

OPEN ACCESS

Volume: 12

Special Issue: 2

Month: February

Year: 2024

E-ISSN: 2582-6190

Impact Factor: 4.118

Received: 11.12.2023

Accepted: 18.01.2024

Published: 14.02.2024

Citation:

Swarnambigai, A., and M. Bala Sivapriya. “Effect of Yogic Practices on Psychological Variables in Athletes.” *ComFin Research*, vol. 12, no. S2, 2024, pp. 18–21

DOI:

<https://doi.org/10.34293/commerce.v12iS2-Feb.7549>



This work is licensed under a Creative Commons Attribution-ShareAlike 4.0

Effect of Yogic Practices on Psychological Variables in Athletes

A. Swarnambigai

*Physical Instructor, SRM Institute of Science and Technology
Tiruchirappalli, Tamil Nadu, India*

M. Bala Sivapriya

*Physical Instructor, SRM Institute of Science and Technology
Tiruchirappalli, Tamil Nadu, India*

Abstract

The study aimed to explore the influence of yogic practices on psychological variables among college women athletes. The hypothesis posited that eight weeks of yogic practice would significantly impact selected psychological variables in women athletes. For this investigation, 30 randomly selected women athletes from Trichy district, Tamilnadu, India, aged between 18 to 24 years, were chosen as subjects. The research employed a pretest–posttest random group design, incorporating an experimental group (Group ‘A’) and a control group (Group ‘B’), each comprising fifteen participants. Group ‘A’ underwent yogic practice, while Group ‘B’ received no training. Anxiety and aggression were assessed using the Spiel Berger questionnaire and Smith questionnaire, respectively. Data were collected before and after eight weeks of training. Analysis of Covariance (ANCOVA) was employed to determine the impact of yogic practices on psychological variables among women athletes, with the significance level set at 0.05. The study’s findings strongly indicate that eight weeks of yogic practice had a significant effect on the selected variables in women athletes, thus supporting the initially hypothesized impact.

Keywords: Yoga Practices, Anxiety, Aggression

Introduction

Yoga, a science of right living, becomes effective when seamlessly integrated into our daily lives. The term ‘yoga’ signifies ‘unity’ or ‘oneness,’ derived from the Sanskrit word ‘yuj,’ meaning ‘to join.’ Unfortunately, numerous misconceptions shroud the science of Yoga, with some perceiving it as black or white magic, sorcery, or a form of physical or mental debauchery capable of miraculous feats (Chandrasekaran, 1999).

Considered one of India’s wonderful gifts to mankind, Yoga is the union of body and mind. It is a simple and accessible practice for people from all walks of life. A key attribute is its ability to enhance physical health through the practice of exercises known as asanas, maintaining body cleanliness and fitness. Yoga postures involve coordinating breath with movement, holding positions to stretch and strengthen various body parts. Yogic practice complements other physical exercises like running, cycling, and swimming, systematically engaging major muscle groups. Yogic postures target back, neck, shoulders, deep abdominal, hip, ankles, feet, wrists, and hands, promoting strength, flexibility, and nourishment to internal organs. While not typically

aerobic, the poses facilitate oxygen flow through conscious deep breathing and sustained muscle stretching and contraction. Yoga helps maintain muscular balance, fostering efficient function of both mind and body. The science of yoga involves acquiring knowledge through observation and experimentation, focusing on body and mind control to achieve mental equilibrium. Health and strength are attained when a state of balance is reached. Like other arts, Yoga is not only a science but also a philosophy, emphasizing analysis in its approach.

Methodology

The objective of this study was to investigate the impact of yogic practices on psychological variables among women athletes. It was hypothesized that eight weeks of yogic practice would significantly influence selected psychological variables in women athletes. For the present study, 30 women from Trichy district, Tamilnadu, India, were randomly selected as subjects, with ages ranging from 18 to 24 years.

A pretest–posttest random group design, incorporating an experimental group (Group ‘A’) and a control group (Group ‘B’), was employed. Subjects were randomly assigned to two equal groups of fifteen each. Group ‘A’ underwent yogic practice, while Group ‘B’ received no training. Anxiety and aggression were assessed using the Spiel Berger questionnaire and Smith questionnaire, respectively. Data were collected before and after eight weeks of training. Analysis of Covariance (ANCOVA) was applied to determine the effect of yogic practice on selected psychological variables of women athletes, with the level of significance set at 0.05.

Results

Table I Descriptive Statistics for Pre-Test and Post-Test Scores on Selected Variables of Yogic Practices and the Control Group

S.No	Group	Variables	Pre-Test Mean	Post-Test Mean	Adjusted Mean
1	Yogic Practices Group	Anxiety	52.74	41.45	41.13
2		Aggression	13.44	10.16	10.06
1	Control Group	Anxiety	53.12	53.03	53.04
2		Aggression	14.14	14.09	14.11

* Significant at 0.05 level

Table II Calculation of Analysis of Variance (Anova) for Initial and Final Means Of Selected Psychological Variables

Variables		Sources	SS	df	MS	F-ratio
Anxiety	Pre Test	Between sets	1.10	1	1.10	0.24
		Within sets	106.66	28	3.88	
	Post Test	Between sets	101.03	1	109.03	90.97*
		Within sets	196.93	28	9.60	
Aggression	Pre Test	Between sets	0.73	1	0.83	0.28
		Within sets	71.46	28	1.91	
	Post Test	Between sets	94.53	1	4.53	20.70*
		Within sets	85.33	28	3.40	

*significant at 0.05 level

In the initial data analysis, the F-test was applied to examine the initial and final means between the Yogic Practices Group (YPG) and the Control Group (CG) on psychological variables. The critical F-value for significance at a 0.05 level with degrees of freedom (df) 1 and 28 is 4.19. The obtained F-values for the initial means of anxiety (0.24) and aggression (0.28) were found to be insignificant, as they did not meet the required table value of 4.19 for df 1 and 28.

Consequently, it was concluded that the mean difference between the YPG and CG on the variables examined in this study before the treatment is statistically insignificant.

For the final means, the observed F-values for anxiety (90.97) and aggression (20.70) were compared to the table value at a 0.05 significance level. It was determined that the observed F-values for final means of anxiety, aggression, self-confidence, and stress exceeded the required table value of 4.19 for df 1 and 28. Therefore, it was concluded that the mean difference between the YPG and CG on the final means of anxiety and aggression is statistically significant.

Table III Conducting an Analysis of Covariance (Ancova) on Anxiety

Sources of Variance	Sum of Squares	Df	Mean Square	F-ratio
Between sets	101.03	1	109.03	90.97*
Within sets	196.93	28	9.60	

*significant at 0.05 level

Table III indicates that the obtained ‘f’ value, significant at the 0.05 level with degrees of freedom 1 and 27, surpassed the required table value of 4.21. With an observed ‘f’ value of 90.97 greater than the table value (4.21), it was concluded that the adjusted mean difference between the Yogic Practices Group (YPG) and Control Group (CG) on Anxiety was statistically significant.

Figure I illustrate the adjusted post-test mean values of the Yogic Practices Group (YPG) and Control Group (CG) on Anxiety.

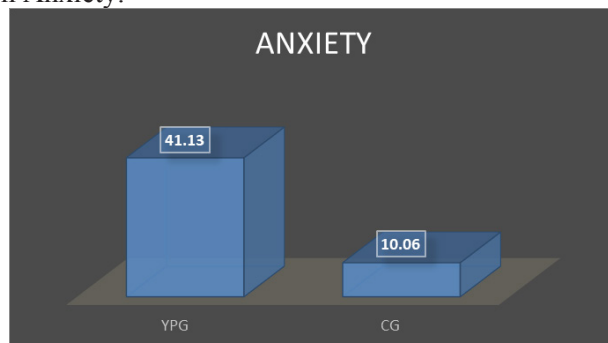


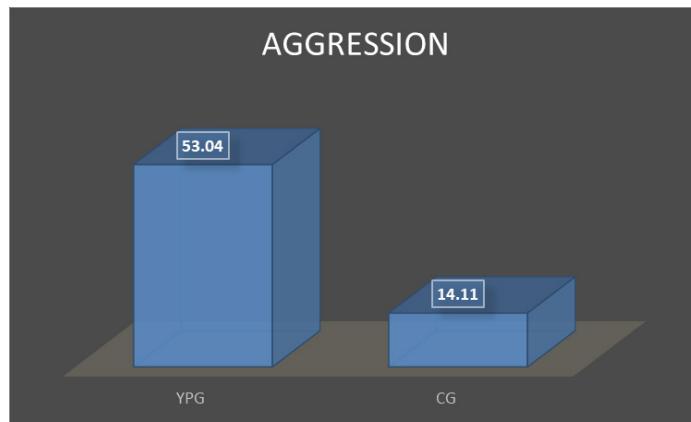
Table IV Conducting an Analysis of Covariance (Ancova) on Aggression

Sources of Variance	Sum of Squares	Df	Mean Square	F-ratio
Between sets	94.53	1	4.53	20.70*
Within sets	85.33	28	3.40	

*significant at 0.05 level

Table IV indicates that the obtained ‘f’ value was significant at the 0.05 level, with degrees of freedom 1 and 27. The required table value was 4.21. With the observed ‘f’ value of 20.70 being greater than the table value (4.21), it was inferred that the adjusted mean difference between the Yogic Practices Group (YPG) and Control Group (CG) on Aggression was statistically significant.

Figure II depicts the adjusted post-test mean values of the Yogic Practices Group (YPG) and Control Group (CG) on Aggression.



Finding of Results

In the case of psychological variables, the results between the pre-test and post-test (8 weeks) have been found to be significantly higher in the experimental group compared to the control group. This is likely due to regular yogic practices, which may lead to a sudden increase in psychological variables among women athletes. The findings of the present study strongly indicate that eight weeks of yogic practice have a significant effect on selected psychological variables.

Conclusions

Within the limitations of the present study, the following conclusions were drawn:

1. The Yogic Practices Group exhibited a significant difference in all the selected psychological variables for women athletes.
2. The experimental group demonstrated significant improvement in all the selected psychological variables compared to the control group.

References

1. Ananda (1982). *The Complete Book of Yoga Harmony of Body & Mind*. Delhi: Orient Books Pvt. Ltd.
2. Akhtar P, Yardi S, Akhtar M. (2013). Effects of yoga on functional capacity and wellbeing. *Int J Yoga*. 2013 Jan; 6(1):76-9.
3. Berger DL, Silver EJ, Stein RE. (2009). Effects of yoga on inner-city children's well-being: a pilot study. *Altern Ther Health Med*. 2009 Sep- Oct; 15(5):36-42.
4. Bharatha Priya K. and R. Gopinath, (2011). Effect of Yogic Practice on Flexibility among School Boys", *Recent Trends in Yoga and Physical Education*, Vol. I, p.24.
5. Saravana Kumar, K. & Dr.K.Balasubramanian. Effect of Yogic Practices on Selected Psychological Variables of Volleyball Players. *International Journal of Recent Research and Applied Studies*, 2014, 2 (8), 30-33.
6. Bharatha Priya K. and R. Gopinath, (2011). Effect of Yogic Practice on Flexibility among School Boys", *Recent Trends in Yoga and Physical Education*, Vol. I, p.24.
7. Noggle JJ, Steiner NJ, Minami T, Khalsa SB. (2012). Benefits of yoga for psychosocial well-being in a US high school curriculum: a preliminary randomized controlled trial. *J Dev Behav Pediatr*. 2012 Apr; 33(3):193-20.