

# Effectiveness Of Integrated Stretching And Relaxation Training Program On The Basis Of Selected Psychological Parameters Of Elite Football Players

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## ARTICLE INFO

## ABSTRACT

**Background:** Stretching is a type of physical activity in which a particular muscle, tendon, or muscle group is purposefully flexed or stretched in order to increase the muscle's perceived flexibility and achieve a comfortable level of muscular tone. Muscle control, flexibility, and range of motion are felt to be improved which is very essential for Football Players. Stretching is additionally applied medically to relieve cramps and enhance daily function by extending range of motion. Football-specific dynamic stretching prepares your muscles for an exercise that will increase your range of motion. Dynamic stretches, which concentrate on one specific muscle group at a time, help you build strength and safeguard your body from overexertion-related injuries. Through a series of dynamic stretching exercises that also improve stability and mobility, this warm-up will assist you in activating the main muscles used in sprinting. Yoga is one of the best types of exercise for unwinding. Yoga has been practiced for a very long time. Numerous top football teams now include yoga and meditation as part of their demanding preseason and offseason training schedules. Major sports organizations have encouraged their athletes to practice yoga, and some have even hired yoga instructors to work with their teams. Players from these teams practice yoga and meditation in the morning and yoga stretches after games to aid in the recovery of injuries, cramps, and spasms.

**Methods:** 60 Elite Football Players (aged 13-14 years) from B.S. Pasi Football Club. Participants were randomly distributed into two groups: Stretching & Relaxation training group (n=30), and a control group (n=30). Standardized assessments were administered both pre-intervention and post-intervention, focusing on pressure and physical stress indicators.

**Results:** The findings of this study align closely with international standards for comprehensive well-being of Football Players. The Stretching and Relaxation training programs demonstrated significant effectiveness in reducing pressure and physical stress among Elite Football players. Football players who engaged in this programs exhibited marked improvements reporting decreased stress levels and a heightened ability to cope with the pressures of academic and social life.

**Conclusion:** This research underscores the global relevance of Stretching and Relaxation training programs as potent interventions for mitigating pressure and physical stress among Elite Football Players. The inclusion of these engaging physical activities in educational curriculum or extracurricular activities offers great potential for fostering the physical resilience and general health of football players around the world in accordance with international well-being criteria. Further research into the viability and widespread acceptance of these programs is urged by the study in order to greatly advance the conversation about young footballers physical well-being and its innate relationship to psychological health.

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**Keywords:** Stretching, Relaxation, Pressure and Physical Stress

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### Introduction

Football players need to be both physically and emotionally robust. When dealing with a minor injury or overcoming difficulty following a turnover or error, children frequently develop mental toughness that they might not have otherwise understood. Some young individuals may already be aware of the sport they prefer to play and plan to do so in the future. Football participation, like many other sports, gives kids various health advantages. It's a physically tough game that allows players to develop their general cardiovascular endurance, speed, agility, strength, and hand-eye coordination. Due to the enormous number of teammates, a football team's friendships are unlike those in any other sport. Football is a game of inches, so each player on the pitch must pay special attention to every small detail. One misplaced step, one intercepted throw, or one mental error can have a significant impact on any given play.

A high-demand setting like competitive athletics has the potential to stress out those who choose to participate. Regardless of level or discipline, there is tremendous pressure placed on athletes, and stress and anxiety can have a significant impact on an athlete's performance. Football is a fast-paced sport with many variables that can impact not only the team and players but also the game itself, regardless of position or skill level.

Pressure and physical stress are sneaky foes that can have a serious impact. Their nefarious effects erode the vitality and optimism that should characterize this stage of life, undermining the very essence of youth. In light of this, the international community has emphasized the significance of fostering teenagers' holistic well-being and the connection between their physical and mental health. Physical exercise stands out as a ray of hope in this situation, a holistic panacea that can reduce stress and annoyance while promoting psychological toughness.

Dynamic stretching can aid in stress reduction. Stretching has been demonstrated to raise serotonin levels, which lower depressive and agitate symptoms. Active movements that allow joints and muscles to fully extend their range of motion are known as dynamic stretches. They can be used to help your body warm up before working out or as a cool-down after. Additionally, dynamic stretching can aid in increasing flexibility, which is important for overall health.

Stretching is the best kind of exercise since it is accessible to all people, regardless of their level of fitness. It's a fantastic place to start for individuals who have never worked out, and even those who work out frequently can benefit from it. Stretching slows down your body and your thoughts. By practicing meditation, you can proactively lessen your mental tension. Stretching slow down your body and your thoughts. By practicing meditation, you can proactively lessen your mental tension.

Yoga has long been recognized as a technique for reducing stress by fusing movement with breathing. Yoga's favorable impact on the parasympathetic nervous system has been shown to offer further advantages. Your heartbeat and blood pressure will level off as a result of less oxygen being required by your body. This system, in essence, regulates the stress response mechanisms. Yoga's central tenet is the union of the body and mind. Both the body and the mind can be impacted by stress, and yoga helps to connect and balance them. The more you do it, the better you get at handling mental and physical stress.

Stretching and Relaxation (Yoga) when both practiced together can do wonders in reducing stress level as both work on a same goal which different nature. Physical exercises or asanas in yoga and stretching practices increase your flexibility, strength, and coordination. However, the **meditation** part and breathing techniques in yoga calms and focuses your mind, thus reducing pressure and physical stress developing greater awareness.

### Purpose of the study

The purpose of this research study is to rigorously examine and evaluate the effectiveness of integrated Stretching and Relaxation training programs as interventions aimed at mitigating pressure and physical stress among Elite Football Players of Mumbai. This study is designed in alignment with international standards for comprehensive well-being, recognizing the crucial interplay between physical and psychological health during adolescence. The primary objectives of this study are as follows:

- **Assessing Impact:** The primary purpose of this study is to determine whether Stretching and Relaxation training programs have a measurable impact on reducing pressure and physical stress levels in Elite Football Players in Mumbai. It seeks to evaluate the efficacy of these physical activities as potential interventions for enhancing the mental well-being of this specific age group.
- **Addressing Mental Health:** The study aims to address the pressing issue of pressure and physical health in Elite Football players, which can negatively affect their academic performance, interpersonal relationships, and overall quality of life. By investigating the potential benefits of Stretching and Relaxation, the study seeks to contribute to efforts aimed at improving the mental health of these students.

- **Exploring Alternative Interventions:** It seeks to provide insights into alternative approaches for managing pressure and physical stress that move beyond traditional interventions like counseling and medication. Stretching and Relaxation represent non-pharmacological, holistic methods that focus on physical health and well-being.
- **Tailoring Interventions:** The study intends to determine whether specific physical as well as relaxation activities, like Stretching and Relaxation, can be tailored to meet the unique needs and preferences of Elite Football Players in Mumbai. This could lead to the development of more engaging and culturally relevant interventions.
- **Enhancing Performance:** Improved mental well-being may positively affect performance during competitions. The study aims to investigate whether practicing Stretching and Relaxation programs can lead to better concentration, higher motivation, and, consequently, improved outcomes during the competitions among the target group.
- **Contributing to Research:** The research also aims to add to the existing body of knowledge on the connection between physical activity and mental health, with a specific focus on the Footballers in Mumbai. It may offer insights that can guide future research in this area.
- **Promoting Well-Being:** Ultimately, the study's purpose is to contribute to the well-being of Elite Football Players in Mumbai by offering evidence-based recommendations for incorporating Stretching and Relaxation programs into their daily lives. This aligns with broader efforts to promote a holistic and healthy approach to education.

### Objective of the Study

For said study, the objectives of the study were as follows;

1. To compare the adjusted mean scores of Pressure of Elite Football Players of Stretching and Relaxation Training Group & Control Group by taking Pre-Pressure as a Covariate.
2. To compare the adjusted mean scores of Physical Stress of Elite Football Players of Stretching and Relaxation Training Group & Control Group by taking Pre-Physical Stress as a Covariate.

### Hypothesis of the Study

For said study, the hypothesis of the study were as follows;

**H<sub>01</sub>:** There is no significant difference in the adjusted Mean Scores of Pressure of Elite Football Players of Stretching and Relaxation Training Group and Control Group by taking Pre-Pressure as Covariate.

**H<sub>02</sub>:** There is no significant difference in the adjusted Mean Scores of Physical Stress of Elite Football Players of Stretching and Relaxation Training Group and Control Group by taking Pre-Physical Stress as Covariate.

### Methodology

Non Equivalent control group design, which is regarded as the gold standard for assessing the efficacy of therapies, was used in this investigation. Two groups were randomly assigned to the participants: a control group and a stretching and relaxation training group. Sixty B.S. Pasi Football Club Elite Football Players, ages 13 to 14, were chosen, gaining participants' and their parents'/guardians' informed permission.

International safety and fitness standards were adhered to in the design of the stretching and relaxation training programs by professional instructors. Twelve weeks of five sessions a week, each lasting sixty minutes, make up the programs. Participants in the control group carried on with their usual schedules. Gathering of baseline data prior to the intervention. Throughout the 12-week course, regular evaluations were monitored. Post-intervention evaluation right after the programs are finished. Qualified data collectors recorded psychological factors and distributed questionnaires.

Descriptive statistics to characterize the sample and report the prevalence of pressure and physical stress. Inferential statistics (One way ANCOVA) to compare changes in pressure and physical stress between groups. Regular monitoring and supervision of the Stretching and Relaxation training sessions. Cross-checking of data entry and analysis for accuracy. Publication of study findings in peer-reviewed journals adhering to international research standards. Presentation of results at relevant international conferences and forums to contribute to global knowledge.

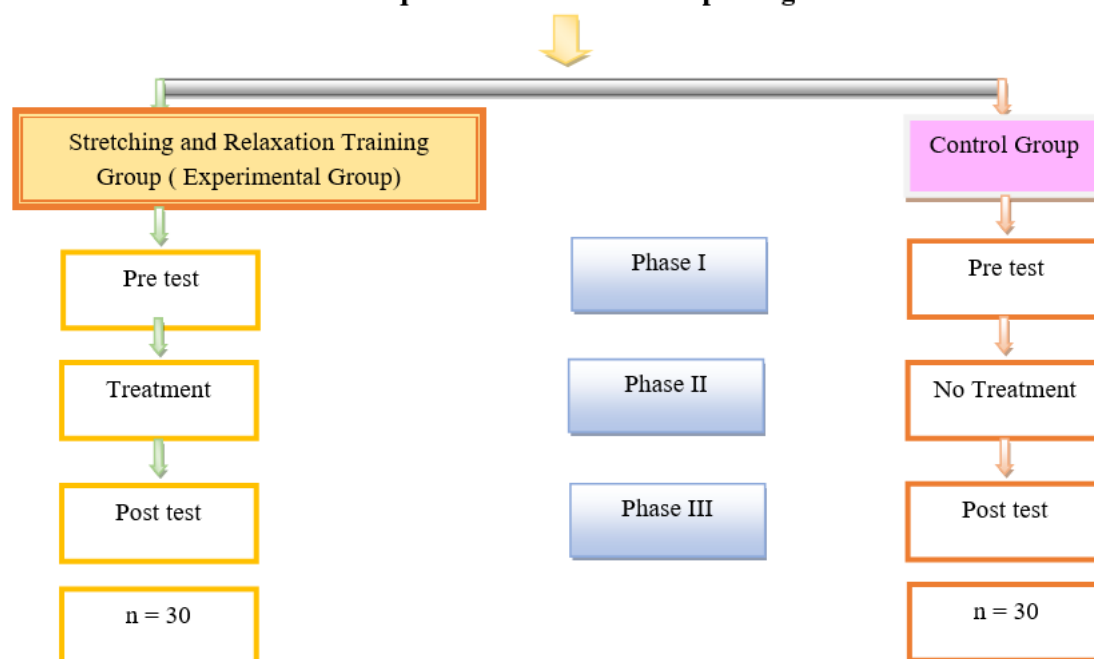
### Design of the Study

The present study was conducted by adopting experimental method. The experimental design was Non Equivalent control group design.

The subjects in the experiment were divided into two groups, i.e. Group 'A' Stretching Training Group (Experimental group), Group 'B' Control Group. Each group consisted of 30 subjects. Experimental group was given Stretching and Relaxation training programme for the period of twelve weeks. The control group had not undergone any training program.

*The blue print of the design is as under*

### Non- Equivalent Control Group Design



#### Dependent Variables of the study:

- Pressure
- Physical Stress

#### Criterion Measures

The following criterion measures included the records of the various test items of Selected Psychological Variables.

Variable	Test	Unit
Pressure	Vijaya Lakshmi and Shruti	Score / Scale
Physical Stress	Narain Stress Scale (2014)	

#### Independent Variables:

- Stretching and Relaxation Training Program

#### Statistics:

The data were analyzed using the following statistical techniques:

- The reliability of the Preliminary form of the test were determined by test-retest (Intra-class Correlation Coefficient) method of correlation.
- Content validity of Stretching and Relaxation Training Programme were determined by analyzing the opinions of the various experts in the area of Fitness, Sports and Physical Education.
- Comparison of group was done with the help of One Way Analysis of Covariance ANCOVA.

#### Results and Discussion:

The mean achievement in Physical Stress and Pressure due to Stretching and Relaxation Training Program, as obtained from ANCOVA test, revealed that –

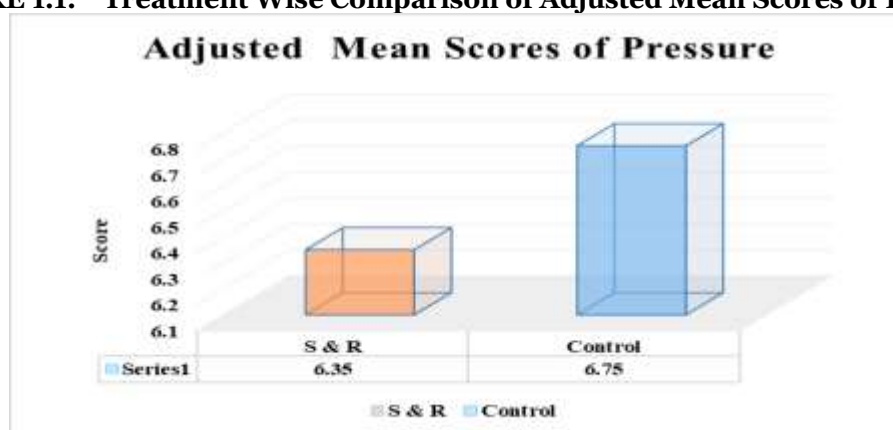
##### 1.1 TREATMENT WISE COMPARISON OF ADJUSTED MEAN SCORES OF PRESSURE

The objective was to compare adjusted mean scores of Pressure of Elite Football players belonging to Stretching and Relaxation Training Group and Control Group by taking Pre-Pressure as Covariate. The data were analyzed with the help of One Way ANCOVA and results are given in Table 1.1.

**TABLE 1.1: Summary of One Way ANCOVA of Anxiety by taking Pre-Pressure as Covariate**

Source of Variance	Df	SSy.x	MSSy.x	Fy.x	Remark
Treatment	2	24.82	8.28		
Error	57	63.14	0.55	15.07	p<0.05
Total	59				

From Table 1.1 it is evident the F-value for the treatment is 15.07 which is significant at 0.05 level with  $df=2/57$ . The adjusted mean scores of Pressure of Elite Football Players of Stretching and Relaxation Training group was 6.35 which is significantly lower than that of Control group where the adjusted mean was 6.75. It reflects that the adjusted mean scores of Pressure of Elite Football Players of Stretching and Relaxation Training group and control group differ significantly when Pre-Pressure was taken as covariate. Thus, the Null Hypothesis that there is no significant difference between the adjusted mean scores of Pressure of Elite Football Players of Stretching and Relaxation Training Group and Control Group by taking Pre-Pressure as covariate is rejected. It may, therefore, be said that the Stretching and Relaxation Training was found to be effective in improving Pressure of Elite Football Players as compared to Control Group where Pre-Pressure was taken as Covariate and is graphically presented in Figure 1.1.

**FIGURE 1.1: Treatment Wise Comparison of Adjusted Mean Scores of Pressure**

## 1.2 TREATMENT WISE COMPARISON OF ADJUSTED MEAN SCORES OF PHYSICAL STRESS

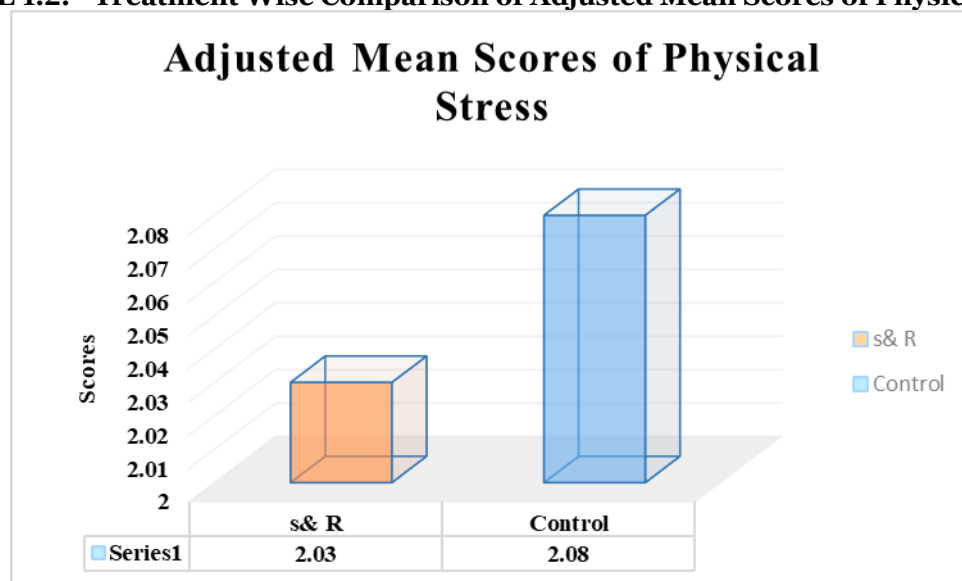
The objective was to compare adjusted mean scores of Physical Stress of Elite Football players belonging to Stretching and Relaxation Training Group and Control Group by taking Pre-Physical Stress as Covariate. The data were analyzed with the help of One Way ANCOVA and results are given in Table 1.2.

**TABLE 1.2: Summary of One Way ANCOVA of Physical Stress by taking Pre-Physical Stress as Covariate**

Source of Variance	Df	SSy.x	MSSy.x	Fy.x	Remark
Treatment	2	2.15	0.72	3.43	p<0.05
Error	57	24.01	0.29		
Total	59				

From Table 1.2 it is evident the F-value for the treatment is 3.43 which is significant at 0.05 level with  $df=2/57$ . The adjusted mean scores of Physical Stress of Elite Football Players of Stretching and Relaxation Training group was 2.03 which is significantly lower than that of Control group where the adjusted mean was 2.08. It reflects that the adjusted mean scores of Physical Stress of Elite Football Players of Stretching and Relaxation Training group and control group differ significantly when Pre-Physical Stress was taken as covariate. Thus, the Null Hypothesis that there is no significant difference between the adjusted mean scores of Physical Stress of Elite Football Players of Stretching and Relaxation Training Group and Control Group by taking Pre-Physical Stress as covariate is rejected. It may, therefore, be said that the Stretching and Relaxation Training was found to be effective in improving Physical Stress of Elite Football Players as compared to Control Group where Pre-Physical Stress was taken as Covariate and is graphically presented in Figure 1.2.



**FIGURE 1.2: Treatment Wise Comparison of Adjusted Mean Scores of Physical Stress****Conclusion:**

In the pursuit of addressing the critical issue of pressure and physical stress among Elite Football players in Mumbai, this study rigorously examined the effectiveness of Stretching and Relaxation training program. The findings of this research contribute to the broader global discourse on youth well-being and provide insights into practical interventions that can have a lasting impact on the psychological health of the football players.

The results of this study underscore the potential of Stretching and Relaxation training programs as powerful tools for mitigating pressure and Physical Stress in Elite Football players, in line with international well-being standards. Participants engaged in these programs experienced significant reductions in pressure, physical stress, demonstrating the capacity of mental balance to serve as effective stress management strategies for the Football players. These findings reinforce the global significance of recognizing and addressing psychological stress as an integral aspect of players' well-being.

Furthermore, this study revealed that these interventions not only reduced pressure and physical stress but also had positive effects on other psychological variables. Such outcomes align closely with international standards that advocate for holistic approaches to youth well-being, recognizing the interplay between physical and mental aspects.

The significant differences between the Stretching and Relaxation group in terms of their effectiveness suggest that the integrated program offer valuable avenues for promoting psychological resilience among Elite Football players. This flexibility in program selection allows educators and policymakers to choose interventions that align with their resources and players preferences.

In conclusion, this research contributes to the global body of knowledge on youth well-being by highlighting the efficacy of Stretching and Relaxation training programs in addressing pressure and physical stress among Elite Football players. It emphasizes the importance of adopting a holistic approach to youth well-being that encompasses psychological dimensions. These findings have the potential to inform educational policies and practices internationally, promoting the integration of physical and relaxation activities into training clubs to enhance the well-being of players worldwide. As we advance into an era where the well-being of our youth is of paramount importance, this study serves as a testament to the transformative power of physical and relaxation activity in nurturing healthier, more resilient generations.

**References:**

1. **Chochalingam, D. (2022).** FOOTBALL PLAYERS STRESS LEVEL OUTPUT IN RESPONSE TO ASANAS AND MEDITATION. *EPRA International Journal of Research and Development* Vol. 7 No. 4 .
2. **Dr. K Venkatesan, D. N. (2023).** Effect of aerobic exercises and yogic practices on stress and self-confidence among male soccer players. *International Journal of Physiology, Nutrition and Physical Education*, 22-24.
3. **Dr. Sarika Chaudhary, S. K. (2021).** Effects of Buteyko Breathing Technique on Physiological and Psychological Parameters among University Football Players. *European Journal of Molecular & Clinical Medicine*, 1790-1800.

4. **Dr. Vijaya Lakshmi, D. S. (2014).** Manual for Stress Scale. *Manual for Stress Scale*. Agra, India: H.P.Bhargava Book House.
5. **Dr.M.L.Gharote. (2013).** *Guidelines for Yogic Practices*. Lonavala: Dr. Manmath M.Gharote.
6. **Li Amber W., G. C.-A. (2012).** The Effects of Yoga on Anxiety and Stress. *Alternative Medicine Review Vol. 17 Issue 1*, 21-35.
7. **Mo. Sameer Khan, S. A. (2016).** Effect of twelve weeks training of yogic asanas on . *International Journal of Physical Education, Sports and Health* , 513-517
8. **Sarah J. Hanson, P. M. (2014).** The Relationship of Personality Characteristics, Life Stress, and Coping Resources to Athletic Injury. *Journal of Sport and Exercise Psychology Volume 14: Issue 3*, 262-272.
9. **Sheikh, D. M. (2019).** IMPORTANCE OF YOGA FOR FOOTBALL PLAYERS. *ReseaRch DiRections*, 4-9.