



Effectiveness of Yoga on the Happiness Level of Middle School Students

DR. SARITA SHARMA, PRINCIPAL, ARIHANT COLLEGE, INDORE, M.P.

MS. DOMINICA ANTHONY, M.Ed SCHOLAR, ARIHANT COLLEGE, INDORE, M.P.

Abstract

The present research aims to investigate the effectiveness of yoga on the happiness levels of middle school students. A quasi-experimental design was adopted with a control group (n=66) from Parijat Higher Secondary School and an experimental group (n=68) from School Kids Care, Indore. The experimental group underwent a 45-day yoga intervention. The R.L. Bhardwaj and P.R. Das Happiness Scale was used as the assessment tool. The data were analyzed using the Kolmogorov-Smirnov test, Levene's test, and ANCOVA. Results demonstrated a statistically significant increase in happiness levels in the experimental group. Item-wise interpretation of the reaction scale also indicated a positive student perception towards yoga. The findings support integrating yoga into school curricula to enhance student well-being.

Keywords: Yoga, Happiness, Middle School Students, Psychological Well-being, Emotional Regulation

1.1 Background

Adolescence is a critical period for emotional and social development. Increasing academic pressures and social challenges make middle school students especially vulnerable to stress and emotional disturbances. Yoga, as a mind-body discipline, offers promising benefits in fostering emotional regulation, happiness, and psychological resilience.

1.2 Social and Emotional Benefits

Yoga promotes empathy, patience, and self-control, thereby strengthening relationships with peers and teachers. Group yoga sessions foster a sense of community and belonging, increasing emotional well-being.

1.3 Rationale of the Study

Noggle et al. (2012), Butzer et al. (2015), Smith et al. (2018), Stapp & Lambert (2020), Hagen et al. (2023), and Khunti et al. (2023) studied yoga interventions in school settings and found positive impacts on students' mood, self-regulation, stress management, and emotional well-being. Sinha & Singh (2009), Kauts & Sharma (2009), Kothiyal & Joshi (2013), Kumar & Sindhulakshmi (2021), Raut (2023), and Rohtash (2025) conducted research in India showing that yoga improved psychological well-being, academic performance, stress reduction, and happiness levels among school and college students. Lyubomirsky, King & Diener (2005), Clark et al. (2008), Dolan et al. (2008), Holder & Coleman (2009), and Huppert & So (2013) linked happiness to positive life outcomes, well-being, and socio-economic influences in global studies. Mishra & Kumar (2011), Patel & Desai (2017), Chakraborty et al. (2018), Das & Roy (2020), and Singh & Kaur (2022) explored predictors of happiness



among Indian adolescents and found links to emotional regulation, academic stress, family support, and lifestyle habits.

Despite substantial evidence from both Indian and international studies confirming that yoga enhances emotional well-being and life satisfaction, there is a distinct lack of focused research measuring happiness as a core outcome variable, particularly among middle school students—a group vulnerable to academic pressure and emotional fluctuation. Furthermore, most existing studies use generalized psychological measures rather than standardized happiness scales. Hence, this study is timely and significant as it directly evaluates the effectiveness of yoga on happiness levels using a validated tool, offering empirical support for incorporating yoga in middle school curricula as a structured intervention for promoting mental health, emotional balance, and overall student well-being.

1.4 Statement of the Problem

The present study is stated as “Effectiveness of Yoga on the Happiness Level of Middle School Students.”

1.5 Operational Definition of variables

Yoga: As defined by Dr. Ishwar V. Basavaraddi, yoga is a spiritual discipline aiming to harmonize the body and mind.

Happiness: According to Sonja Lyubomirsky, happiness is the experience of joy, contentment, and well-being combined with a sense of meaning.

1.6 Objectives

To study the effect of yoga on the happiness level of middle school students, considering pre-happiness as a covariate.

To study students' reactions towards yoga.

1.7 Hypothesis

H0: There will be no significant effect of yoga on the happiness level of middle school students, considering pre-happiness as a covariate.

1.8 Delimitations

Conducted in Indore only.

Limited to 134 middle school students in the academic session 2024–25.

2.0 Review of Related Literature

- Noggle et al. (2012) examined the feasibility of a Kripalu-based yoga program within a high school curriculum. Grade 11 and 12 students (N = 51) were cluster-randomized into yoga and PE-as-usual groups. Findings showed improved mood and reduced anxiety in the yoga group compared to the control.
- Butzer et al. (2015) surveyed yoga programs in U.S. schools and reported



improved emotional regulation and stress management. The study emphasized the growing acceptability and feasibility of school-based yoga.

- Smith et al. (2018) studied sixth-grade students undergoing the KYIS yoga intervention. Students in the yoga group demonstrated improved social-emotional competence over time relative to the control.
- Stapp & Lambert (2020) explored the effect of mindfulness-based yoga on fifth graders' stress and anxiety. Post-intervention, students—particularly remedial class males—showed reduced stress and anxiety.
- Hagen et al. (2023) conducted a qualitative study in Norway with 20 students aged 12–16. Yoga participants reported greater self-awareness, stress relief, and mental clarity.
- Khunti et al. (2023) reviewed 13 RCTs involving 840 students and concluded that school-based yoga significantly improved emotional regulation and reduced anxiety.
- Sinha & Singh (2009) studied yoga's effect on residential college students' adjustment but found no significant changes.
- Kauts & Sharma (2009) found that yoga improved academic performance and reduced stress among students.
- Kothiyal & Joshi (2013) conducted a 30-day yoga program for 50 school students. Results showed significant improvement in emotional adjustment.
- Kumar & Sindhulakshmi (2021) evaluated psychological well-being of 60 students aged 10–15 after yoga therapy. Significant improvements in stress reduction and well-being were reported.
- Raut (2023) compared happiness and quality of life among postgraduate students practicing yoga vs. non-practitioners. Yoga practitioners reported significantly higher happiness and well-being.
- Rohtash (2025) implemented an 8-week yoga program for secondary students and found improvements in anxiety, self-esteem, and coping strategies

3.1 Research Design

The study adopted a quasi-experimental design with two groups:

Control Group: 66 students (32 males, 34 females) from Parijat Higher Secondary School.

Experimental Group: 68 students (37 males, 31 females) from School Kids Care, Indore.

3.2 Tool Used: R.L. Bhardwaj and P.R. Das Happiness Scale.

3.3 Intervention: 45-day yoga module including asanas, pranayama, and meditation.



3.4 Statistical Techniques: Kolmogorov-Smirnov test for normality, Levene's test for homogeneity of variances, and ANCOVA for hypothesis testing.

4.1 Normality and Homogeneity

- KS Test: Data distribution was normal.
- Levene's Test: Homogeneity of variance confirmed.

4.2 ANCOVA Analysis

The ANCOVA results showed a significant difference in adjusted post-test means between the groups, favoring the experimental group.

4.3 Adjusted Means

Experimental group: Higher adjusted post-test mean happiness score.

Control group: No significant change.

4.4 Reaction Scale

Students expressed positive reactions to yoga on various parameters like emotional regulation, calmness, and enthusiasm.

5.1 Normality Test (Kolmogorov-Smirnov)

Control Group: $D = 0.087$, $p = 0.195$

Experimental Group: $D = 0.065$, $p = 0.32$

Both groups met the assumption of normality ($p > 0.05$).

5.2 Homogeneity of Variance (Levene's Test)

$F = 1.72$, $df1 = 1$, $df2 = 132$, $p = 0.193$

No significant difference in error variance was found.

5.3 ANCOVA Analysis

$F(1, 131) = 105.42$, $p < 0.01$, $\eta^2 = 0.446$

The adjusted mean happiness score was significantly higher in the experimental group (66.46) than in the control group (48.46), indicating that yoga had a significant positive effect on happiness levels.

5.4 Reaction Scale Analysis: A reaction scale was administered to the experimental group. The majority of students (above 85% in most items) reported positive experiences with yoga. Highlights include:

91% enjoyed group sessions.

90% expressed a desire to continue yoga.



88% felt happier after sessions.

6.1 Major Findings

- Yoga significantly improves happiness levels in middle school students.
- Students responded positively to yoga sessions.

6.2 Conclusion

Yoga, when implemented in school settings, serves as an effective tool for enhancing students' happiness and emotional well-being.

6.3 Educational Implications

- Schools should integrate yoga into daily curricula.
- Teacher training for yoga instruction should be promoted.

6.4 Suggestions for Further Research

- Longer intervention durations
- Inclusion of socio-economic and gender-based variables
- Broader geographic coverage

Bibliography

- Butzer, B., Ebert, M., Telles, S., & Khalsa, S. B. S. (2015). School-based yoga programs in the United States: A survey. *Advances in Mind-Body Medicine*, 29(4), 18–26.
- Chakraborty, B., Maji, S., Sen, A., & Mallik, I. (2018). Exploring happiness among college students in India: A study of social and academic factors. *Journal of Mental Health and Human Behaviour*, 23(1), 54–60.
- Clark, A. E., Frijters, P., & Shields, M. A. (2008). Relative income, happiness, and utility: An explanation for the Easterlin paradox and other puzzles. *Journal of Economic Literature*, 46(1), 95–144.
- Das, P., & Roy, S. (2020). Social media and youth happiness: A cross-sectional study. *Indian Journal of Health and Wellbeing*, 11(3), 280–284.
- Dolan, P., Peasgood, T., & White, M. (2008). Do we really know what makes us happy? A review of the economic literature on the factors associated with subjective well-being. *Journal of Economic Psychology*, 29(1), 94–122.
- Hagen, I., Skjelstad, S., & Nayar, U. S. (2023). Promoting mental health and wellbeing in schools: The impact of yoga on young people's relaxation and stress levels. *Frontiers in Psychology*, 14, 1083028.
- Holder, M. D., & Coleman, B. (2009). The contribution of active and passive



leisure to children's well-being. *Journal of Health Psychology*, 14(3), 378–386.

- Huppert, F. A., & So, T. T. C. (2013). Flourishing across Europe: Application of a new conceptual framework for defining well-being. *Social Indicators Research*, 110(3), 837–861.
- Khunti, K., Boniface, S., Norris, E., De Oliveira, C. M., & Shelton, N. (2023). The effects of yoga on mental health in school-aged children: A systematic review and narrative synthesis of randomized control trials. *Journal of Health Psychology*.
- Kothiyal, R., & Joshi, V. (2013). Effect of yogic practices on adjustment enhancement in school students. *International Journal of Yoga and Allied Sciences*, 2(2), 124–129.
- Kumar, A., & Sindhulakshmi, B. (2021). Effectiveness of yoga therapy on psychological well-being among school students. *International Journal of Indian Psychology*, 9(1), 1556–1563.
- Kauts, A., & Sharma, N. (2009). Effect of yoga on academic performance in relation to stress. *International Journal of Yoga*, 2(1), 39–43.
- Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin*, 131(6), 803–855.
- Mishra, R. C., & Kumar, A. (2011). Subjective well-being and its predictors among Indian adolescents. *Indian Journal of Psychology and Education*, 1(1), 49–56.
- Noggle, J. J., Steiner, N. J., Minami, T., & Khalsa, S. B. S. (2012). Benefits of yoga for psychosocial well-being in adolescents: A school-based yoga intervention. *Journal of Developmental & Behavioral Pediatrics*, 33(3), 193–201.
- Patel, V., & Desai, R. (2017). Academic stress and exam anxiety among Indian secondary students. *Indian Journal of Educational Research*, 6(2), 24–36.
- Raut, P. D. (2023). Impact of yoga on happiness and quality of life among postgraduate students. *International Journal of Indian Psychology*, 11(3), 4905–4910.
- Rohtash. (2025). Impact of yoga on the psychology of secondary school students. *South Eastern European Journal of Public Health*, 3015–3020.
- Singh, T., & Kaur, P. (2022). Work-life balance and its impact on women's happiness and motivation in India: A systematic literature review. *Journal of Indian Business Research*, 14(4), 347–363.
- Sinha, S., & Singh, A. (2009). A comparative study of the effect of yoga practices on adjustment of residential college students. *Indian Journal of Psychology and Mental Health*, 3(2), 64–70.



- Smith, C., Hancock, H., Blake, A., & Dwyer, C. (2018). The effects of Kripalu Yoga in the Schools on middle school students. *Contemporary School Psychology*, 22(3), 267–275.
- Stapp, A., & Lambert, R. (2020). Mindfulness-based yoga intervention on perceived stress and anxiety in fifth-grade students. *Journal of Evidence-Based Integrative Medicine*, 25, 2515690X20939406.