaria Weber, Mirjam Kretschmer, Milena Uhlemayr, Niko Kohls, Vera Kaltwasser (2016)
- [13] The Influence of Concentrative Meditation Training on the Development of Attention Networks during Early Adolescence. Baijal, Shruti, Jha, Amishi P., Kiyonaga, Anastasia, Singh, Richa, Srinivasan, Narayana (2011)
- [14] Mindfulness training for elementary school students: The attention academy; Maria Napoli, Paul Rock Krech, Lynn Holley (2005)
- [15] Academic achievement and transcendental meditation: a study with at-risk urban middle school students. Nidich and Nidich et al. (1989 & 2011)
- [16] Feasibility and preliminary outcomes of a school-based mindfulness intervention for urban youth. Mendelson et al. (2010)
- [17] Tai Chi and Mindfulness-Based Stress Reduction in a Boston Public Middle School. Wall, Robert B. 2005
- [18] “National Policy Education,2020”. Ministry of Human Resource Development, Govt of India.