EFFECTS OF SIX MONTHS OF TRATAK TRAINING ON SELECTED PSYCHOLOGICAL VARIABLES AMONG MALE AND FEMALE STUDENTS OF HIGH SCHOOL

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Abstract: The subjects for this study were 100 (50 male and 50 female) High School Students of Bijnor Distt. All the subjects were divided into four groups i.e two experimental and two control groups in respective sex category the age of the subjects will range from 16 to 21 years. Psychological Variables: State Anxiety, Cognitive Anxiety, Stress, Concentration and self Confidence. The particular design used would single group design Tratak training sessions was held thrice a week, for duration of 2 hours. Training was imparted for a period of 8 weeks to see significant changes in the psychological variables of the subjects. The data on psychological variables were collected by administering following standard tests: State anxiety was measured by SCAT questionnaire., Cognitive anxiety was measured by CSCAT questionnaire. To determine the effect of tratak on selected psychological variables paired T-Test will be employed at. 05 level of significance. Pearson's product moment correlation coefficient was used to establish relationship among the pre and post test scores of the respective groups.

Key words: Tratak, Psychological Variables, State Anxiety, Cognitive Anxiety

I. INTRODUCTION

Physical education and sports have been part of human life almost since the time immemorial, it have been indispensable to mankind and become part of his culture, today physical education and sports have emerged as universal cultural phenomena. It is a comprehensive concept and not limited to all-round development of individuals, It has potentials not only to touch the lives of individuals but also to form an important and enduring part of the culture in which they live.

Yoga is an ancient discipline designed to bring balance and health to the physical, mental, emotional, and spiritual dimensions of the individual. It is long popular practice in India that has become increasingly more common in Western society. “Yoga” means union of our individual consciousness with the Universal Divine Consciousness in a super-conscious state known as Samadhi.

Today many people in the claim to practice yoga for its health benefits. Without consciously adopting Hindu religious perspectives which underlies the practice and usually become apparent in more advanced stages of instruction. Elementary courses of tratak on physical exercises consisting of various postures and breathing techniques. A growing body of research evidence supports the belief that certain yoga techniques may improve physical and mental
health through down-regulation of the hypothalamus pituitary adrenal (HPA) axis and the sympathetic nervous system.

Tratak meditation is one very powerful ancient practice that can help a person to make some very significant spiritual progress. People also call it fixed gazing meditation because this technique is all about fixing your eye and focus on external objects, so that you could use it as an instrument to become more aware of your mind activities. This meditation requires you to be persistent with your efforts for a very long time before you expect to see any significant change in yourself.

Various Forms of Tratak Meditation

As I have mentioned, this method makes you gaze at an external object, so, you have many options available to choose from and four such well-known types of Tratak are:

1. Tratak on a flame  
   Here the practitioner puts his focus on the flame of a candle or oil lamp. (known as Diya Tratak in Hindi)
2. Tratak on a point on wall or board  
   – A practitioner here gains a greater ability to focus by gazing on a dark spot drawn on the wall or board. (known as Bindu Tratak in Hindi)
3. Mirror Tratak  
   Here the practitioner observes his mirror reflection. (also known as Darpan Tratak in Hindi)
4. Tratak on an image  
   - This done by concentrating on any particular image, it could be some picture related to your faith or religion

II. The objectives of the study will be as follows:

1. To determine the effect of Tratak Training on selected psychological variables in relation to male high school students of Bijnor District.
2. To determine the effect of Tratak Training on selected psychological variables in relation to female high school students of Bijnor District

III. On the basis of study reviewed and own understanding of the scholar about the problem, it is hypothesized that:

1. It may be hypothesized that Tratak will have different degree of effect on selected psychological variables in relation to high school male and female students of Bijnor District.
2. It may be hypothesized that Tratak will have different degree of relationship on selected psychological variables in relation to high school male and female students of Bijnor District.

IV. METHODOLOGY

The subjects for this study were 100 (50 male and 50 female) High School Students of Bijnor Distt. All the subjects were divided into four groups i.e two experimental and two control groups in respective sex category the age of the subjects will range from 16 to 21 years. The particular design used would single group design Tratak training sessions was held thrice a week, for duration of 2 hours. Training was imparted for a period of 8 weeks to see significant changes in the psychological variables of the subjects. The data on psychological variables were collected by administering following standard tests: State anxiety was measured by SCAT questionnaire, Cognitive anxiety was measured by CSCAT questionnaire, To determine the effect of tratak on selected psychological variables paired T-Test will be employed at. 05 level of significance. Pearson’s product moment correlation coefficient was used to establish relationship among the pre and post test scores of the respective groups.
V. ANALYSIS
The results pertaining to find the relationship and to find out the significant difference if any, between pre and post data for anxiety were found out with the help of ‘T- Ratio. The analysis of data pertaining to pre and post data for anxiety is presented in Table 1.

Table 1
MEAN AND STANDARD DEVIATION (PRE AND POST TEST) OF STATE ANXIETY OF BIJNOR DISTRICT MALE SUBJECTS IN SCAT QUESTIONNAIRE

<table>
<thead>
<tr>
<th>Nature of Test</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test</td>
<td>50</td>
<td>267.4</td>
<td>34.60</td>
</tr>
<tr>
<td>Post Test</td>
<td>50</td>
<td>269.78</td>
<td>34.64</td>
</tr>
</tbody>
</table>

The means and standard deviations for pre and post test pre and post data for state anxiety it was found that the score of the subjects was normal as per the national standards in pre test, difference is very significant as the score is in points and higher the score better the score, hence it could be said that the yogic practice has improved the state anxiety level of the subjects. The standard deviation in pre and post test was more or less same which suggests that the scores did not variate much among the subjects in pre as well as post test being from the same age group and sex.

To find out the significant difference if any, between pre and post test of anxiety of Bijnor District in SCAT Questionnaire were found out with the help of “Paired T-Test”. The analysis of data pertaining to is presented in Table 2.

Table 2
PAIRED T-TEST FOR PRE AND POST TEST WITH RESPECT TO STATE ANXIETY OF BIJNOR DISTRICT MALE SUBJECTS IN SCAT QUESTIONNAIRE

<table>
<thead>
<tr>
<th>Variable</th>
<th>Groups</th>
<th>df</th>
<th>T- Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score in SCAT Questionnaire</td>
<td>2</td>
<td>49</td>
<td>12.67*</td>
</tr>
</tbody>
</table>

*Significant at .05 level of confidence.

It is evident from Table - 2 that variability exists among the pre and post test of state anxiety of Bijnor District in SCAT Questionnaire. The difference is very significant as the score is in points and higher the timing better the score, hence it could be said that the yogic practice has improved the anxiety of the subjects. Difference between the means of the pre and post test of anxiety of Bijnor District in SCAT Questionnaire, is shown in Fig.- 1.

FIG.1
BAR DIAGRAM REPRESENTING MEANS OF STATE ANXIETY OF BIJNOR DISTRICT IN SCAT QUESTIONNAIRE

The results pertaining to find the relationship and to find out the significant difference if any, between pre and post data for state anxiety were found out with the help of ‘T- Ratio. The analysis of data pertaining to pre and post data for anxiety is presented in Table 3.
Table 3

<table>
<thead>
<tr>
<th>Nature of Test</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test</td>
<td>50</td>
<td>269.80</td>
<td>34.64</td>
</tr>
<tr>
<td>Post Test</td>
<td>50</td>
<td>273.85</td>
<td>35.65</td>
</tr>
</tbody>
</table>

The means and standard deviations for pre and post test pre and post data for state anxiety it was found that the score of the subjects was normal as per the national standards in pre test, difference is very significant as the score is in points and higher the score better the score, hence it could be said that the yogic practice has improved the state anxiety level of the subjects. The standard deviation in pre and post test was more or less same which suggests that the scores did not variate much among the subjects in pre as well as post test being from the same age group and sex.

To find out the significant difference if any, between pre and post test of anxiety of Bijnor District in SCAT Questionnaire were found out with the help of “Paired T-Test”. The analysis of data pertaining to is presented in Table 2.

**TABLE 4**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Groups</th>
<th>df</th>
<th>T- Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score in SCAT Questionnaire</td>
<td>2</td>
<td>49</td>
<td>14.67*</td>
</tr>
</tbody>
</table>

*Significant at .05 level of confidence.

T.05 (2.49) = 0.996

It is evident from Table - 2 that variability exists among the pre and post test of anxiety of Bijnor District in SCAT Questionnaire. The difference is very significant as the score is in points and higher the timing better the score, hence it could be said that the yogic practice has improved the anxiety of the subjects.

Difference between the means of the pre and post test of anxiety of Bijnor District in SCAT Questionnaire, is shown in Fig. - 2.

**FIG.2**

**BAR DIAGRAM REPRESENTING MEANS OF STATE ANXIETY OF BIJNOR DISTRICT IN SCAT QUESTIONARRE**

The results pertaining to find the relationship and to find out the significant difference if any, between pre and post data for cognitive anxiety were found out with the help of ‘T- Ratio. The analysis of data pertaining to pre and post data for cognitive anxiety is presented in Table 5.
Table-5
MEAN AND STANDARD DEVIATION (PRE AND POST TEST) OF COGNITIVE ANXIETY OF BIJNOR DISTRICT MALE SUBJECTS IN CSCAT QUESTIONARRE

<table>
<thead>
<tr>
<th>Nature of Test</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test</td>
<td>50</td>
<td>268.80</td>
<td>35.68</td>
</tr>
<tr>
<td>Post Test</td>
<td>50</td>
<td>270.86</td>
<td>35.65</td>
</tr>
</tbody>
</table>

The means and standard deviations for pre and post test pre and post data for cognitive anxiety it was found that the score of the subjects was normal as per the national standards in pre test, difference is very significant as the score is in points and higher the score better the score, hence it could be said that the yogic practice has improved the cognitive anxiety level of the subjects. The standard deviation in pre and post test was more or less same which suggests that the scores did not variate much among the subjects in pre as well as post test being from the same age group and sex.

To find out the significant difference if any, between pre and post test of anxiety of Bijnor District in CSCAT Questionnaire were found out with the help of “Paired T-Test”. The analysis of data pertaining to is presented in Table 6.

TABLE-6
PAIRED T-TEST FOR PRE AND POST TEST WITH RESPECT TO COGNITIVE ANXIETY OF BIJNOR DISTRICT MALE SUBJECTS IN CSCAT QUESTIONARRE

<table>
<thead>
<tr>
<th>Variable</th>
<th>Groups</th>
<th>df</th>
<th>T- Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score in CSCAT Questionnaire</td>
<td>2</td>
<td>49</td>
<td>13.67*</td>
</tr>
</tbody>
</table>

*Significant at .05 level of confidence.

It is evident from Table 6 that variability exists among the pre and post test of cognitive anxiety of Bijnor District in CSCAT Questionnaire. The difference is very significant as the score is in points and higher the timing said that the yogic practice has improved the anxiety of the subjects.

Difference between the means of the pre and post test of cognitive anxiety of Bijnor District in CSCAT Questionnaire, is shown in Fig. 3.

FIG.3
BAR DIAGRAM REPRESENTING MEANS OF COGNITIVE ANXIETY OF BIJNOR DISTRICT IN CSCAT QUESTIONARRE

The results pertaining to find the relationship and to find out the significant difference if any, between pre and post data for anxiety were found out with the help of ‘T- Ratio. The analysis of data pertaining to pre and post data for cognitive anxiety is presented in Table 7.
Table-7

MEAN AND STANDARD DEVIATION (PRE AND POST TEST) OF COGNITIVE ANXIETY OF BIJNOR DISTRICT FEMALE SUBJECTS IN CSCAT QUESTIONNAIRE

<table>
<thead>
<tr>
<th>Nature of Test</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Test</td>
<td>50</td>
<td>258.80</td>
<td>36.68</td>
</tr>
<tr>
<td>Post Test</td>
<td>50</td>
<td>275.86</td>
<td>30.65</td>
</tr>
</tbody>
</table>

The means and standard deviations for pre and post test were found to be normal as per the national standards in pre test, difference is very significant as the score is in points and higher the score better the score, hence it could be said that the yogic practice has improved the cognitive anxiety level of the subjects. The standard deviation in pre and post test was more or less same which suggests that the scores did not variate much among the subjects in pre as well as post test being from the same age group and sex.

To find out the significant difference if any, between pre and post test of anxiety of Bijnor District in CSCAT Questionnaire were found out with the help of “Paired T-Test”. The analysis of data pertaining to is presented in Table 8.

TABLE-8

PAIRED T-TEST FOR PRE AND POST TEST WITH RESPECT TO COGNITIVE ANXIETY OF BIJNOR DISTRICT FEMALE SUBJECTS IN CSCAT QUESTIONNAIRE

<table>
<thead>
<tr>
<th>Variable</th>
<th>Groups</th>
<th>df</th>
<th>T- Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score in CSCAT Questionnaire</td>
<td>2</td>
<td>49</td>
<td>11.67*</td>
</tr>
</tbody>
</table>

*Significant at .05 level of confidence.

T.05 (2.49) = 0.996

It is evident from Table 8 that variability exists among the pre and post test of cognitive anxiety of Bijnor District in CSCAT Questionnaire. The difference is very significant as the score is in points and higher the score better the score, hence it could be said that the yogic practice has improved the anxiety of the subjects. The difference between the means of the pre and post test of cognitive anxiety of Bijnor District in CSCAT Questionnaire, is shown in Fig. 4.

VI. DISCUSSION OF FINDINGS

1. Paired T-Test was applied for testing the difference between the pre and post test in terms of pre and post test of anxiety of male subjects Bijnor District in SCAT Questionnaire. The groups showed significant difference as lower the timing better the performance. This depicts that yogic practices improve the anxiety of the subjects and yogic asanas.

2. Paired T-Test was applied for testing the difference between the pre and post test in terms of dynamic pre and post test of state anxiety of female subjects Bijnor District in SCAT Questionnaire. The groups showed
significant difference as lower the timing better the performance. This depicts that yogic practices improve the anxiety of the subjects and yogic asanas.

3. Paired T-Test was applied for testing the difference between the pre and post test in terms of dynamic pre and post test of cognitive anxiety of male subjects Bijnor District in CSCAT Questionnaire. The groups showed significant difference as lower the timing better the performance. This depicts that yogic practices improve the anxiety of the subjects and yogic asanas.

4. Paired T-Test was applied for testing the difference between the pre and post test in terms of dynamic pre and post test of cognitive anxiety of male subjects Bijnor District in CSCAT Questionnaire. The groups showed significant difference as lower the timing better the performance. This depicts that yogic practices improve the anxiety of the subjects and yogic asanas.

VII. CONCLUSIONS

1. Paired T-Test was applied for testing the difference between the pre and post test in terms of state anxiety of male subjects Bijnor District in SCAT Questionnaire. The groups showed significant difference as lower the timing better the performance. This depicts that yogic practices improve the anxiety of the subjects and yogic asanas.

2. Paired T-Test was applied for testing the difference between the pre and post test in terms of dynamic pre and post test of state anxiety of female subjects Bijnor District in SCAT Questionnaire. The groups showed significant difference as lower the timing better the performance. This depicts that yogic practices improve the anxiety of the subjects and yogic asanas.

3. Paired T-Test was applied for testing the difference between the pre and post test in terms of dynamic pre and post test of cognitive anxiety of male subjects Bijnor District in CSCAT Questionnaire. The groups showed significant difference as lower the timing better the performance. This depicts that yogic practices improve the anxiety of the subjects and yogic asanas.

4. Paired T-Test was applied for testing the difference between the pre and post test in terms of dynamic pre and post test of cognitive anxiety of male subjects Bijnor District in CSCAT Questionnaire. The groups showed significant difference as lower the timing better the performance. This depicts that yogic practices improve the anxiety of the subjects and yogic asanas.

VIII. DISCUSSION OF HYPOTHESIS

1. It was hypothesized that Tratak will not have different degree of effect on selected psychological variables in relation to high school male and female students of Bijnor District may be rejected.

2. It was hypothesized that Tratak will not have different degree of relationship on selected psychological variables in relation to high school male and female students of Bijnor District may be rejected.

XI. REFERENCES

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