

IMPACT OF YOGA ASANAS ON SELECTED PSYCHOLOGICAL VARIABLES AND SKILL PERFORMANCE IN UNDERGRADUATE BALL BADMINTON PLAYERS

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ABSTRACT

The study aims to elucidate the influence and impact of yogic practices on specific psychomotor skills in Ball Badminton players. Yoga is characterized as a set of ancient Indian practices encompassing physical, mental, and spiritual dimensions, involving alterations in mental outlook, dietary habits, and the adoption of specific techniques like yoga asana (postures). Asana refer to bodily positions that promote steadiness and comfort, fostering both physical and mental well-being without exertion over a specified duration. The study focuses on yogic practices and evaluates their effects within the realm of Psychological Variables. Specifically, the research delves into the role of yoga asana in shaping selected Psychological Variables among Ball Badminton players, aiming to articulate the impacts of these practices on the psychological aspects of the players. The significance of investigating the role of Yogic practices in enhancing psychomotor skills among Ball Badminton players is evident, prompting the researcher to embark on this exploration.

Keywords: - Yoga Asana; Physical; Mental; Ball Badminton; Psychological Variables.

1. INTRODUCTION

Human body is a wonderful entity, having body, mind and soul in an astonished synchronization of all the gifts of evolution, mind is the most precious. The aim of the yoga is to attain the maximum benefits of life by lining body with mind and mind with soul. Yoga was introduced and perhaps developed by the saint Patanjali, in 2000 B.C. He had proved to be a 'Basic'. Today the whole world is looking to yoga for this, and yoga answers to various problem of the modern man, yoga develops the personality of an individual, physically, mentally and intellectually.

The present research study tried to find out the influence of sports training and yogic asana practice on Selected Psychological Variables and Skill Performance in Undergraduate Ball Badminton Playersthe research conducts the post test of skill related components to check the impact of the sports training and yogic asana practice [1]. The study was to find out the effect of skill training with yoga practice on skill performance variables [2]. The study's goal is to determine the "Effect of Yogic Practices on physical variables among rifle and pistol shooters". [3]Studying the effects of selected Yogic practices on the static balance of Badminton players [4]. Impacts of Yogic Asana Practice on Flexibility Among College-Level Football Players". [5]. Effects of Selected Yogic Exercises on Motor Fitness and Football Skill Development in Boys" [6]The Impact of the Bali Yoga Program for Athletes (BYP-A) on General Psychological Well-being: A Pilot Project [7]. Assessment of Psychological Factors in Grassroots Male and Female Badminton Players [8] Comparative Analysis of Self-Esteem in Early Adolescent Athletes and Non-Athletes.[9]study is to comparative analysisof reaction time and explosive power between badminton and tennisplayers.[10]Exploring the Relationship between Motor Ability and Judo Performance in Judo Players.[11]Integration of Yoga Practice into the Training Regimen of Elite Romanian Athletes: An Investigation and Assessment [12] The purpose is to define an efficient impact of the specifically formed activities through Yoga practice on the development of flexibility among the female. [13] The study was to find out the effect of ball badminton game on the rallying ability of the badminton players at inter college level. [14] The study was to find out the effect of ball badminton game on the rallying ability of the badminton players at inter college level.[15]Enhancing Learning Effectiveness in Novice Badminton Learners: A Comprehensive Study[16]Differences in Selected Anthropometric Variables, Specifically Skinfold Measurements [17] Examining the Relationship between Motor Skills Proficiency and Physical Activity Participation[18]Optimizing Performance: High-Intensity Exercise Intervals and Recovery Patterns in Volleyball Players. [19] Impact of Combined Loop Band and Ladder Training on Performance Variables in Handball Players [20]Comparative Analysis of Agility, Muscular Strength, and Muscular Endurance Among Male College Students

1.1 Concept of Yoga

Yoga stands as a powerful avenue for self-improvement and realizing one's full potential. Through the practice of yoga, individuals strive for the union of their consciousness with the universal consciousness. Regarded as one of the oldest forms of therapeutic healing, the profound effects of yoga have captured the attention of scientists worldwide, prompting extensive studies to explore its remarkable benefits.

1.2 Yoga Asanas

Asanas represent body positions wherein individuals can maintain a steady and comfortable posture, both physically and mentally, for a specified duration without undue strain. These postures aid in muscle relaxation by enhancing circulation, alleviating accumulated tension and stress. The act of stretching contributes to muscle toning and conditioning, thereby

serving as a preventative measure against injuries. These asanas are Bhujangasana, Mayurasana, Trikonasana, Thadasana, Padhastasana, Chakrasana, Dandasana, Utkatasana, Naukasana

1.3 Benefits of Yoga on Ball Badminton Performance: -

The practice of yoga can offer various benefits to individuals engaged in ball badminton, contributing to improved performance and overall well-being. Yoga involves a range of stretching exercises that can significantly improve flexibility. Increased flexibility in joints and muscles can enhance agility and manoeuvrability on the ball badminton court. Yoga often incorporates balance poses and exercises that promote stability. This can translate to better balance and coordination during ball badminton matches, aiding players in quick and precise movements. Yoga can make every form of training you do more effective and efficient.

A regular yoga practice can give you the following: Heightened Power, Enhanced Endurance, Improved Balance and Proprioception, Effective Injury Prevention, Enhanced Recovery and Improved Focus.-

Sport Psychology focuses on optimizing performance by effectively handling emotions and mitigating the psychological impact of injuries and subpar performances. Key skills emphasized in this field include goal setting, interpersonal relations, visualization, self-talk, self-awareness and control, concentration, confidence building, utilizing rituals, attribution training, and periodization. The modern sport psychologist is tasked with fulfilling three essential roles: conducting research, providing education through teaching, and offering consulting services.

Anxiety represents a comprehensive emotional state marked by an overarching sense of fear or apprehension, typically accompanied by heightened tension. This emotional condition is often linked to a fear of failure, whether actual or anticipated. Anxiety frequently revolves around interpersonal relations, social situations, and the pervasive feelings of rejection and insecurity..

Stress is the body's natural response to a situation demanding a physical, mental, or emotional adjustment. It can be triggered by various circumstances or thoughts that evoke feelings of frustration, anger, nervousness, or anxiety. The source of stress, often referred to as a "stressor," can stem from factors such as coping with a serious illness or taking care of someone who is unwell, leading to a significant amount of stress..

Motivation can be characterized as the internal impetus that propels individuals to engage in and persist with an activity. It encompasses the performer's resolute determination and enthusiasm to attain their goals, intertwined with external factors that influence them.

Emotion is described as an intricate response pattern that includes experiential, behavioral, and physiological elements. Emotions represent an individual's way of navigating matters or situations that hold personal significance to them.

“A dynamic process manifested in the group's inclination to cohesively stay united while working towards achieving instrumental objectives for the fulfilment of the members' needs.”.

The study aims to investigate how the practice of asanas influences specific psychological factors and skill performance variables in undergraduate-level ball badminton students.

1.4 Significance of Study

The study will create a professional interest for coaches, physical educationists and yoga trainers and Ball Badminton students. Findings of the study will give the importance of asanas on selected psychological variables and skill performance of undergraduate level ball badminton students. The study will provide scientific base and guidance to the physical educationists, coaches and players to understand the asanas on selected psychological variables and skill

performance of undergraduate students. This study will help the future research scholars to select and identify new problems with selected asanas.

The study's discoveries could contribute to the existing body of knowledge on the impact of asanas. Ball badminton is a racket sport played with a yellow woolen ball on a standardized court. It is a team-based game where players may need to willingly sacrifice for the overall benefit of the team. The game is highly dynamic, requiring skills, rapid perception, accurate judgment, agile movement, and the ability to control the ball through precise wrist movements.

The effect of asanas will help in developing and enhancing the playing skills of the undergraduate students. The findings of the study will directly benefit the physical educators, research scholars, coaches, yoga experts and the players as they would be able to scientifically understand and assess the asanas and the psychological variables owing to Ball Badminton game.

2. METHODOLOGY

The researcher outlines the methodology involving the selection of subjects, choice of variables, data collection, and the statistical techniques used for analysis. The study is structured to investigate the impact of specific asanas and psychological variables on undergraduate students aged 17 to 21. To fulfill the study's objectives, the following procedures will be implemented.

2.1 Selection of Subjects: -

For this study 90 undergraduate ball badminton players will be selected from University. They are normal and healthy subject without any disability. They are within the age group of 17 to 21 years. The selected subjects will be divided into three equal groups, each group consist of thirty subjects, Group I will be imparted training on yoga asana for 12 weeks for 5 days per week (45 minutes duration). Certain factors like food habit, life style, daily routine work, climatic conditions and environmental factors, which may have an effect on the result of this, will not be taken into consideration while interpreting the result.

2.2 Data Analysis

The analysis will be conducted using analysis of covariance (ANCOVA) and subsequently, Scheffe's post-hoc method. All statistical computations will be executed using the Statistical Package for the Social Sciences (SPSS).

2.3 Selection of Variables

- Independent variables: Bhujangasana, Mayurasana, Trikonasana, Thadasana.
- Dependent Variables:
 1. Psychological variables: Anxiety, Stress and Motivation.
 2. Skill Performance Variables: Float, Service.

2.4 Instrumentation

Variables	Test Used
Anxiety	Sports competition anxiety test(SCAT)
Stress	Ways of coping in sports (WOCS)
Motivation	Recreational exercise motivation measure(REMM)

2.5 Procedure.

A standardized questionnaire will be employed to measure the selected psychological variables. The data obtained from the three groups on these variables will undergo statistical analysis to determine if there are significant differences among the groups.

The subjects were asked to assemble on the class room. Yogic Practices were important to the student for a period of 30 minutes in the evening between 4.30 P.M to 5.13 P.M. The investigator demonstrated the Asana first and the subjects were asked to repeat them. The duration of the class is about 30 minutes.

Scoring of Stress Questionnaire: Many individuals can effectively handle different levels of pressure without experiencing stress. However, when faced with excessive pressure, often stemming from our own thought patterns and life experiences, our capacity to cope may be overextended, leading to the experience of stress.

Point or less: your or least likely to suffer from stress-related illness. Scoring between 5-13 points indicates a higher likelihood of experiencing stress-related health issues, whether mental, physical, or both. Seeking stress management counselling or advice is recommended to address and alleviate challenges identified in these areas.

14 points or more indicates a higher susceptibility to stress, showcasing numerous traits or characteristics associated with unhealthy behaviors. This heightened risk suggests an increased likelihood of experiencing stress-related illnesses, such as diabetes, irritable bowel syndrome, migraines, back and neck pain, high blood pressure, heart disease/strokes, and mental health issues (depression, anxiety, and stress). Seeking professional help or stress management counselling is strongly recommended. Consultation with your medical practitioner is advised.

Scoring of Anxiety Questionnaire: The SCAT questionnaire, along with three additional surveys, was provided to the participants one hour prior to the commencement of the assessment. Clear instructions were given to ensure subjects understood the task. The SCAT questionnaire comprises 15 items, including 5 spurious ones intentionally added to reduce any bias in responses towards the actual test items. Participants were directed to indicate their general feelings in sports competition for each item. Each statement offered three possible response options are Hardly ever-1, Sometimes-2 and Often-3.

After the completion of the questionnaire the investigator collected and checked whether there was any omission. The complete questionnaires were evaluated by the investigator according to the scoring key.

Spurious Questions were not scored as suggested by martins. The score obtained for each statement were added and it was treated as total score higher the score higher the anxiety and lower the score lower the anxiety. They were ranged between 10-30.

2.6 Statistical Technique: -

The study utilized various statistical procedures to assess the changes in selected psychological variables and skill performance among college-level ball badminton players. To analyze the significance difference between pre-test and post-test scores, dependent 't' ratios were calculated. The chosen level of significance for the study was set at 0.05.

The data were analysed with the computer using SPSS statistical package. The level of confidence was fixed at 0.05 level of confidence.

3. RESULT AND DISCUSSION

The study aimed to investigate the impact of selected psychological variables and skill performance variables on college-level ball badminton players. To fulfill this objective, a sample of fifteen students was randomly selected from BITS VIZAG College in Visakhapatnam, constituting a single group for the study. Each participant underwent testing for psychological variables such as Anxiety, Stress, Motivation, and skill performance variables, including service and float tests. The outcomes of these assessments are presented and discussed in this chapter.

The data collected were statistically analyzed using ‘t’ ratio and 0.05 level of confidence was fixed to test the table value. The results of the present study were given below.

TABLE 1
MEAN, MEDIAN, STANDARD DEVIATION, STANDARD ERROR OF MEAN, MEAN DIFFERENCE AND ‘T’ VALUE OF PRE-TEST AND POST TEST OF FLOAT

S. No	Test	Mean	Mean Deviation	Standard Deviation	Standard Error of Mean	DF	T	Table value
1	Pre-Test	82.8	4.4	7.36	1.9	14	26.94	2.14
2	Post-Test	87.2		7.35	1.89			

To find out the asana on selected psychological variable and skill performance variable among college level ball badminton players only one group ‘t’ ratio was employed and the level of significance was set at 0.05. A Float player mean value were 82.80,87.20 respectively different mean value 4.40. The obtained ‘t’ ratio 26.94, so it was found to be significant.

Figure- I: showing the mean of pretest and post-test for float

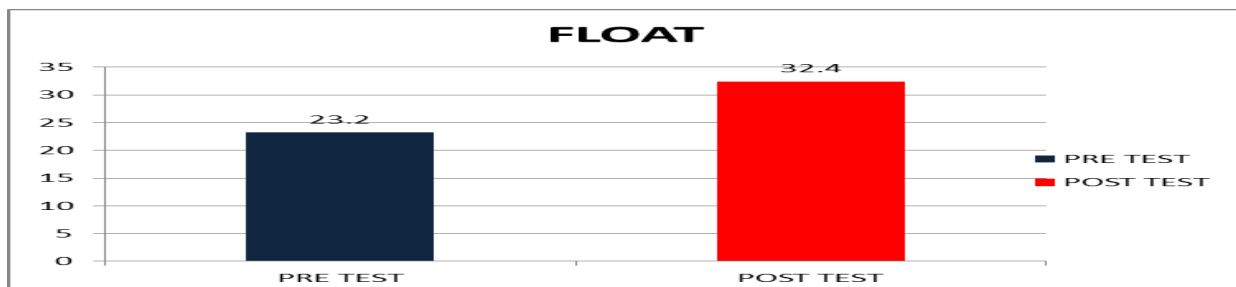
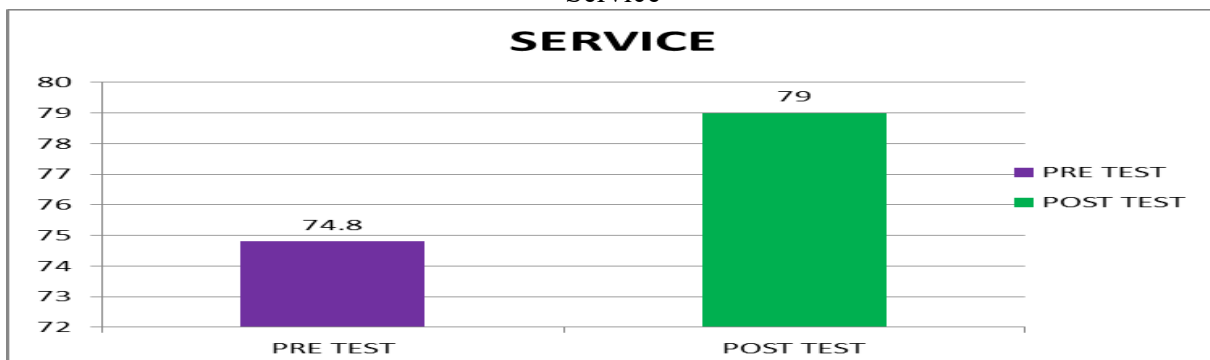


TABLE 2
: MEAN, MEDIAN, STANDARD DEVIATION, STANDARD ERROR OF MEAN, MEAN DIFFERENCE AND ‘T’ VALUE OF PRE-TEST AND POST TEST OF SERVICE

S. No	Test	Mean	Mean Deviation	Standard Deviation	Standard Error of Mean	DF	T	Table value
1	Pre-Test	74.8	4.2	9.11	2.35	14	15.02	2.14
2	Post-Test	79		8.67	2.24			

Figure- II: Showing the Mean of Pre-Test and Post-Test for Service



To find out the asana on selected psychological variable and skill performance variable among college level ball badminton players only one group ‘t’ ratio was employed and the level of significance was set at 0.05. The obtained ‘t’ ratio 15.02 so it was found to be significant.

TABLE 3
MEAN, MEDIAN, STANDARD DEVIATION, STANDARD ERROR OF MEAN, MEAN DIFFERENCE AND ‘T’ VALUE OF PRE-TEST AND POST TEST OF ANXIETY

S. No	Test	Mean	Mean Deviation	Standard Deviation	Standard Error of Mean	DF	T	Table value
1	Pre-Test	27.9	5.96	3.75	.97	14	19.76	2.14
2	Post-Test	33.86		3.33	.86			

To find out the asana on selected psychological variable and skill performance variable among college level ball badminton players only one group ‘t’ ratio was employed and the level of significance was set at 0.05. The obtained ‘t’ ratio 19.76 so it was found to be significant.

Figure- III: Showing the Mean of Pre-Test and Post-Test for Anxiety

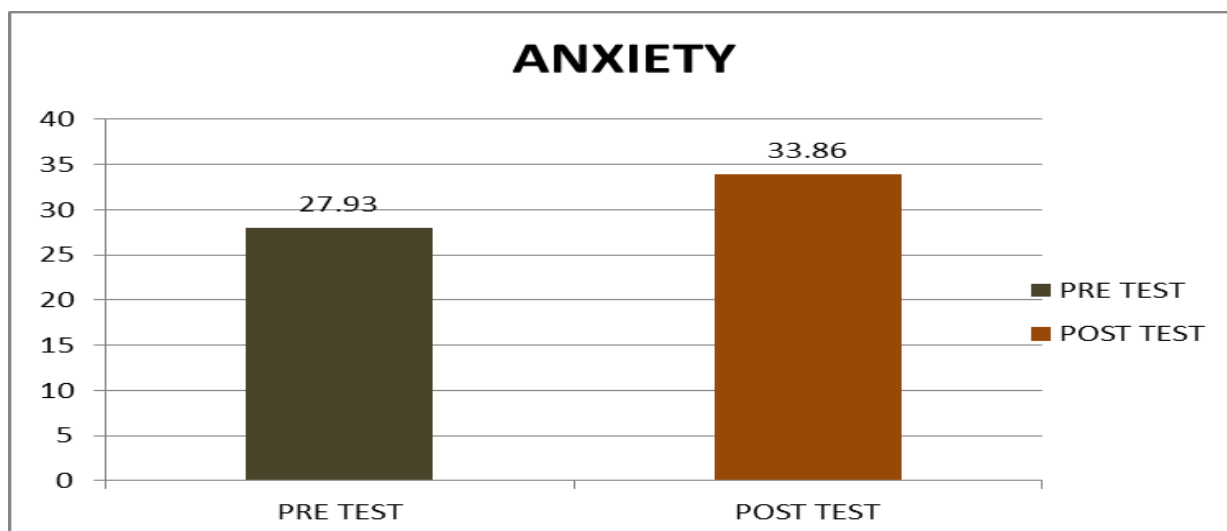


TABLE 4
MEAN, MEDIAN, STANDARD DEVIATION, STANDARD ERROR OF MEAN, MEAN DIFFERENCE AND ‘T’ VALUE OF PRE-TEST AND POST-TEST OF STRESS

S. No	Test	Mean	Mean Deviation	Standard Deviation	Standard Error of Mean	DF	T	Table value
1	Pre-Test	12.93	3.93	2.31	0.6	14	10.24	2.14
2	Post-Test	16.86		1.5	0.39			

To find out the asana on selected psychological variable and skill Performance variable among college level ball badminton players only one group ‘t’ ratio was employed and the level of significance was set at 0.05. The obtained ‘t’ ratio 10.24 so it was found to be significant.

TABLE 5
MEAN, MEDIAN, STANDARD DEVIATION, STANDARD ERROR OF MEAN, MEAN DIFFERENCE AND ‘T’ VALUE OF PRE-TEST AND POST-TEST OF MOTIVATION

S. No	Test	Mean	Mean Deviation	Standard Deviation	Standard Error of Mean	DF	T	Table value
1	Pre-Test	23.20	9.20	5.74	1.48	14	12.25	2.14
2	Post-Test	32.40		4.73	1.22			

Figure- IV: Showing the Mean of Pre-Test and Post-Test for Stress

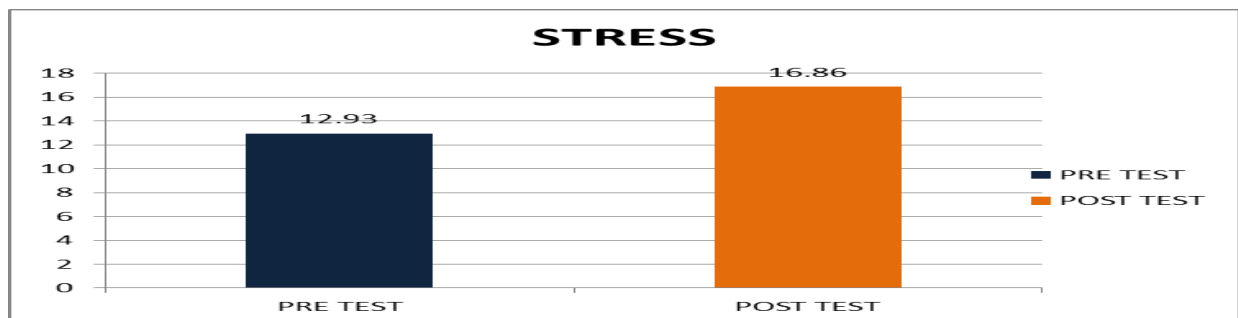
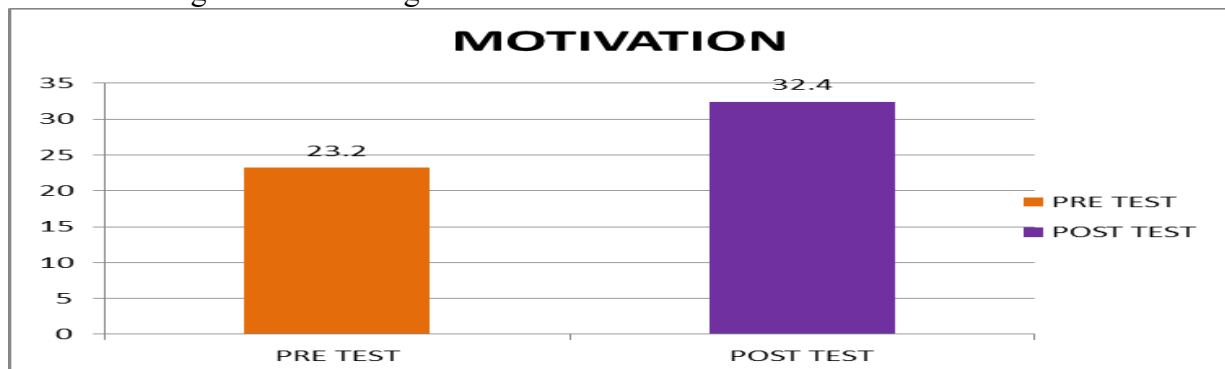


Table – V: Calculation of Mean, Median, Standard Deviation, Standard Error of Mean, Mean Difference and ‘T’ Value of Pre-Test and Post-Test of Motivation

S. No	Test	Mean	Mean Deviation	Standard Deviation	Standard Error of Mean	DF	T	Table value
1	Pre-Test	23.20	9.20	5.74	1.48	14	12.25	2.14
2	Post-Test	32.40		4.73	1.22			

To find out the asana on selected psychological variable and skill performance variable among college level ball badminton players only one group ‘t’ ratio was employed and the level of significance was set at 0.05. The obtained ‘t’ ratio 12.25 so it was found to be significant.

Figure- V: Showing the Mean of Pre-Test and Post Test for Motivation



4. CONCLUSIONS

The primary objective of this study was to explore the effects of specific asanas on psychological variables and skill performance among college-level ball badminton players. The

study included fifteen players from BITS VIZAG, Visakhapatnam, aged between 16 to 20 years, who were chosen as participants. These players were collectively grouped, and initial assessments were conducted on selected psychological variables, such as Anxiety, Stress, and Motivation, utilizing Questionnaire Tests. Subsequent to the pre-test, the single group of ball badminton players underwent a 6-week training program, with sessions held five days a week, lasting 45 minutes each in the evening. Following the completion of the sixth week, a post-test was administered to all ball badminton players in the group. The significance of the difference between the means of pre and post-tests for BITS VIZAG, Visakhapatnam ball badminton players was determined through the 't' ratio, with the level of significance set at 0.05. Despite the study's limitations, it was concluded that the designated group of ball badminton players exhibited significant improvement in all selected psychological variables, including Cognitive Anxiety, Stress, and Motivation.

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