



# Effect of Selected Yogic Practices on Mental Health of Badminton Players

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**Abstract:** The purpose of this article is to find out the effect of Yogic Practices with Physical Exercises and Yogic Practices with Specific Skills Exercises on Mental Health of college level Badminton players. The subjects (n=72) were randomly assigned to three equal groups of 24 degree college Badminton players and their age between 18-25 years. The groups were assigned as two experimental Groups that is 'A' and 'B' and one control group that is 'C.' Pre test scores were conducted for the subjects of all groups on Mental Health. The Mental Health was tested by administering Mental Health Inventory developed by Dr. Jagadish and Dr.A.K. Srivastava and the data were recorded in scores. Group-A participated in yogic practices with physical exercises (YPPE) and Group-B participated in yogic practices with badminton specific skill exercises (YPSSE) done for a period of 12 weeks. The post test scores were conducted on the said criterion variable of Mental Health after experiment. The differences between pre and post tests mean scores on Mental Health was considered as the effect of experimental treatments. Analysis of Variance (ANOVA) and Analysis of Covariance (ANCOVA) were used to determine the significant differences in the mean scores of Mental Health of the subjects of different groups. LSD (Least Significant Difference) Post hoc analysis was utilized to identify paired mean differences where the obtained F value was found significant. In all cases 0.05 level was fixed to test the formulated hypothesis. The ANOVA and ANCOVA results concluded that both experimental groups that Yogic Practices with Physical Exercises (YPPE) group Yogic Practices with Specific Skills Exercises (YPSSE) groups significantly improved mental health of badminton players. The results suggested that yogic practices with specific skill exercises as an appropriate, easy and affordable approach for increasing Mental Health of the Badminton players. The present study would provide a scientific base and guidance to the coaches to design the training programme for badminton players for development of better mental health.

**Index Terms** - Badminton Players, Degree College, Badminton, Mental Health, Psychology

## I. INTRODUCTION

The palpable factor which really affects the capability of an athlete is psychological factors. One of the aspects that affect performance of athlete on the game is mental health. Mental health is a state of well-being in which a person understands his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully and is able to contribute to his or her community. A mental illness is a medical condition that disrupts a person's thinking, feeling, mood, ability to relate to others and daily functioning.

Mental health is concern with the process of adjustment of a person's potential in a expressed in a balanced way and motivation towards the goal. Hadfield considers that "In general terms we may say that mental health is the full harmonious functioning of the whole personality."

According to WHO (World Health Organization), mental health is "a state of well being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community". WHO stresses that mental health "is not just the absence of mental disorder."

The sound mental health is one of the first requisite conditions of development. But adolescents, especially end stage of adolescents are overwhelmed by a number of problems which affect the mental health. In general, a depressed student becomes a depressed society, an its incalculable harm to the nations. Amy Novotney (2009) suggested that yoga may help strengthen social attachments, reduce stress and relieve anxiety, depression and insomnia. Jue-Ting Fan and Kuei-Min Chen (2011) suggested that

Yoga exercise has positive benefits for both the physical and mental health of elders with dementia living in long-term care facilities. It is recommended that yoga be included as one of the routine activities in these long-term care facilities

Many scientists, doctors, psycholinguists etc., all over the world are extensively studying the beneficial aspects of yoga which encourages individual to attain positive health through yoga and improve health. The blood circulation happens all the more easily and appropriately and the body ends up able to do more work.

Based on a study in badminton reported that many problems occur on psychological factors, such as crucial match, first games, fear of losing, afraid for their parents, unreadiness, arena problems, people watching, and strong enemy and it is a characteristic of low mental health of players. Yoga enhances the resistance power against diseases and does not enable any peripheral issue to accumulate in the body.

The theoretical background of yoga has its genesis in ancient Indian philosophy. There are plentiful modern schools or types of yoga (namely Iyengar, Viniyoga, Sivananda, etc.), each having its own distinct emphasis regarding the relative content of physical postures and exercises (*asanas*), breathing techniques (*pranayama*), and practices of meditation that grow awareness and finally more profound states of awareness. Yoga has multiple benefits, including; injury prevention and increased performance, body awareness, balance, core strength, breath awareness, mental focus, stress relief, recovery time, and endurance (LaMeaux, 2011). With the many benefits derived from the practice of yoga, it is important for badminton athlete to exercise yoga. The benefits of yoga include: injury prevention, increased performance, body awareness, balance, core strength, breathe awareness, mental focus, stress relief, recovery time, and endurance. Therefore, the investigator intended to know the effect of varied yogic exercises on Mental Health of degree college badminton players as psychological component.

## II. STATEMENT OF THE PROBLEM

The purpose of this article is to find out the effect of Yogic Practices with Physical Exercises and Yogic Practices with Specific Skills Exercises on Mental Health of college level Badminton players and the topic is “**EFFECT OF SELECTED YOGIC PRACTICES ON MENTAL HEALTH OF BADMINTON PLAYERS.**”

## III. STATEMENT OF HYPOTHESIS

It was hypothesized that 12 weeks Yogic Practices with Physical Exercises and Yogic Practices with Specific Skills Exercises training would have significant improvement on Mental Health of college level Badminton players.

## IV. METHODOLOGY

The subjects (n=72) were randomly assigned to three equal groups of 24 degree college Badminton players and their age between 18-25 years. The groups were assigned as two experimental Groups that is ‘A’ and ‘B’ and one control group that is ‘C.’ Pre test scores were conducted for the subjects of all groups on Mental Health. The Mental Health was tested by administering Mental Health Inventory developed by Dr. Jagadish and Dr.A.K. Srivastava and the data were recorded in scores. This inventory contains 54 items. Lower the score indicates good mental health. Group-A participated in yogic practices with physical exercises (YPPE) and Group-B participated in yogic practices with badminton specific skill exercises (YPSSE) done for a period of 12 weeks. The post test scores were conducted on the said criterion variable of Mental Health after experiment. The differences between pre and post tests mean scores on Mental Health was considered as the effect of experimental treatments. Analysis of Variance (ANOVA) and Analysis of Covariance (ANCOVA) were used to determine the significant differences in the mean scores of Mental Health of the subjects of different groups. LSD (Least Significant Difference) Post hoc analysis was utilized to identify paired mean differences where the obtained F value was found significant. In all cases 0.05 level was fixed to test the formulated hypothesis.

## V. RESULTS AND DISCUSSION

Analysis of Variance (ANOVA) and Analysis of Covariance (ANCOVA) was utilized to know the effect of treatments, Yogic Practices with Physical Exercises (YPPE) group Yogic Practices with Specific Skills Exercises (YPSSE) group and Control Group (CG) on Mental Health (In meters) was presented in the following table

**Table-1:** ANOVA and ANCOVA Results on Mental Health of Badminton Players of different groups that is CG, YPPE and YPSSE Groups.

Mean	CG	YPPE	YPSSE	Sources of Variance	Sum of Squares	df	Mean Squares	Obtained F value
Pre Test	166.46	161.83	157.58	Between	945.750	2	472.875	0.83 <sup>NS</sup>
				Within	39665.125	69	574.857	
Post Test	172.08	149.92	141.13	Between	12216.583	2	6108.292	11.55*
				Within	36478.292	69	528.671	
Adjusted Post Test	167.942	150.032	145.151	Contrast	6764.532	2	3382.266	79.81*
				Error	2881.649	68	42.377	

<sup>NS</sup>Not Significant; \*Significant at 0.05 (Tabled 'F' value for degree of freedom 2, 69/68 is 3.15)

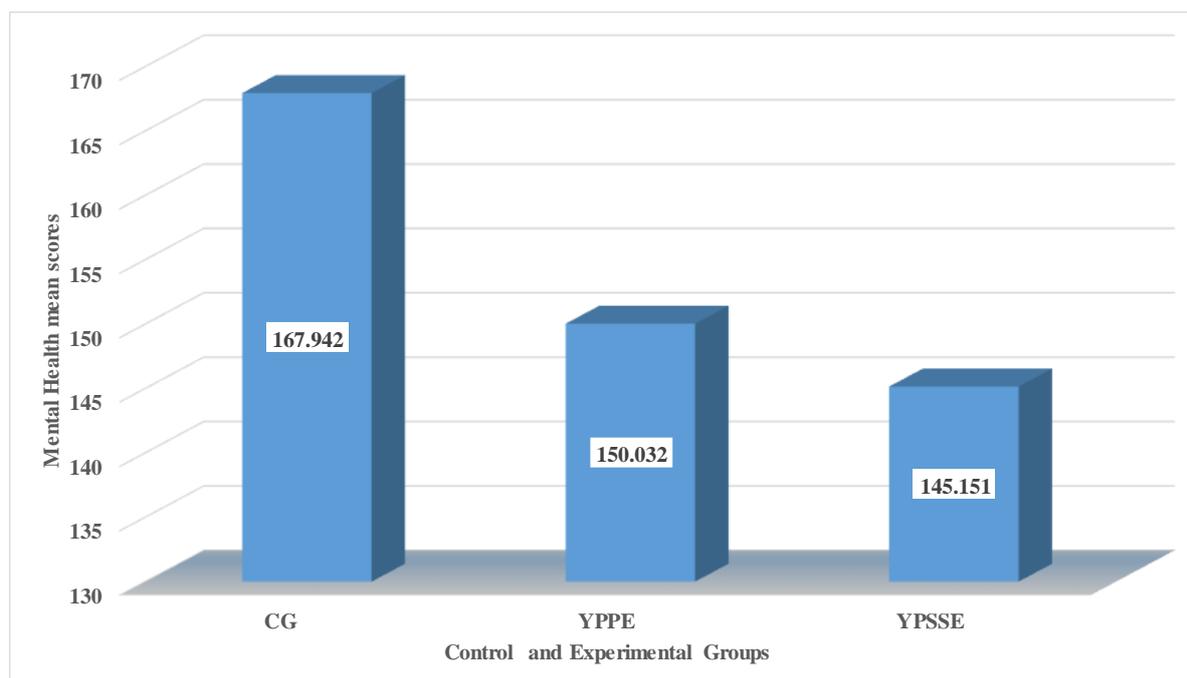
Since significant F ratio was obtained, the results related to mental health of badminton players were further subjected to post hoc analysis using LSD test and results presented in Table-2.

**Table-2:** LSD Post Hoc Test Results on scores of Mental Health of badminton players.

Selected Groups			Mean Difference
CG	YPPE	YPSSE	
167.942	150.032	-	17.910*
-	150.032	145.151	4.881*
167.942	-	145.151	22.791*

\*Significant at 0.05 level.

From the above mentioned table shows that Mental Health of college level badminton players was significantly improved due to participation in training of 12 weeks of yogic practices with physical exercises and yogic practices with badminton specific skills exercises as the obtained F value of 79.81 on adjusted means was greater than the required table F value of 3.15 at 0.05 level. The LSD post hoc analysis proved that there was significant difference between CG & YPPE; CG & YPSSE and YPPE and YPSSE groups. The YPSSE group (M=145.151) was found greater mental health of badminton players than YPPE group (M=150.032). Hence, the stated hypothesis was accepted for the said criterion variable that is Mental Health of badminton players.



**Fig.1:** Bar diagram shows comparison of adjusted mean scores of Mental Health of Badminton Players.

## VI. CONCLUSION

The ANOVA and ANCOVA results concluded that both experimental groups that Yogic Practices with Physical Exercises (YPPE) group Yogic Practices with Specific Skills Exercises (YPSSE) groups significantly improved mental health of badminton players. The results suggested that yogic practices with specific skill exercises as an appropriate, easy and affordable approach for increasing mental health of the Badminton Players. The similar results supported by previous studies conducted by Murugesan and Robert (2015). The present study would provide a scientific base and guidance to the coaches to design the training programme for badminton players for their improvement in mental health issues. Now a days people are turning towards yoga for mental health improvement because of preferences for: self-treatment; perceived greater efficacy; fewer side effects; lack of response to medication. Yogas added advantage is that it improves physical fitness and encourages self-reliance So treatment with yoga for badminton exercises managed to increase mental health and improve badminton athlete's performance.

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