



An Integrated Approach of Progressive Relaxation Technique and Yogic Practices for Anxiety and Aggression Control: A 12 Weeks Prospective Study

Dr. K. A Ramesh

Assistant Director of Physical Education, Anna University, BIT Campus Tiruchirappalli, Tamilnadu, India.

Received 19th March 2015, Accepted 1st June 2015

Abstract

The purpose of the study was to find out the progressive relaxation technique and yogic practices for anxiety and aggression on soccer players. Forty five Inter Collegiate men Soccer Players of Anna University, Tamilnadu, India, who participated in the Anna University, inter Zone Soccer tournament held in the year 2014-2015 were selected as subjects at random for this study. The age of the subjects were ranged from 18 to 21 years. The subjects were assigned at random into three groups of fifteen each (n=15). Group-I underwent Progressive Relaxation Technique, Group-II underwent Yogic Practices and Group-III acted as Control. All the three groups undergo their respective training for 12 weeks in addition to the regular training as per College curriculum. Anxiety and Aggression were selected as dependent variables. Anxiety was assessed by SCAT Questionnaire and Aggression was assessed by Smith's Aggressive Questionnaire. All the subjects were tested prior to and after the training period for all the selected variables. The data collected from the three groups prior to and post experimentation on dependent variables were statistically analyzed by using Analysis of Covariance (ANCOVA). Whenever the 'F' ratio for adjusted post test means was found to be significant, Scheffe's test was followed, as a post hoc test to determine which of the paired mean differences was significant. In all the cases .05 level of confidence was fixed as a level of confidence to test the hypotheses. The results of the study showed that there was a significant difference was found among all the groups. Anxiety and Aggression of Progressive Relaxation Technique and Yogic Practices group registered better performance than control group.

Keywords: Anxiety, Aggression, Yogic Practices, PMR.

© Copy Right, IJRRAS, 2015. All Rights Reserved.

Introduction

Soccer is a game of physical and mental challenges. You must execute skilled movements under generalized conditions of restricted space, limited time, physical and mental fatigue, and opposing players. You must be able to run many miles during a game, mostly at sprint like speed and respond quickly to a variety of rapidly changing situations during play. Finally, you need a thorough understanding of an individual, group and team tactics. Your ability to meet all these challenges determines how well you perform on the soccer field (Luxbacher, 1966). Soccer is a game, which calls for strenuous, continuous thrilling action and therefore, appeals to the youth the world over. The skills involved in the game are simple, natural and yet are highly stimulating and satisfying to anyone who participates in the game (Thomas, 1964).

A relaxation technique (also known as relaxation training) is any method, process, procedure, or

activity that helps a person to relax; to attain a state of increased calmness; or otherwise reduce levels of anxiety, stress or anger.

Relaxation techniques are often employed as one element of a wider stress management program and can decrease muscle tension, lower the blood pressure and slow heart and breathe rates, among other health benefits. Progressive muscle relaxation (PMR) is a technique for reducing anxiety by alternately tensing and relaxing the muscles. It was developed by American physician Edmund Jacobson in the early 1920s. Jacobson argued that since muscle tension accompanies anxiety, one can reduce anxiety by learning how to relax the muscular tension. PMR entails a physical and mental component. The physical component involves the tensing and relaxing of muscle groups over the legs, abdomen, chest, arms and face. With the eyes closed and in a sequential pattern, a tension in a given muscle group is purposefully done for approximately 10 seconds and then released for 20 seconds before continuing with the next muscle group (Jacobson, 1938).

The word Yoga has been derived from the Sanskrit word 'Yuj' which essentially means 'to join' or 'unite' etc. Yoga originated in India almost 26,000 years

Correspondence

Dr.K.A.Ramesh

E-mail: drkaramesh@gmail.com, Ph: +919791699009

back, during the period of the 'Sat Yuga', also called the Golden Age. This period became known for a time of everlasting peace and abundant blessings amongst the people, who could afford all the time to seek the truth and search within. Research says that yoga's origin dates back to more than 5,000 years ago. The discovery of the Indus- valley civilization, which is the largest civilization, opened the channels of Knowledge about the origin of yoga. As has already been stated, in Sanskrit, Yoga means "to unite". Primarily an exercise in moral and mental cultivation of poses and practices aims towards harmonizing your mind, body and soul to achieve a state of oneness with the universe. It's a spiritual practice that does not subscribe nor promote any particular faith; hence it can be practiced by all. A lifestyle choice by many, the universally timeless philosophies of yoga can be incorporated into any belief system. Stress, anxiety, ill-health, unhappiness and anger can be transformed into peacefulness, vibrant health, service and love towards all creations. The techniques are important in this process but the goal should be kept firmly in mind (Iyengar, 1981).

Anxiety means a disturbed state of mind; emotional reactivity; arousal; nervousness; and unrealistic and unpleasant state of mind. Anxiety is an essential ingredient of any competitive situation and without certain level of anxiety, there cannot be competitive performance. Neither too high, nor too low level of anxiety is conducive to sports performance. Adequate level of anxiety produces best results. Unless sports persons learn to cope up with stressful competitive situations by managing anxiety, they would fail to achieve their goal. Aggression in sport situations might also emanate from frustration. The frustration aggression hypothesis states that when one is unwanted in an attempt to achieve a goal, frustration will occur, which will then result in aggressive behaviour. In sports, frustration often is a result of an unsuccessful event or outcome; therefore, the frustration aggression hypothesis predicts that poor performance (i.e., the lack of success) precedes aggression. Early in a soccer game or season

aggression might facilitate performance, whereas later in game or season aggression might be a result of frustration. The purpose of the study was to find out the impact of isolated and combined progressive relaxation technique and yogic practices on selected psychological factors of University men Soccer players.

Methodology

The purpose of the study was to find out the progressive relaxation technique and yogic practices for anxiety and aggression on soccer players. Forty five men Soccer players who participated in the Anna University Chennai, Inter zone Soccer Tournament Organized by Department of Physical Education, J.J College of Engineering, Tiruchirappalli, Tamilnadu in the year 2014-2015, India were selected as subjects and their age ranged from 18-21 years. The selected subjects randomly assigned into three groups of fifteen each, Group-I underwent Progressive Relaxation Technique, Group-II underwent Yogic Practices and Group-III acted as control. The training period was limited to twelve weeks and for three days per week. Anxiety and Aggression were selected as dependent variables. Anxiety was assessed by SCAT Questionnaire and Aggression was assessed by Smith's Aggressive Questionnaire. The selected dependent variable were assessed prior to and post experimentation.

Progressive Relaxation Technique

The Soccer players were comfortable with the breathing technique. It is systematic technique developed by Jacobson. A Soccer player is asked to inhale and tense a specific muscle group for approximately 7 – 10 seconds followed by releasing them for 15 – 20 seconds. The Soccer player then exhales and releases the tension from the specified muscle group, concentrating on the feelings of relaxation. This procedure is repeated for a number of muscle groups with each group begin tensed and relaxed three times. The muscle groups used with the Soccer team are listed (Navaneethan & Rajan, 2010).

Table1. The Muscle groups used in the Progressive Relaxation Exercise

| Muscle Group | Instructions |
|--------------|--|
| Hand | Clench your left hand and feet the tension relax and let hand hang loosely. Same for right hand. |
| Wrists | Bend hand back, hyper extending your wrists relax. |
| Upper arms | Bend elbow towards your shoulders and tense biceps muscle relax. |
| Shoulders | Bring shoulders up toward yours ears. Relax; let your shoulders drop down. |
| Forehead | Wrinkle your forehead, raise your eyebrows relax. |
| Eyes | Close your eyes tightly relax. |
| Jaws | Clench your jaws tightly relax. |
| Tongue | Press your tongue against the roof of your mouth relax. |
| Mouth | Press your lips together tightly relax. |
| Neck | Turn your head so that your chin is over your right shoulder. Straighten and relax. |

| | |
|---------------|--|
| Neck and Jaws | Bend your head forward, pressing your chin against your chest. Straighten and relax. |
| Chest | Take a deep breath and hold it for 5 seconds, slowly exhale and relax. |
| Abdomen | Tighten your stomach muscles relax. |
| Back | Arch your backs relax. |
| Thighs | Stretch your legs in front of you. Tighten your thigh muscles relax. |
| Hamstrings | Push your heels down into floor; tighten your hamstring muscles relax. |
| Calves | Point your toes toward your head relax. |
| Feet | Curl your toes toward the bottom of your feet relax |

Analysis of the Data

All the subjects were tested prior to and after the training period for all the selected variables. The data collected from the three groups prior to and post experimentation on selected dependent variables were statistically analyzed by using Analysis of Covariance (ANCOVA). Whenever the 'F' ratio for adjusted post test means was found to be significant, Scheffe's test was

followed, as a post hoc test to determine which of the paired mean differences was significant. In all the cases .05 level of confidence was fixed as a level of confidence to test the hypotheses. The analysis of covariance on of Anxiety and Aggression of Progression Relaxation Technique group, Yogic practices group and Control group have been analyzed and presented in Table – II.

Table II. Analysis of covariance on selected variable of experimental groups

| Adjusted Post-test Means | | | | Source of Variance | Sum of Squares | df | Mean Squares | 'F' Ratio |
|--------------------------|--|-----------------------|---------------|--------------------|----------------|----|--------------|-----------|
| Criterion Variable | Progressive Relaxation Technique Group | Yogic Practices Group | Control Group | | | | | |
| Anxiety | 15.89 | 17.70 | 19.21 | Between | 80.79 | 2 | 40.40 | 32.09* |
| | | | | With in | 51.62 | 41 | 1.26 | |
| Aggression | 20.70 | 22.65 | 24.52 | Between | 109.54 | 2 | 54.77 | 26.20* |
| | | | | With in | 85.72 | 41 | 2.09 | |

* Significant at .05 level of confidence

(The table value required for Significance at .05 level with df 2 and 41 is 3.23)

From table – II, the obtained value of 'f' - ratio for Anxiety and Aggression, for adjusted post test means were 32.09 and 26.20. The obtained 'f' - ratio value of the Experimental groups were greater than the table value of 3.23 for df 2 and 41 required for significant at 0.05 level of confidence. The results of the study indicated that significant differences exist among the

adjusted post test means of Progression Relaxation Technique group and Yogic practices group on the development of Anxiety and Aggression. To determine which of the paired means had a significant difference, Scheffe's test was applied as post hoc test and the results are presented in Table III.

Table III. The scheffe's test for the differences between the adjusted post test paired means on selected variables

| Adjusted Post-test means | | | | Mean Difference | Confidence Interval |
|--------------------------|--|-----------------------|---------------|-----------------|---------------------|
| Criterion Variables | Progressive Relaxation Technique Group | Yogic Practices Group | Control Group | | |
| Anxiety | 15.89 | 17.70 | | 1.81* | 1.03 |
| | 15.89 | | 19.21 | 3.32* | 1.03 |
| | | 17.70 | 19.21 | 1.51* | 1.03 |
| Aggression | 20.70 | 22.65 | | 1.95* | 1.32 |
| | 20.70 | | 24.52 | 3.82* | 1.32 |
| | | 22.65 | 24.52 | 1.87* | 1.32 |

Table III shows that the mean difference values of Anxiety between Progressive Relaxation Technique group and yogic practices group, Progressive Relaxation Technique group and control group, Yogic Practices group and Control group (1.81, 3.32 & 1.51), Aggression between Progressive Relaxation Technique group and yogic practices group, Progressive Relaxation Technique group and control group, Yogic Practices group and Control group (1.95, 3.82 & 1.87), respectively, is greater than the confidence interval value (3.65, 4.19, 1.03 & 1.32) respectively, which was significant at .05 level of confidence. The adjusted post test mean values of Progressive Relaxation Technique group, Yoga Practices Group and Control Group on Anxiety and Aggression are graphically represented in the Figure –I and II.

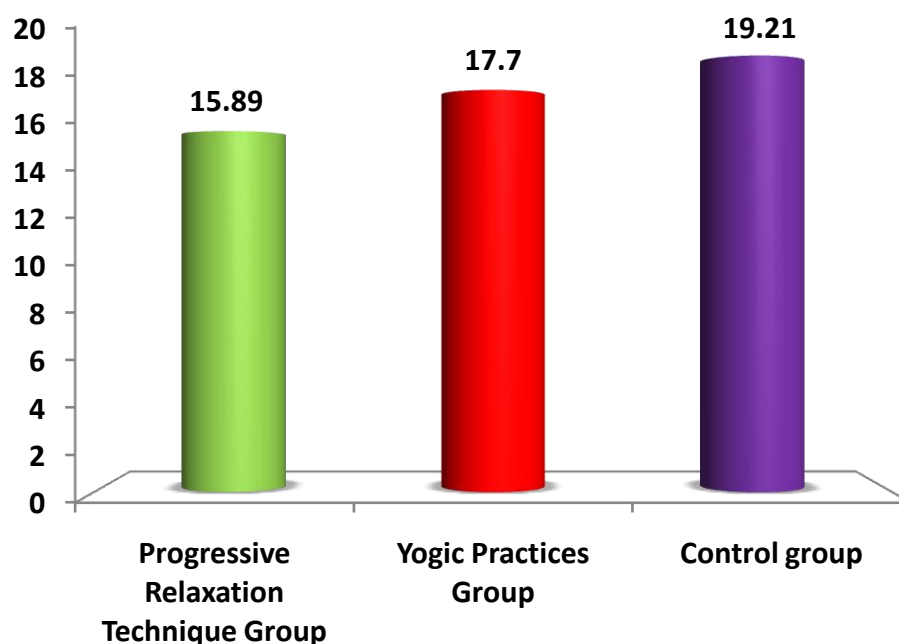
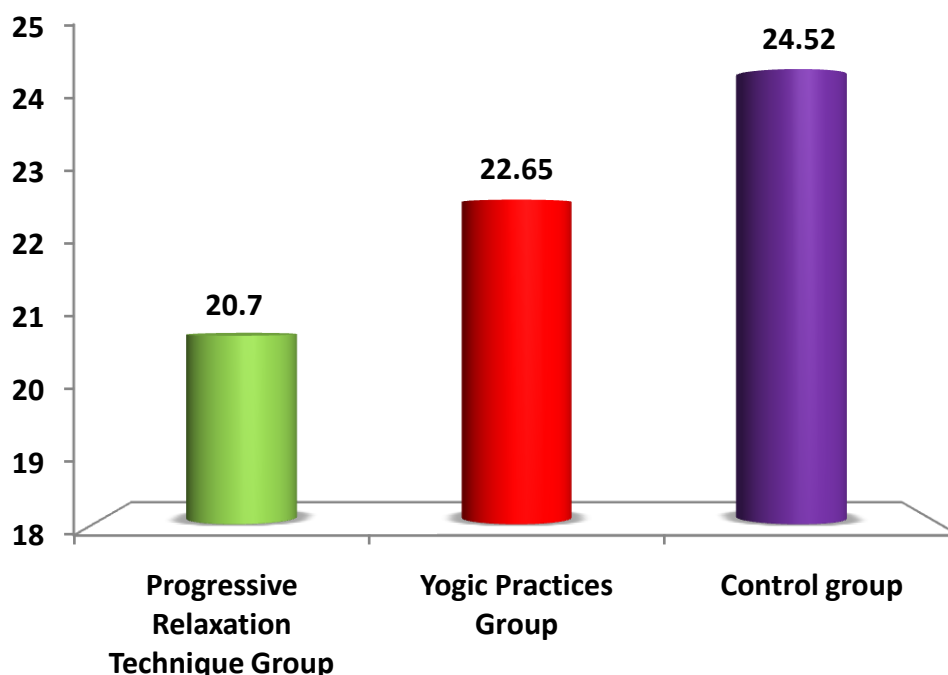
Figure I. The adjusted post test mean values of progressive relaxation technique group, yoga practices group control group on anxiety

Figure II. The adjusted post test mean values of progressive relaxation technique group, yoga practices group control group on aggression



Conclusion

From the analysis of the data, the following conclusions were drawn.

1. Three experimental groups namely Progressive Relaxation Technique and Yogic Practices groups have achieved significant decreases on Anxiety and Aggression.
2. Significant differences were found among Progressive Relaxation Technique group, Yogic Practices group and Control group towards improving the selected criterion variables.
3. It may be concluded that, Progressive Relaxation Technique group is found to be better than Yogic Practices Group and control Group to increase the performance of Anxiety and Aggression.

References

1. Iyengar, B.K.S. (1981). *Light on Pranayama*. Unwin Hyman Limited, London.
2. Jacobson, E. (1938). *Progressive relaxation*. Chicago: University of Chicago Press.
3. Joseph A. Luxbacher, (1966). *Soccer Steps to Success*, Champaign, Illinois: Human kinetics Publishers.
4. Navaneethan B. & R. Soundara Rajan (2010). Effect of Progressive Muscle Relaxation Training on Competitive Anxiety of male Inter-collegiate volleyball players, *International Journal for Physical Education and Sports*, 5, 2010, 52-53.
5. Thomas J. P. (1964). *Let Us Coach Soccer*, Madras: YMCA College of Physical Education.