The effect of yoga and physical exercise on anxiety variables among the secondary school students of Vijayapura in Karnataka

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Abstract
The purpose of the study was intended to assess the effect of yogic and physical exercises on Cardiovascular Endurance for this purpose hundred fifty students studying in various classes of Sanganbasaveshawar school of Vijayapaur in Karnataka state in age group of 14-16 years were selected. They were divided into three equal groups, each group consist of 100 subjects, in which group-I underwent yoga practices, group-II underwent physical exercises and group –III acted as control group who were not allowed to participated and receive any special treatment apart from their regular curriculum classes’. The training period for this study was six days a week for twelve weeks, the before and after the training period, the subjects were tested for agility. The analysis of covariance (ANCOVA) was applied to find out which group has better in performance, whenever “F” ratio for adjusted test was found to be significant for adjusted post-test means Scheffe’s test was followed, as a post hoc to determine which of the paired means differ significantly.

It was drawn conclusions that after the training of yoga and physical exercise both training has improved in their academic anxiety, but significant difference was noticed in anxiety behaviour among the physical exercise group comparing their yoga group.

Keywords: Yoga, physical exercise, Cardiovascular Endurance

Introduction
Yoga is the art and science of maintaining physical and mental wellbeing that has its origin in India, is among the most ancient yet vibrant living traditions that is getting increasingly popular today. A potent stress buster, yoga is an instrument of self-evolvement and enlighten, through physical and mental well-being. Math-dimension it enhances the quality of our lives at so many levels. One aspect of yoga’s benefits is to explore the bond between health and beauty.

The word Yoga derived from Sanskrit word “YUJ” meaning to yoke, join or unite. This implies joining or integrating all aspects of the individual body with mind with soul to achieve a happy, balanced and useful life, and spiritually, uniting the individual with the supreme.

Physical exercise in any organised activity that involves continuous participation and effects on whole body. Exercise occupies a leading role in keeping a person fit. It will be quite difficult to adjunct one’s life in terms on stress, diet, and sleep and so on without proper exercise.

Regular practices of asana maintain the Physical body in an optimum condition and promote health even in an unhealthy body. Through asana practice, the dormant energy potential is released and experienced as increased confidence in all areas of life, yogasna have a deeper significance value in the development of the Physical, Mental, and spiritual personality, whereas pure exercise only have physical effect on muscles and bones.

Physical exercises are performed quickly and with a lot of heavy breathing, yogasna are performed slowly with relaxation and concentration. The benefits of various yoga techniques have been professed to improve body muscular strength, performance, stress reduction, attainment of inner peace and self realization.
Anxiety
Anxiety is a physiological response to a real or emarginated threat. It is a complex emotional state characterized by a general fear or foreboding usually accompanied by tension. It is related to apprehension and tear and is frequently associated with failure, either real or anticipated. It often has to do with inter-personal relations and social situations. Feeling of rejection and insecurity are usually a part of anxiety. According to Frost (1971), anxiety is “an uneasiness and feeling of foreboding often accompanied by a strong desire to excel”. Hence, anxiety state arises from faulty adaptations to the stress and strains of life and is caused by over actions in an attempt to meet these difficulties.

Schools are dynamic setting for promoting health and wellness through various correlated areas such as physical education and sports. There is a growing awareness that the health and psycho-social wellbeing of young children is of paramount importance and schools can provide a strategic means of children’s health, self-esteem, life skills and behaviour.

The yoga and physical exercise are the means to notice all round and harmonious development among school students in the modern society, hence scholar made an attempt explore the “The Effect of Yoga and Physical Exercise on Anxiety Variables among the secondary school students of Vijayapura in Karnataka” The present study was carried out in the background of the experimental method.

Hypothesis
1. There would be significant effect of yoga and physical exercises training on improvement of anxiety variables between different groups of secondary school students.
2. The training of Yoga exercises leads and develops control academic anxiety behaviour among secondary school students
3. The is no significant difference of yoga and Physical exercise training in improving Anxiety variables among the different sub group of secondary school students

Objectives
To assess the effect of yoga and Physical exercises on Anxiety variables between different sub group of secondary school students

Methodology
The purpose of the study was to find out effect of yogasan and Physical exercises on psychological variables such as anxiety behaviour between different experimental group, to achieve the purpose of the study 300 students studying in the Government High School Nagathan and Sanganbasaveshawar school of Vijayapur district of Karnataka (India) has selected randomly as subject for the experiment, they were divided into two equal groups, each group consists of the 100 students. Group I and Group II underwent yogasan and physical; exercises training for six days per week for twelve weeks. Group III Acted as control that did not undergo any special training programme apart from their regular physical education classes programme. The data related academic anxiety behaviour was collected at prior and the after the experimental session by administering standardized questioner devised by Prof. A.K. Singh (Patna) Dr. A.Sen. Gupta on ss secondary school students of residential school in Vijayapura district of Karnataka. The analyses of covariance were used to analyze the significant difference if any between the groups. The 0.05 level of confidence was fixed as the level of significance to test the ‘F’ ratio obtained by the analysis of covariance, which was considered as an appropriate.

Analysis of the data
The data related aggressive behaviour was collected at prior and the after the experimental session by administering standardized question secondary school students of residential school in Vijayapura district of Karnataka, the results were analyzed and presented in the following table -I

Anxiety behaviour:
It was hypothesised that there would be significant difference in their Anxiety behaviour between the Yoga and Physical exercises group. The hypothesis was formulated on the rational that regular practices of asana and meditative technique s of yoga is going develop mastery over the Emotion and cultivates skills of managing anxiety and aggressive behaviour among the practitioners.

Table 1: Computation of Covariance of academic Anxiety level of control Group, Experimental group1 (Yogic Exercises) and Experimental group 2 (Physical Exercises) of Secondary school students.

<table>
<thead>
<tr>
<th>Source Variance</th>
<th>Df</th>
<th>Sum of the Square</th>
<th>Mean square</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between the group</td>
<td>2</td>
<td>130.341</td>
<td>65.17</td>
<td>71.608</td>
</tr>
<tr>
<td>Within the group</td>
<td>296</td>
<td>132.875</td>
<td>0.916</td>
<td>71.608</td>
</tr>
</tbody>
</table>

Table 2: Anxiety mean differences of control group (A), Experimental group 1(B) (Yogic Exercise) and experimental group 2(C) (Physical Exercise)

<table>
<thead>
<tr>
<th>Group</th>
<th>M1</th>
<th>M2</th>
<th>Diff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group C &amp; E1</td>
<td>12.983</td>
<td>11.047</td>
<td>1.936</td>
</tr>
<tr>
<td>Group C &amp; E2</td>
<td>12.983</td>
<td>10.936</td>
<td>2.047</td>
</tr>
<tr>
<td>Group E1 &amp; E2</td>
<td>11.047</td>
<td>10.936</td>
<td>0.111</td>
</tr>
</tbody>
</table>

Results and findings (Anxiety behaviour)
Table I shows the “F” ratio of 71.608 which was greater than table value of 0.05 level. Hence Scheff’s Post Hoc test was employed to the data the score is 1.130, which was also found significant. Table-VII A (shows Scheff’s Post Hoc test) shows the mean difference between the three groups. The difference between Group A (control group) and Group B (Yogic exercise) was 1.936 the difference between the Group A (control group) and Group C Experimental group (Physical Exercise) was 2.047. The difference between Group B Experimental groups 1 (Yogic Exercise) and Experimental group II (Physical exercise) was -0.111.

Discussion and findings of Anxiety Behaviour
When we refer Table- 2 it was reveals that computed F ratio was greater than the table Value and data was employed to find-out the adjusted paired means that was also significant. From the statistical analysis of the data, it was found that Physical exercise has shown less mean score and reduced academic anxiety behaviour than their counter part (Yogic exercise and control group). It may be due to the reason that Physical exercises are going develop competency and mastery over the emotions, confidence, positive attitudes, characters and behaviour of the practitioners. Yogic practices could be useful in the management of Anxiety, which is mainly focus to the mental (Manomaya kosha) and intellectual (Vijnanamaya kosha) layers. The imbalance in the brain...
functions leads to imbalance in the autonomous nervous system and the unwanted, unrealistic notions and blockages in the intellectual layer which leads to anxiety. The practice of Yogasana keeps the body in relaxed stage; pranayama practices lower the dominance of sympathetic nervous system and the meditation calm down the mind. Chanting of mantras divert the mind from unwanted thoughts, fears etc. Hence study reveals that various emotions could be improved by involving in Physical exercises regularly and that result in managing anxiety and Emotion, hence, formulated hypothesis there would be significant difference in their anxiety behaviour between yoga and Physical exercises is statistically proved and formulated hypothesis is rejected and alternative hypothesis accepted.

Fig 1: showing the mean difference in Anxiety behaviour of yoga and Physical exercises practitioners

**Conclusion**

The practice of physical exercises were played significant role in developing anxiety factors among the rural secondary school students, hence it was recommended to that the physical exercises and yoga should be part of curriculum at secondary school system and must teach and practice effectively to develops the harmonious development of personify of students and achieve the academic excellence at school level.

**References**

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