EFFECT OF YOGASANAS AND SURYANAMASKAR ON SELECTED PSYCHOLOGICAL VARIABLES AMONG COLLEGE MEN VOLLEYBALL PLAYERS.

Dr. S.V. Arun

Affiliations:
1 Director of Physical Education, C. Kandaswami Naidu College for Men, Chennai - 600102.

ABSTRACT

The purpose of the study was to find the Effect of Yogasanas and Suryanamaskar on selected psychological variables among college men Volleyball players. To achieve the purpose ninety inter collegiate men volleyball players aged between eighteen to twenty five were selected as subjects. The subjects were divided into three equal groups. Group I Undergone Yogasanas, Group II Undergone Suryanamaskar, Group – III acted as control group. The subjects were divided into three groups of 30 subjects each. The duration was restricted to six weeks and number of session confined to six days. The physiological variables like anxiety and negative feelings of Volley ball players found significant reduction due to Yogasanas and Suryanamaskar as compared to Control Group. The psychological variables like self concept and skill learning found significant improvement due to Yogasanas and Suryanamaskar. Pretest, Post test, Adjusted mean, “F” ratio and Scheffe’s test were used to analyze the data and level of confidence was set at 0.05

Key Words: Yogasanas, Suryanamaskar, Anxiety, Self Concept, Volleyball players
1. INTRODUCTION

Yoga is an ancient discipline designed to bring balance and health to physical, mental, emotional, spiritual dimension of the Individual. Yoga in its own way a system of knowledge, is a science of being, a psychophysical system. Yoga means to attain physical and mental purification. Yoga stretching is recommended from head to foot which will not only affect all the muscles of a particular system (or) organ but almost all the muscles involved in the games.

Yoga is a tool that can deepen and benefit anyone, of any religion. It does not conflict with personal beliefs; it is simply a vehicle to help one transform oneself by promoting conscious connection with oneself, the world, and the highest truth. There are many traditional paths of yoga, including tantra, mantra, kundalini, bhakti, jnana, karma, raja yoga, and others, all of which have their own techniques to awaken these connections. According to the classic text of the Yoga Sutras of Patanjali, “yoga” is the complete “inhibition of the modifications of the mind” (Taimini, 1999) or quieting of the constant chatter in one’s mind so that our True Selves can manifest, rest in our own true nature and be free of suffering. Disease, as described in the sutras, is said to be an impediment to spiritual practice, growth and freedom from suffering (Taimini, 1999). Traditional yogic practices include breath control and techniques (pranayama), meditation (including mindfulness), the adoption of specific bodily postures (asanas) and self-reflection (Taimini, 1999 & Feuerstein, 2008).

Yoga is a definite means of physical, mental, emotional and spiritual development, as it improves, strengthens and develops both the physical and mental personality. Everybody wants a fit and efficient body and mind. Remember that the mind and body act and react on each other. Mental ailments cause physical ailments and vice versa (Satyananda, 2005).

Within the past decade, yoga has infiltrated not only Western culture, but also Western medicine. The more we learn about this ancient practice, the more we realize that its benefits go far beyond increased flexibility and muscle tone. A common misunderstanding is that yoga predominantly focuses on increasing flexibility; however, although Hatha Yoga, or the physical practice of yoga, does emphasize appropriate postural alignment, musculoskeletal strength and endurance as well as balance, the study and practice of yoga incorporates mindfulness-based practices such as mindful breathing techniques, focused concentration, meditation and self-reflection.

Asanas are special patterns of postures that stabilize the mind and the body through static stretching Gharote and Ganguly, 2001). Regular practice of sun salutation regulates pingala nadi (right nostril), whether it is underactive or overactive, thus leading to a balanced energy system at both the mental and physical levels (Vivekananda, 2005).

Yogasanas and Suryanamaskar is very important for youth, children. With this practices they can reduce their anxiety level and increase the skill learning. The brain and spinal cord constitute central nervous system and nervous impulse could be controlled by practicing yogasanas properly and regularly. It also gives massage to spinal cord. This is the scientific method of exercise for controlling tension, anxiety and improving self concept, skill learning based on the rules governing the working of the muscle in the body which are under control of the will.

Prasanna & Vaithianathan (2016) find out effect of varied yogic practices on selected psychological variables among obese men. The result of the study indicated the significant improvement in self-confidence after the experimental period.
Jayachandran (2014) revealed that the experimental group shown the significant improvement in all the selected variables where as in control only 50 m dash and vital capacity having significant improvement and all the remaining variables are not having any significant improvement. The results revealed the effectiveness of yogasanas in physical fitness, physiological systems and psychological efficiency of school students.

Sharma (2014) revealed that the yogic practices (suryanamaskar) is one of the best tool to manage the stress level especially among the students and provides the individual with refreshing experiences, and manage the stress to a great level and also the individual get rid of taking psychotic and mood refreshing drugs.

Laxmi and Murugavel (2013) indicated that eight weeks asanas and the pranayama training programme significant produced changes in mood state anxiety and stress. Tripathi, and Bharadwaj (2013) showed that self-concept and attitude of school boys were improved significantly among Surya Namaskara group after three month of practice Surya Namaskara as a treatment. Kundu and Pramanik (2014) indicated improvement in anxiety and self concept of school going children by practicing asanas, pranayama and combination of asana pranayama.

Many studies have proved that yoga and meditation are beneficial in cases of psychiatric and psychosomatic disorder like stress, aggression, anxiety, depression, mental retardation, hyper tension, diabetes, etc (Mark 2004). Lark (1993) said that practicing Yoga will “provide effective relief of anxiety and stress.

Multiple studies have shown that yoga can positively impact the body in many ways, including helping to regulate blood glucose levels, improve musculoskeletal ailments and keeping the cardiovascular system in tune. It also has been shown to have important psychological benefits, as the practice of yoga can help to increase mental energy and positive feelings, and decrease negative feelings of aggressiveness, depression and anxiety (Stephens, 2017).

2. METHODOLOGY

2.1 Selection of Subjects

To achieve the purpose ninety (N=90) inter collegiate men volleyball players aged between eighteen to twenty five were selected as subjects. The subjects were divided into equal groups of thirty subjects each. The duration of the experimental period was restricted to six weeks and number of session per work confined to six days.

2.2 Selection of Variables

Variables are the conditions that the experimenter manipulates controls or observes. The variables are anxiety, self concept, negative feelings and skill learning. Dependant variables: Anxiety and Self concept, Independent variables: Yogasanas and Suryanamaskar.
3. RESULTS

### TABLE 1
ANALYSIS OF CO-VARIANCE FOR YOGASAN, SURYA NAMASKAR AND CONTROL GROUPS ON ANXIETY OF COLLEGE MEN VOLLEYBALL PLAYERS

<table>
<thead>
<tr>
<th></th>
<th>Yogasan Group</th>
<th>Surya Namaskar Group</th>
<th>Control Group</th>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest mean</td>
<td>53.23</td>
<td>52.43</td>
<td>52.87</td>
<td>B</td>
<td>9.62</td>
<td>2</td>
<td>4.811</td>
<td>0.20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>W</td>
<td>2056.20</td>
<td>87</td>
<td>23.63</td>
<td></td>
</tr>
<tr>
<td>Post test mean</td>
<td>50.16</td>
<td>49.67</td>
<td>52.63</td>
<td>B</td>
<td>151.36</td>
<td>2</td>
<td>75.68</td>
<td>3.51*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>W</td>
<td>1873.80</td>
<td>87</td>
<td>51.54</td>
<td></td>
</tr>
<tr>
<td>Adjusted Mean</td>
<td>49.82</td>
<td>50.03</td>
<td>52.61</td>
<td>B</td>
<td>145.08</td>
<td>2</td>
<td>72.54</td>
<td>26.96*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>W</td>
<td>231.381</td>
<td>86</td>
<td>2.69</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at .05 level
F 0.05 (2, 87) = 3.1

As shown in Table 1 obtained ‘F’ value on the scores pretest means 0.20. The analysis of post test means proud that the obtained F value 3.51 was greater than the required value of 3.1 to be significant at 0.05 level. Taking into consideration of the pretest means, adjusted post test means were done and the obtained F value 26.96 was greater than the required value of 3.1. Hence it was accepted that Yogasanas and Suryanamaskar practices significantly decreased the anxiety.

As the ANCOVA indicated significant difference among the groups on anxiety , the Sceffe’s Test of Post-hoc comparisions was applied to find out the significance of difference between ordered paired adjusted means of different groups and data has been presented in table 2

### TABLE 2
SIGNIFICANCE OF DIFFERENCE BETWEEN ADJUSTED PAIRED FINAL MEANS OF EXPERIMENTAL GROUPS AND CONTROL GROUP ON ANXIETY OF COLLEGE MEN VOLLEYBALL PLAYERS

<table>
<thead>
<tr>
<th></th>
<th>Yogasan Group</th>
<th>Surya Namaskar Group</th>
<th>Control Group</th>
<th>Mean Difference (MD)</th>
<th>Confidence Interval (C.I.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>52.61</td>
<td>49.82</td>
<td>-</td>
<td>2.79*</td>
<td>1.05</td>
</tr>
<tr>
<td></td>
<td>52.61</td>
<td>-</td>
<td>50.03</td>
<td>2.58*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>49.82</td>
<td>50.03</td>
<td>0.21</td>
<td></td>
</tr>
</tbody>
</table>

*Significant at 0.05 level

The data on significance of difference between ordered paired and adjusted final means of experimental groups and control group in table 4 indicated significant difference between yogasan group and Surya Namaskar group (2.79), between yogasan group and control group (2.59). significant difference was not found between Surya Namaskar group and control group (0.21)
TABLE 3
ANALYSIS OF CO-VARIANCE FOR EXPERIMENTAL GROUPS AND CONTROL GROUP ON SELF CONCEPT OF COLLEGE MEN VOLLEYBALL PLAYERS

<table>
<thead>
<tr>
<th></th>
<th>Yogasan Surya Namaskar Group</th>
<th>Control Group</th>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest mean</td>
<td>29.76</td>
<td>30.70</td>
<td>B</td>
<td>29.27</td>
<td>2</td>
<td>14.63</td>
<td>0.93</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W</td>
<td>1366.33</td>
<td>87</td>
<td>15.70</td>
<td></td>
</tr>
<tr>
<td>Post test mean</td>
<td>33.36</td>
<td>34.07</td>
<td>B</td>
<td>298.69</td>
<td>2</td>
<td>149.34</td>
<td>9.01*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W</td>
<td>1441.53</td>
<td>87</td>
<td>16.57</td>
<td></td>
</tr>
<tr>
<td>Adjusted Mean</td>
<td>33.50</td>
<td>33.45</td>
<td>B</td>
<td>189.80</td>
<td>2</td>
<td>94.90</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>W</td>
<td>570.117</td>
<td>86</td>
<td>0.63</td>
<td>14.31*</td>
</tr>
</tbody>
</table>

*Significant at .05 level
F 0.05 (2, 87) = 3.1

As shown in table 3 obtained F value on the scores pre test means 0.93. The analysis of post test means proud that the obtained F value 9.01 was greater than the required value of 3.1 to be significant at 0.05 level. Taking in to consideration of the pre test means adjusted post means were done. The obtained F value 14.31 was greater than required value of 3.1. Hence it was accepted that Yogasanas and Suryanamaskar practices significant increased self concept.

As the ANCOVA indicated significant difference among the groups on anxiety, the Sceffe’s Test of Post-hoc comparisons was applied to find out the significance of difference between ordered paired adjusted means of different groups and data has been presented in table 4

TABLE 4
SIGNIFICANCE OF DIFFERENCE BETWEEN ADJUSTED PAIRED FINAL MEANS OF EXPERIMENTAL GROUPS AND CONTROL GROUP ON SELF-CONCEPT OF COLLEGE MEN VOLLEYBALL PLAYERS

<table>
<thead>
<tr>
<th>Means</th>
<th>Yogasan Surya Namaskar Group</th>
<th>Control Group</th>
<th>Mean Difference (MD)</th>
<th>Confidence Interval (C.I.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30.38</td>
<td>33.50</td>
<td>-</td>
<td>3.12*</td>
</tr>
<tr>
<td></td>
<td>30.38</td>
<td>-</td>
<td>33.45</td>
<td>3.08*</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>33.50</td>
<td>33.45</td>
<td>0.05</td>
</tr>
</tbody>
</table>

*Significant 0.05 level

The data on significance of difference between ordered paired and adjusted final means of experimental groups and control group in table 4 indicated significant difference between yogasan group and Surya Namaskar group (3.12), between yogasan group and control group (3.08). Significant difference was not found between Surya Namaskar group and control group (0.05)
4. DISCUSSION

Anxiety was measured through Spielberger’s questionnaire. The result present in Table (1 & 2) showed significant difference in the adjusted means. The obtained F value was greater than the required value of post hoc analysis. The obtained adjusted means proved that there was significance difference existed between control group and suryanamaskar. It was also proved there was significant difference between yogasanas, suryanamaskar and control group.

Self concept was measured through Dr. Mukta Rani Rastogi questionnaire. The result present in Table (3 & 4) showed significant difference in the adjusted means. The obtained F value was greater than required value of post hoc analysis. The obtained adjusted means proved that there was significance difference between control group and Yogasanas. It was also proved there was significant difference between suryanamaskar, yogasanas and control group.

4. CONCLUSION

The investigator formulated hypothesis stating that a significant difference on psychological variables among college men volleyball players due to yogasanas and suryanamaskar. The result proved that Group I and Group II showed significant different compare to Group III. The dependent variables showed improvement due to independent variable and the same were improved at 0.05 level of confidence. Within limitation and delimitation of this study, it was concluded that there was significant reduction in anxiety and there was significant improvement in self concept comparing to control group.

REFERENCES


Tripathi, Manish Kumar and Bharadwaj, Bijendra Kumar, (2013) Effects of Surya Namaskara on Selected Psychological Parameters of School Boys Available at SSRN: https://ssrn.com/abstract=2322370
