ABSTRACT
Surya Namaskara is a novel and invaluable contribution of Indian culture to mankind. Surya Namaskara practices help the students achieve mental, emotional and physical balance. It improves fitness, promotes relaxation, develops self-concept, self-confidence, and attitude and reduces stress as well as anxiety. Self-concept and attitude are complex components of behaviour. Both are improved by Surya Namaskara. Purpose: The purpose of the present study is to find out the effects of Surya Namaskara on self-concept and attitude of school girls. Methodology: Sixty (60) school boys of District Howrah, West Bengal State were selected at randomly as subjects for the present study. The age limit of the subjects was 10-12 years. All the subjects were divided into two equal groups such as Gr. S and Gr. C. Gr. S was experimental group and Gr. C served as control group. Initially Beena shah’s Self-concept Inventory scale and Gopal Rao’s school attitude inventory scale were employed to all the subjects of Gr. S and Gr. C and thereafter Surya Namaskara as a treatment were given to Gr. S for four days in a week and continued three months and finally the subjects were retested on criterion measures. The data were analysed by paired t–test to find out the effects of the treatment. Results: The result of the present study 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.

Keywords: Surya Namaskara, Self-concept, Attitude.

INTRODUCTION
Surya Namaskara is a novel and invaluable contribution of Indian culture to mankind. It is a well known vital technique within the yogic practices. Its versatility and application make it one of the most useful methods to induce a healthy, vigorous and active life and at the same time prepare for spiritual awakening and the resultant expansion of awareness. Surya Namaskara practices help the students achieve mental, emotional and physical balance. It improves fitness, promotes relaxation, develops self-concept, self-confidence, and attitude and reduces stress as well as anxiety. Self-concept and attitude are complex components of behaviour. Both are improved by Surya Namaskara. Self-concept is a person perception about him or himself and attitude is a realistic summary of experience and it
built up by beliefs, feelings and disposition of behaviour. Jadhav (2006) investigated the impact of yoga practices on self-concept among fifty naturopathy and yogic science college students and fifty MBBS students both male and female. Result revealed that naturopathy and yogic science college students have better self-concept than MBBS students. Ramiz Arobaci (2009) assessed the attitude toward physical education and class performance of 1240 Turkish secondary and high school students. The participants were 302 male students from secondary school age 12-14 years and 290 female and 316 male students from high school aged 15-17 years. Attitudes toward physical education scale were employed to all the subjects and result revealed that attitudes toward physical education and class performance significantly changed accordingly to gender and age.

**Purpose:**
The purpose of the present study is to find out the effects of Surya Namaskara on self-concept and attitude of school boys.

**METHODOLOGY**
Sixty (60) school boys of District Howrah, West Bengal State were selected at randomly as subjects for the present study. The age limit of the subjects was 10-12 years. All the subjects were divided into two equal groups such as Gr. S and Gr. C. Gr. S was experimental group and Gr. C served as control group.

Initially Beena Shah’s Self-concept Inventory Scale and Gopal Rao’s School Attitude Inventory Scale were employed to all the subjects of Gr. S and Gr. C and thereafter Surya Namaskar as a treatment were given to Gr. S for four days in a week and 90 minutes in each day and continued three months and finally the subjects were retested on criterion measures. The data were analysed by paired t–test to find out the effects of the treatment.

**Following treatment was given:**
Surya Namaskara is the best to begin all sessions of yogaasanas. Surya Namaskara combines yogasanas and pranayama. It comes in between asana and loosening exercises. It consists of 12 different asanas in different spinal positions. The sun salutation helps to regulate the breathing and focus the mind. This is usually done both at sunrise and sunset, facing the sun, after chanting the prayer with bija mantra. Prior to surya namaskara practice Gr. S practiced worm up exercise for 15 minutes. After practice of surya namaskara, Gr. S was practiced savasana and makarasana.

**RESULTS AND DISCUSSIONS**
All the Self-concept Scores and School Attitude Scores were analyzed by paired t-test and level of significance was set up at .05 level of confidence.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Type of test</th>
<th>Gr. S (n=30)</th>
<th>Gr. C (n=30)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>t</td>
</tr>
<tr>
<td>Self-concept</td>
<td>Pre-test</td>
<td>123.23</td>
<td>1.98</td>
</tr>
<tr>
<td></td>
<td>Post-test</td>
<td>129.86</td>
<td>1.83</td>
</tr>
</tbody>
</table>

SIGNIFICANT AT .05 LEVEL OF CONFIDENCE

Table-I represents the mean values of pre and post test for self-concept of Gr. S and Gr. C. The mean values of pre-test and post-test of Gr. S were 123.23 and 129.86 respectively. The t-value of self-concept of Gr. S was 11.04. The t value of Gr. S in
relation to improvement of self-concept was significant at .05 level of confidence after three months treatment. The mean values of pre-test and post-test of Gr. C were 123.27 and 125 respectively. The t-value of self-concept of Gr. C was 1.25. To be significant at .05 level of confidence the t-value should be greater than 2.04. The t-value of Gr. C was not improved significantly at .05 level of confidence after three months treatment.

![Fig. 1: A comparison of means of pre and post test data on self-concept among Gr. S and Gr. C.](image1)

Self-concept may be explained as person’s perception about himself. It is a central point of phenomenology to one’s personality. It may be describe as a looking glass. It is a mental and conceptual understanding and persistent regard that sentient beings hold for their own self existence. Self-concept includes physical, psychological and social attributes, which can influence individual’s attitudes, habits, beliefs and ideas. Surya Namaskara contributes a great deal to the development of self-concept utilized by an individual to understand himself and others, to direct his own behaviour. Table-I represents Surya Namaskara group improved self-concept significantly at .05 level of confidence. These improvements have been presented by bar graph (Fig.1). Anderson et. al.(1982), Deshpande (2009), Eilin Ekeland (2004), Jadhav (2006) have reported that yogasanas have greater impact on self-concept.

![Fig.2: A comparison of means of pre and post test data on school attitude among Gr. S and Gr. C.](image2)

**TABLE-II. Group means increase in School Attitude among Gr. S and Gr. C during three months treatment**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Type of test</th>
<th>Gr. S (n=30)</th>
<th>Gr. C (n=30)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Attitude</td>
<td>Pre-test</td>
<td>119.73</td>
<td>2.59</td>
</tr>
<tr>
<td></td>
<td>Post-test</td>
<td>126.33</td>
<td>2.35</td>
</tr>
</tbody>
</table>

Table-II represents the mean values of pre and post test for school attitude of Gr. S and Gr. C. The mean values of pre-test and post-test of Gr. S were 119.73 and 126.33 respectively. The t-value of school attitude of Gr. S was 7.98. The t value of Gr. S in relation to improvement of school attitude was significant at .05 level of confidence after three months treatment. The mean values of pre-test and post-test of Gr. C were 119.33 and 121.2 respectively. The t-value of school attitude of Gr. C was 0.57. To be significant at .05 level of confidence the t-value should be greater than 2.04. The
t-value of Gr. C was not improved significantly at .05 level of confidence after three months treatment.

Psychology takes leading role to make a man complete. Attitudes are part and parcel of our behavior and beliefs. Attitudes are generally thought to influence behavior. It builds by previous experiences and it is confirmed and modified through repeated trials. It is a realistic summery of experiences. Positive attitudes build through yogic practice. Table-II represents that Surya Namaskara group improved attitude significantly at .05 level of confidence. The results have been reflected by bar graph (Fig. 2). The result of the present study corroborates with the findings of Arabaci (2009), Liu Wenhao (2008), Tokmakidis (2006), Hagger(1997) and Ben-Shlomo(1983).

Surya Namaskara not only develop the mentally fitness, but also make a sense of fair play and develop individual esthetic values and mental alertness. It also helps to develop mental state.

The investigator had not given Surya Namaskara as a treatment to control group but the means of both attitude and self-concept were improved by both experimental and control groups. The investigator had control over the treatment variables such as teaching-learning process, school curriculum, family environment, peer group, socio-economic status, cognitive and effective domain which could not be controlled in Gr. S and also in Gr. C. The hypothetical mean values were considered from post test data for both the groups; nevertheless significant improvement was observed in the psychological parameter among Surya Namaskara group.

**CONCLUSION**

Under the conditions of the present study the results seem to conclude the following:

1. Significant improvement of self-concept was observed by administering three months treatment of Surya Namaskara among school going boys.
2. Attitude was improved significantly due to three months treatment programme of Surya Namaskara among school going boys.

**REFERENCES**


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