



Effectiveness of meditation on anxiety among college students of Indore city

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Abstract - The present study investigates the effectiveness of meditation in reducing anxiety among college students in Indore city. Rising academic pressure, social expectations, and personal challenges have contributed to increased anxiety levels among students. The study adopted a quasi-experimental pretest–posttest control group design, involving undergraduate students, randomly assigned to an intervention (meditation) group and a control group. The intervention group participated in an 1 month treated through meditation program, including session per day and daily home practice, while the control group received no intervention during this period. Anxiety levels were measured using the EAS-DSDR Anxiety test. Statistical analyses were conducted using t-test to assess group. The findings indicate that meditation is an effective, low-cost, and accessible strategy for managing anxiety among undergraduate students. The study recommends incorporating structured meditation programs within college wellness initiatives to promote mental health and emotional well-being.

Keywords - Meditation, Mindfulness, Anxiety, Mental health.

I. Introduction

Anxiety is one of the most common mental health issues affecting college students today. Academic pressure, competition, and personal challenges often lead to increased stress and emotional imbalance. Meditation, an ancient practice focusing on mindfulness and relaxation, has been shown to reduce anxiety and improve mental well-being. Several studies (Kabat-Zinn, 2015; Sharma & Gupta, 2020) indicate that regular meditation enhances focus, emotional stability, and calmness. However, limited research has explored its impact among college students in Indore city. Therefore, this study aims to assess the effectiveness of meditation in reducing anxiety levels among these students and to promote meditation as a simple and effective tool for managing stress in educational settings.

II. Review of Related Literature

Misra & Castillo (2019). Consequently, researchers have increasingly focused on mindfulness and meditation as non-pharmacological approaches to reduce anxiety and enhance emotional well-being. Meditation, especially mindfulness meditation, involves focusing one's attention on the present moment while calmly acknowledging and accepting one's thoughts and feelings.



Kabat-Zinn (2015) described mindfulness as a method for cultivating awareness and reducing reactivity to stressors. Studies have shown that regular meditation practice enhances self-awareness, emotional regulation, and resilience.

Sharma and Gupta (2020) found that college students who practiced guided meditation for six weeks showed significant decreases in anxiety and stress levels compared to those who did not meditate.

Jain, Shapiro, and Swanick (2018) observed that meditation improved emotional stability and reduced symptoms of anxiety and depression among undergraduate students. A meta-analysis by Hofmann et al. (2010) confirmed that mindfulness-based interventions effectively reduce anxiety and mood symptoms across different populations.

Bhatnagar and Sharma (2019) found that mindfulness-based meditation significantly lowered anxiety among university students in Delhi.

Mehta and Joshi (2021) reported improvements in concentration and emotional balance among students practicing meditation for eight weeks. Despite growing evidence, limited studies have examined the impact of meditation specifically among college students in Indore city, a rapidly developing educational center. Understanding its effectiveness in this context will help educators and mental health professionals integrate meditation programs into student support services.

Summary:

The reviewed literature consistently indicates that meditation is a powerful tool for reducing anxiety and promoting psychological well-being. However, further research is needed to validate these findings among different student populations in India. The present study, therefore, aims to assess the effectiveness of meditation in reducing anxiety among college students of Indore city, thereby filling a gap in existing research.

Objectives:

To compare the mean Anxiety scores of experimental and Control group under graduate students treated through meditation therapy.

Hypotheses :

H0: There will be no significant difference between mean Anxiety scores of Experimental and Control group under graduate students treated through meditation therapy

III. Methodology

Research Design

The study employed a quasi-experimental pretest–posttest control group design to examine the effectiveness of meditation on anxiety among undergraduate students. Participants were assigned to either a meditation group, which treated in 1 month meditation program, or a control group, which did not treat meditation during the study period.



Sample

In this study, two colleges have been selected to conduct data collection. Both the colleges are private in Indore city. For sampling purposes, under graduate students have been selected randomly. In the first college, Aspire Institute, there were a total 45 students and in the second college, Maharaja Ranjit Singh college, there were a total 46 students.

Sampling Technique: Participants were selected using purposive sampling, and randomly selection of two colleges.

Procedure

Data collection procedures refer to the systematic methods or processes used to gather information or data for research, analysis or study. These procedure are crucial in ensuring the collection of accurate, reliable and relevant data that aligns with the objectives of the research or study. The procedures vary depending on the nature of the research, the type of data required, and the resources available.

Two private colleges in Indore city that are connected to the Devi Ahilya Vishwavidyalaya were chosen by the researcher for this study. The Aspire Institute and Maharaja Ranjit singh college have been selected to collect the data of the participants. After getting a permission letter from Arihant College, Indore the researcher got approval from college management that data collection could be done in the upcoming suitable days. Undergraduate students have been taken randomly into and perform the Pre Anxiety Test with proper instruction and due care. It has been instructed that students face the pre anxiety test for the groups. They had sufficient time to learn Educational Anxiety items. After 1 month, the post anxiety test had been scheduled and conducted successfully. Tool distribution was done by the researcher herself to all the individuals.

Tools / Instruments

Tool Description — Educational Anxiety Scale (EAS) by Dahiya & Dahiya Based on their work, especially from the International Journal of Research in Education and ISS (IJREISS) article, and other sources, here is what the Educational Anxiety Scale (EAS) by Dr. Sarita Dahiya and Rajni Dahiya seems to be:

Name: Educational Anxiety Scale (EAS) — sometimes referred as “Educational Anxiety Scale-EAS-DSDR” in related literature.

Reliability: 0.89

Validity: 0.80

No of Items :-

Dimension 1 : 1 to 17 (Scholastic anxiety)

Dimension 2 : 18 to 32 (Co-Scholastic anxiety)

Data Analysis:



Table 1: Independent t - test of normality for meditation therapy of students of experimental and control group

Therapy	t	df	Sig (2-tailed)
Meditation therapy	4.313	89	.000

From the Table 1 it is evident that the t - values for treatment is 4.313 to significance value with df (89) is .000. The value is lesser then 0.05 and significant at 0.05 level of significance. It indicates that the mean scores of Anxiety treated through meditation therapy is significant differ. So, the null hypothesis “There will be no significant difference between mean Anxiety scores of Experimental and Control group under graduate students treated through meditation therapy” is rejected. For further analysis comparison of mean anxiety scores of both groups that is Experimental and Control group is necessary which is given in Table 2

Table 2 : Summary of independent t - test for meditation therapy of students of experimental and control group

Group	mean	Std.deviation	Std Error of mean
EG	88.31	6.560	.978
CG	99.04	15.377	2.267

It is evident that the mean anxiety scores treated through meditation therapy is 88.31 which is lesser than the corresponding mean scores is 99.04 of students treated through traditional method. It may therefore be concluded that meditation therapy was found to be significantly effective than the traditional method is reducing the anxiety level of under graduate students.

Result and Interpretation

Result of the present study is discussed under the following statements Meditation therapy was found to be significantly superior than non treated group of student in terms of anxiety level.

On the basis of analysis of data it was found that the meditation was found to be effective in terms of anxiety level. This finding is consistent with study reported by Kabat-Zinn (1990) ,Grossman et al. (2004), Davidson et al. (2003) , Zeidan et al. (2010), Goyal et al. (2014),Khusid & Vythilingam (2016) , Liu et al. (2018), Bamber & Kraenzle Schneider (2020) , Vujanovic et al. (2021) , Sun et al. (2022) , Shrestha (2024) , Patgaonkar and Thik (2024) , Banerjee et al. (2022) , Gupta et al. (2022) , Kadaramandalagi et al. (2024) , Sureka and Sarkar (2023) they too found that through mediation therapy was better than non-treated group of students. The finding obvious



in view of the fact that the meditation therapy is to reduce the anxiety level, stress, fear and phobia. This therapy increases the motivation, concentration and intellectual powers. In non-treated group of students they are not much concentrate, motivate towards their achievement and increased their anxiety level ,in this way meditation therapy helps to improve their focus towards their educational activities. Through this meditation therapy have to decrease the level of anxiety and helps the students to more concentrate towards their goals and achievements

Findings of The Study

Meditation therapy was found to be significantly superior than non-treated group of student in terms of anxiety level.

Suggestions for Further Research

Future studies may include a larger sample size from multiple colleges or universities to increase generalizability of results.

Researchers can conduct long-term studies to examine the sustained impact of meditation on anxiety and emotional reactions over extended periods.

Studies can explore whether the effectiveness of meditation differs based on gender, academic stream (arts, science, commerce), or year of study.

Future researchers may study how meditation influences variables like self-esteem, academic motivation, emotional intelligence, or resilience.

More rigorous experimental designs with control groups can be used to strengthen evidence for the effectiveness of meditation interventions.

IV. Conclusion

The present study concludes that meditation is an effective intervention for reducing anxiety among college students of Indore city. The findings indicate that students who regularly practiced meditation showed a noticeable decrease in anxiety levels compared to their pre-intervention state. Meditation helped students develop better emotional regulation, improved focus, and a calmer mental state, which contributed to lower stress and anxiety.

Given the increasing academic pressure, competitive environment, and psychosocial challenges faced by college students, meditation serves as a simple, cost-effective, and non-pharmacological approach to enhance mental well-being. The results align with previous research suggesting that mindfulness and meditation practices significantly reduce anxiety among young adults.

Therefore, it is recommended that meditation programs be incorporated into college curricula or student wellness initiatives in Indore city. Regular practice of meditation can promote psychological resilience, improve academic performance, and support overall mental health among college students.

References

1. Beck, J. S. (2011). Cognitive behavior therapy: Basics and beyond (2nd ed.). Guilford Press.



2. Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98(2), 310–357
<https://doi.org/10.1037/0033-2909.98.2.310>
3. Jerath, R., Edry, J. W., Barnes, V. A., & Jerath, V. (2006). Physiology of long pranayamic breathing: Neural, respiratory, and cardiovascular correlates. *Medical Hypotheses*, 67(3), 566–571.
<https://doi.org/10.1016/j.mehy.2006.02.042>
4. Kabat-Zinn, J. (1990). Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness. Delta.
5. Salmon, P. (2001). Effects of physical exercise on anxiety, depression, and sensitivity to stress: A unifying theory. *Clinical Psychology Review*, 21(1), 33–61. ht
6. (Kabat-Zinn, J., 1990. "Full Catastrophe Living: Using the Wisdom of Your Body and Mind to Face Stress, Pain, and Illness.")
[https://doi.org/10.1016/S0272-7358\(99\)00032-X](https://doi.org/10.1016/S0272-7358(99)00032-X)
7. Travis, F., & Shear, J., 2010. "Focused attention, open monitoring and automatic self-transcending: Categories to organize meditations from Vedic, Buddhist and Chinese traditions." (Consciousness and Cognition.)
Reference: (Salzberg, S., 1995. "Loving-Kindness: The Revolutionary Art of Happiness.")
Reference: (Goenka, S.N., 2002. "The Art of Living: Vipassana Meditation.")
Reference: (Suzuki, S., 1970. "Zen Mind, Beginner's Mind.")
 - Reference: (Iyengar, B.K.S., 2005. "Light on Life: The Yoga Journey to Wholeness, Inner Peace, and Ultimate Freedom.")
 - Reference: (Judith, A., 2004. "Wheels of Life: A User's Guide to the Chakra System.")
 - Reference: (Lomas, T., et al., 2015. "The dark side of meditation: Prevalence and predictors of adverse experiences." PLoS ONE.)
 - Reference: (Baer, R., 2003. "Mindfulness Training as a Clinical Intervention: A Conceptual and Empirical Review." Clinical Psychology: Science and Practice.)
 - Reference: (Goyal, M., et al., 2014. "Meditation programs for psychological stress and well-being: A systematic review and meta-analysis." JAMA Internal Medicine.)