Comparative analysis of progressive muscle relaxation training and Yog Nidra training effect on anxiety of athletes

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Abstract
The purpose of the present study was to find out the comparison of progressive muscle relaxation and yog nidra technique effect on anxiety level of athletes. The present investigation has been conducted on 30 athletes, these 30 athletes were divided into two groups, 15 in each group of PMR and Yog Nidra respectively. All are of 20 to 26 years of age to find out the comparison of progressive Muscle Relaxation and Yog Nidra Technique Effect on Anxiety level of Athletes. Firstly, GSR was applied on these subjects and then the PMR was given to group A and yog nidra to group B. It was given for 15 days. After that again GSR was applied on these subjects and collected pre and post test data. Then data was interpretation to find out the significance difference between pre and post test of progressive muscle relaxation on anxiety of athletes. Then another data was being interpretation of post tests of PMR and yog nidra to find out that there is a significance difference.

Keywords: Progressive, muscle, relaxation, Yog Nidra, athletes

Introduction
Human beings by nature are competitive and ambitious. A number of psychologists are engaged in analyzing and evaluating the relationship of human behavior and sports performance. A sport is a worldwide phenomenon to-day as in no period of history a sport was as popular as it is to-day. There are numerous federation/department/bdards and even international organizations like I.O.C and I.A.A.F. which are responsible for organizing sports at grass root level to the international level. All organizations encourage participants with coaching and training facilities and even at universities level the same process goes on (Melville de mellow 1979).

The unprecedented popularity and better organization of sports activities have been possible with the importance of sports for modern civilization and also with the various aims like educating children and youth for better health, better utilizatin of leisure time, recreation against psychological stresses, social adjustment, mutual understanding and finally honour for nation who excels. Within the field of physical education, sports and related discipline much emphasis upon the values of physical activity, physique and skills in events to performance. Practically all coaches and physical educators believe that ability to do an activity is only the important factor to judge athletic proficiency. but recently the expanding modern philosophy and researches in the field of physical education and sports brought in light that aside from physique, physical abilities and skills of the physical education activities and sports., there are other factors like competitive spirit, muscular strength, co-ordination ability, proper mental attitudes, determination to win, ability to accept criticism, anxiety and excitement stress which go long way in effecting the performance of individuals. (Darshan Singh Dhindsa, 1975)

Davy Vancampfort et.al (2011) to examine the effect of a single progressive muscle relaxation session compared with a control condition on state anxiety, psychological stress, fatigue and subjective well-being in patients with schizophrenia. Design: Randomized controlled trial. Setting: An acute inpatient care unit of an University Psychiatric Centre.
Subjects: Sixty-four out of 88 eligible patients with schizophrenia. Interventions: Patients were randomly assigned to either a single progressive muscle relaxation session during 25 minutes or a resting control condition with the opportunity to read for an equal amount of time. Main outcome measures: Before and after the single interventions the State anxiety inventory and the Subjective exercise experiences scale were completed. Effect sizes were calculated. Results: Only within progressive muscle relaxation, participants (n=27) showed decreased state anxiety, psychological stress and fatigue and increased subjective well-being. Between-group differences in post scores were found for state anxiety, subjective well-being and psychological stress, but not for fatigue. The effect size favoring progressive muscle relaxation was 1.26 for subjective well-being and −1.25 and −1.02 for respectively state anxiety and psychological stress. Conclusions: Progressive muscle relaxation is highly effective in reducing acute feelings of stress and anxiety in patients with schizophrenia. A reduction in stress and state anxiety is associated with an increase in subjective well-being.

Sample and Procedure: Thirty university level players of individual sports and team sports (judo, track and field, handball, cycling, baseball, softball, badminton, korfball, basketball and archery) will be recruited as subjects from the Punjab state. All subjects will be given an informed consent letter to sign to be a subject for the present study with their own will. The researcher will ask the player to fill the sports competition anxiety test (SCAT) questionnaire and after conducting the test the investigator will only select thirty high and low level anxiety players. After that the researcher will divide the subject in two different groups. These two different groups will be exposing to selected psychological relaxation techniques.

Selection of Variables
Psychological variables selected for this study are:

Independent variables
1. Progressive muscle relaxation
2. Yog nidra

Dependent variable
State Anxiety

Statistical consideration: The `t` test was applied to find out the significance difference between pre and post test of progressive muscle relaxation on anxiety of athletes

Results

Table 1: Comparison of Pre Test and Post Test of Progressive Muscle Relaxation

<table>
<thead>
<tr>
<th></th>
<th>PRE</th>
<th>S.D.</th>
<th>POST</th>
<th>S.D.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>162.6</td>
<td>41.02</td>
<td>235.47</td>
<td>56.33</td>
<td>4.05*</td>
</tr>
</tbody>
</table>

* level of significance=0.05
Degree of freedom=28
t_{0.05}=2.05

The perusal of table 1 indicates the mean score of pre test anxiety and post test anxiety of Punjab students are 162.6 and 235.47 respectively. The t-value is 4.05 which are significant at 0.05 level of confidence. Thereby indicating that there is significant difference between pre test anxiety and post test anxiety.

1. Therefore, hypothesis I which states that “There will be significant effect of Progressive muscle relaxation on state anxiety of sports person.” is accepted.

Table 2: Comparison of Pre Test and Post Test Of Yog Nidra Technique Group B

<table>
<thead>
<tr>
<th></th>
<th>PRE</th>
<th>S.D.</th>
<th>POST</th>
<th>S.D.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>268.73</td>
<td>137.09</td>
<td>341.13</td>
<td>140.37</td>
<td>1.43ns</td>
</tr>
</tbody>
</table>

Degree of freedom=28
t_{0.05}=2.05

level of significance=0.05

The above of table 2 indicates the mean scores of group B of pre test and post test of anxiety of Punjab players are 268.73 and 341.13. The t-value is 1.43, which were not significant at 0.05 level of confidence. There by indicating that there is no significant difference between pre test and post test anxiety. Therefore, hypothesis 2 which states that “There will be significant effect of yog nidra on state anxiety of athletes.” is not accepted

Table 3: Comparison between Post Tests of Anxiety of Pmr and Yog Nidra Techniques

<table>
<thead>
<tr>
<th></th>
<th>POST PMR</th>
<th>S.D.</th>
<th>POST YOG NIDRA</th>
<th>S.D.</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>235.47</td>
<td>56.33</td>
<td>341.13</td>
<td>140.37</td>
<td>2.71*</td>
</tr>
</tbody>
</table>

Degree of freedom=28
t_{0.05}=2.05

level of significance=0.05

The inspection of table 3 indicates the mean scores of post tests of anxiety of progressive muscle relaxation and yog nidra of Punjab athletes are 235.47 and 341.13.the t-value is 2.71, which were significant at 0.05 level of confidence. Thereby indicating that there is significant difference post test anxiety of PMR and yog nidra of Punjab athletes.

Therefore, hypothesis 3 which states that “There will be significant difference between post -test anxiety of PMR and post test co anxiety of yog nidra of athletes.” Is accepted.

Discussion and Finding: The present investigation has been conducted on 30 athletes, these 30 athletes were divided into two groups, 15 in each group of PMR and Yog Nidra respectively. All are of 20 to 26 years of age to find out the comparison of progressive Muscle Relaxation and Yog Nidra Technique Effect on Anxiety level of Athletes. Firstly, GSR was applied on these subjects and then the PMR was given to group A and yog nidra to group B. It was given for 15 days. After that again GSR was applied on these subjects and collected pre and post test data. Then data was interpretation to find out the significance difference between pre and post test of progressive muscle relaxation on anxiety of athletes.

Then another data was being interpretation of post tests of PMR and yog nidra to find out that there is a significance difference. As collected data shows that there is regular and steady decrease in anxiety of each individual, the following study shows similar results Richard J. Fehring (1983), Davy Vancampfort et al. (2011), Martens, et al. (1977), Blumenstein, Bar-Eli, and Tenebaum (1995).
Therefore, the result of this study reveals that progressive muscle relaxation technique had significant effect and yoganidra had no significant effect on anxiety.

References