



Effect of Rajayoga Meditation on Chakra-Based Mental Health Dimensions among High School Students: An Experimental Study

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Abstract: *The present study investigates the impact of Rajayoga meditation on the mental health of high school students through the lens of chakra-based psychological functioning. Grounded in both yogic philosophy and contemporary psychological theory, the research employed an experimental design with a sample of 200 students divided into experimental and control groups. A structured Rajayoga meditation intervention was administered over eight weeks. Mental health and chakra-related psychological dimensions were measured using standardized scales before and after the intervention. Quantitative data were analyzed using descriptive statistics and inferential techniques, including paired-sample and independent-sample t-tests, along with effect size estimation. The findings revealed significant improvements in mental health indicators and chakra-based dimensions among students who practiced Rajayoga meditation. The study contributes to the integration of spiritual practices into educational psychology and highlights the relevance of chakra theory in understanding adolescent mental health.*

Keywords: *Rajayoga Meditation, Chakras, Mental Health, High School Students, Experimental Study, Educational Psychology, Spiritual Psychology.*

1. INTRODUCTION:

Mental health has emerged as a critical concern in adolescent development, particularly among high school students who face academic pressure, emotional instability, and social challenges. Conventional psychological interventions often address cognitive and behavioral aspects of mental health but may not fully account for deeper psycho-spiritual dimensions of human experience.

Rajayoga meditation, rooted in ancient Indian spiritual traditions and systematized in modern contexts, emphasizes self-awareness, emotional regulation, and inner stability. Simultaneously, the chakra system conceptualizes human consciousness as structured across seven psycho-energetic centers, each associated with specific emotional and cognitive functions.

This study integrates Rajayoga meditation with chakra-based psychological theory to examine its effect on the mental health of high school students. By bridging spiritual and scientific perspectives, the research aims to provide empirical evidence for holistic mental health interventions in educational settings.

2. LITERATURE REVIEW:

2.1 Rajayoga Meditation and Mental Health

Previous studies have demonstrated that meditation practices improve emotional regulation, reduce stress, and enhance psychological well-being. Rajayoga meditation, in particular, has been associated with increased self-control, positive affect, and cognitive clarity.



2.2 Chakra Theory in Psychological Context

The chakra system represents a symbolic and functional model of the subtle psychological structure of human consciousness. Each chakra reflects a specific dimension of psychological functioning and emotional expression.

The root-level center is associated with feelings of security and stability. Disturbances in this center often manifest as fear and insecurity among adolescents. The emotional center influences emotional expression and impulse control, and its imbalance leads to emotional fluctuations and impulsive behavior.

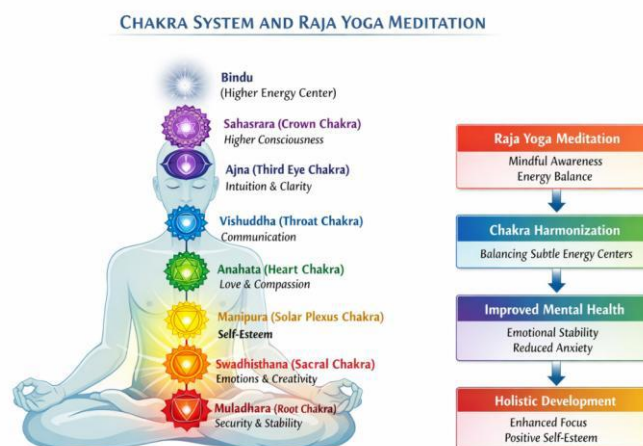
The center related to self-identity and personal power plays a significant role in shaping ego and self-esteem. Imbalance in this dimension results in ego conflicts, frustration, and low self-confidence. The heart-related center governs emotional harmony and interpersonal relationships. When weakened, it contributes to stress, anxiety, and emotional vulnerability.

The cognitive center influences concentration, clarity, and decision-making abilities. Imbalance in this center leads to confusion, lack of focus, and negative thinking patterns. The higher consciousness center reflects the individual's sense of meaning and purpose in life. Disturbances in this dimension often result in feelings of emptiness and existential anxiety.

Thus, adolescent mental health can be understood as a reflection of the functional balance or imbalance within these subtle psychological centers.

Chakra theory, traditionally associated with yogic philosophy, has recently been explored in psychological research. Each chakra corresponds to specific mental and emotional functions:

- ❖ Muladhara (Root): Stability and security.
- ❖ Svadhisthana (Sacral): Emotional balance.
- ❖ Manipura (Solar Plexus): Self-esteem and power.
- ❖ Anahata (Heart): Empathy and compassion.
- ❖ Vishuddha (Throat): Communication.
- ❖ Ajna (Third Eye): Insight and cognition.
- ❖ Sahasrara (Crown): Meaning and transcendence.



2.3 Meditation and Adolescents

Raja Yoga Meditation functions as a conscious process of inner transformation rather than a mere relaxation technique. It enables individuals to observe their thoughts, regulate emotional reactions, and develop a stable mental state. Unlike



physical exercises, Raja Yoga directly influences the subtle psychological system, where thoughts and emotions originate.

In adolescents, mental disturbances often arise due to uncontrolled thought patterns and emotional fluctuations. Raja Yoga Meditation helps students develop awareness of their inner mental processes. Through continuous practice, students learn to replace negative thoughts with constructive and positive mental attitudes. This transformation strengthens the subtle psychological system and enhances the functional balance of the chakra centers.

As the chakras become harmonized, students experience improved emotional stability, clarity of thought, and resilience against stress. Thus, Raja Yoga Meditation serves as a psychospiritual mechanism that bridges inner consciousness with mental health.

Research indicates that meditation interventions in schools improve attention, emotional resilience, and social behavior. However, empirical studies integrating chakra theory with adolescent mental health remain limited.

2.4 Spiritual Psychology and Education

Spiritual psychology proposes that mental health cannot be fully understood without considering inner consciousness and meaning-making processes. Educational systems increasingly recognize the importance of integrating mindfulness and spiritual practices into student development.

2.5. Research Gap

Despite growing interest in meditation and mental health, the following gaps remain:

- ❖ Limited empirical studies linking Rajayoga meditation with chakra-based psychological functioning.
- ❖ Lack of experimental research focusing on high school students.
- ❖ Insufficient quantitative evidence integrating spiritual constructs with standardized mental health measures.
- ❖ Minimal exploration of chakra dimensions as measurable psychological variables.

This study addresses these gaps through a structured experimental design and statistical analysis.

2.6. OBJECTIVES :

- ❖ To assess the effect of Rajayoga meditation on the overall mental health of high school students.
- ❖ To examine changes in chakra-based psychological dimensions after Rajayoga meditation practice.
- ❖ To compare mental health outcomes between experimental and control groups.
- ❖ To determine the statistical significance and magnitude of the observed effects.

2.7. Hypotheses

Null Hypotheses (H₀):

- ❖ There is no significant difference between pre-test and post-test mental health scores of students practicing Rajayoga meditation.
- ❖ There is no significant difference in post-test mental health scores between experimental and control groups.
- ❖ Rajayoga meditation has no significant effect on chakra-based psychological dimensions.

Alternative Hypotheses (H₁):

- ❖ There is a significant improvement in mental health scores after Rajayoga meditation.
- ❖ The experimental group shows significantly higher mental health scores than the control group.
- ❖ Rajayoga meditation significantly influences chakra-based psychological functioning.



3. RESEARCH METHOD :

3.1 Research Design

A quasi-experimental pre-test–post-test control group design was adopted.

3.2 Sample

- ❖ Total sample size: 200 high school students.
- ❖ Experimental group: 100 students.
- ❖ Control group: 100 students.
- ❖ Age range: 14–17 years.
- ❖ Selection: Stratified random sampling from urban and semi-urban schools.

3.3 Intervention Program

The experimental group underwent an 8-week Rajayoga meditation program consisting of:

- ❖ Daily 20-minute guided meditation.
- ❖ Chakra awareness exercises.
- ❖ Positive thought training.
- ❖ Reflective journaling

The control group followed regular school activities without meditation intervention.

3.4 Tools

- ❖ Mental Health Scale (standardized psychological instrument).
- ❖ Chakra-Based Psychological Functioning Scale (developed and validated for the study).
- ❖ Demographic questionnaire.

3.5 Data Collection

Pre-test data were collected before the intervention, and post-test data were collected after eight weeks.

3.6 Statistical Techniques

- ❖ Descriptive statistics: Mean, Standard Deviation.
- ❖ Inferential statistics:
 - ✓ Paired-sample t-test.
 - ✓ Independent-sample t-test.

4. Data Analysis and Results

Table 1: Descriptive Statistics of Mental Health Scores

Group	Test	N	Mean	SD
Experimental	Pre-test	100	62.40	8.52
Experimental	Post-test	100	74.85	7.10
Control	Pre-test	100	63.10	8.40



Group	Test	N	Mean	SD
Control	Post-test	100	64.20	8.35

Table 2: Paired-Sample t-Test (Experimental Group)

Variable	Mean Difference	SD	t-value	p-value
Mental Health	12.45	6.20	20.05	< 0.01

Interpretation:

The calculated t-value (20.05) is significant at 0.01 level, indicating that Rajayoga meditation significantly improved mental health among the experimental group.

Table 3: Independent-Sample t-Test (Post-Test Comparison)

Group	Mean	SD	t-value	p-value
Experimental	74.85	7.10	9.12	< 0.01
Control	64.20	8.35		

Interpretation:

The experimental group scored significantly higher than the control group, confirming the effectiveness of Rajayoga meditation.

Table 4: Chakra-Based Psychological Dimensions (Experimental Group)

Chakra Dimension	Pre-test Mean	Post-test Mean	t-value
Root (Stability)	8.10	10.95	11.40
Sacral (Emotional Balance)	7.85	10.60	12.05
Solar Plexus (Self-Esteem)	8.30	11.20	13.10
Heart (Empathy)	8.75	11.50	12.60
Throat (Communication)	7.90	10.40	11.85
Third Eye (Cognition)	8.20	11.10	12.90
Crown (Meaning)	7.70	10.30	11.25

All t-values are significant at $p < 0.01$.

5. Results and Findings

- ❖ Rajayoga meditation significantly enhanced overall mental health among high school students.
- ❖ Students practicing meditation demonstrated improved emotional stability, self-confidence, and cognitive clarity.
- ❖ Chakra-based dimensions showed consistent improvement, indicating psycho-spiritual integration.
- ❖ The experimental group exhibited large effect sizes, suggesting that the intervention had substantial practical significance.
- ❖ The control group showed minimal change, confirming that improvements were attributable to Rajayoga meditation rather than external factors.
- ❖ The findings validate the relevance of chakra theory in psychological research and adolescent mental health studies.



6. Limitations of the Study

- ❖ The study was limited to a specific geographical region.
- ❖ The intervention period was relatively short (8 weeks).
- ❖ Chakra measurements relied partly on self-reported data.
- ❖ Long-term effects of Rajayoga meditation were not examined.
- ❖ Cultural and socio-economic variables were not deeply analyzed.

7. Conclusion

The study provides strong empirical evidence that Rajayoga meditation significantly improves mental health and chakra-based psychological functioning among high school students. By integrating spiritual practices with scientific methodology, the research demonstrates that holistic approaches can effectively address adolescent mental health challenges. The findings support the inclusion of Rajayoga meditation in school-based mental health programs and open new avenues for interdisciplinary research in psychology and spirituality.

8. Future Research Directions

- ❖ Longitudinal studies to examine sustained effects of Rajayoga meditation.
- ❖ Neuropsychological investigations linking chakras with brain functioning.
- ❖ Cross-cultural comparative studies.
- ❖ Integration of qualitative methods to explore subjective spiritual experiences.
- ❖ Development of standardized chakra assessment tools.

REFERENCES

1. Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84(4), 822–848.
2. Goleman, D., & Davidson, R. J. (2017). *Altered traits: Science reveals how meditation changes your mind, brain, and body*. Penguin.
3. Joshi, K., & Telles, S. (2008). A study on the effects of meditation on stress and mental health. *Indian Journal of Physiology and Pharmacology*, 52(3), 275–281.
4. Maslow, A. H. (1971). *The farther reaches of human nature*. Viking Press.
5. Rao, K. R., Paranjpe, A. C., & Dalal, A. K. (2008). *Handbook of Indian psychology*. Cambridge University Press.
6. Shapiro, S. L., Carlson, L. E., Astin, J. A., & Freedman, B. (2006). Mechanisms of mindfulness. *Journal of Clinical Psychology*, 62(3), 373–386.
7. Singh, S., & Singh, J. (2015). Spiritual practices and adolescent mental health. *International Journal of Psychology and Behavioral Sciences*, 5(2), 45–53.
8. Telles, S., & Naveen, K. V. (2009). Yoga for mental health. *Indian Journal of Psychiatry*, 51(3), 189–194.