

# YOGA FOR ENHANCING SELF-ESTEEM IN UNDER PRIVILEGED (SOCIALY DISADVANTAGED AND LOW-INCOME FAMILY) STUDENTS

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## Abstract

The need for self-esteem tools for teenagers is universally accepted, because teenage years are the most difficult years in a person's life. Students who esteem themselves are less likely to engage in destructive and self-destructive behaviors and yoga plays a major role in the development of self-esteem. Researchers conducted the study to assess self-esteem in high school students undergoing Integrated Yoga Module (IYM). Sixty four high school students with  $14.70 \pm 0.66$  years of mean age participated in this single group pre-post study. The data was collected before and after 5 days of IYM using Rosenberg Self-Esteem scale. The data analysis showed 13.96% increase ( $p < 0.001$ ) in self-esteem scores. The present study shows that short duration IYM improves self esteem in students, which paves way for their better health and academic excellence.

## Introduction

Low self-esteem (SE) is a major health concern among students as it may lead many psychological problems. Efforts aimed at reducing low SE among students should focus more on implementing effective and culturally acceptable interventions, such as Yoga, meditation etc. with and increasing social support (Nieuwsma. et al., 2011). Mendelson et al., (2010) in their study on mindfulness approaches have shown that students in underserved, urban communities are at risk for a range of negative outcomes related to stress, including social-emotional difficulties, behavior problems, and poor academic performance. Yoga may improve adjustment among chronically stressed and disadvantaged students by enhancing SE. Yoga reduces involuntary stress responses and improves mental health outcomes and social adjustment. It has a positive impact on problematic responses to stress including rumination, intrusive thoughts, and emotional arousal (Mendelson et al., 2010). Yoga practices are acceptable and feasible in a secondary school setting and have the potential of playing a protective or preventive role in maintaining mental health (Khalsa, et al, 2011). Stress effects SE in students. It was reported that regular practice of Yoga by medical students for a longer period may possibly result in improved management of their daily stress (Parshad, et al., 2011). Previous study has shown that Integrated Yoga Module (IYM) improves SE in normal healthy adults (Deshpande, 2009). However, the changes in SE that characterizes the efficacy of a short duration IYM for under privileged students have not been reported adequately. Hence, we have designed the present study to assess the efficacy of short duration IYM for enhancing SE which may lead towards better health and better academic excellence in under privileged students.

## Objectives

To assess the efficacy of short term (5 days) IYM on self esteem in high school students.

1. To examine whether a short duration IYM would help under privileged high school boys in increasing their SE.
2. To assess the effect of age on SE development.

## Methodology

### Sample

The subjects for the study were 64 high school children (boys) with  $14.70 \pm 0.66$  years of mean age. The students were from under privileged and lower income sections of urban community. They were enrolled in the Yoga Camp during Mysore Dasara program, a royal festival celebrated annually on a grand scale in Mysore, India.

**Table – 1**  
**Details of subjects**

Age (In years)	14	15	16	Total
No. of boys	26	31	7	64
Mean $\pm$ SD	14.70 $\pm$ 0.66			

**Inclusion Criteria:**

School boys in the age range of 14 to 16 years with normal health after obtaining informed consent from the ward of the school.

**Exclusion criteria:**

- (a) Boys with neurological or psychological disturbances.
- (b) Boys with learning disabilities and cognitive deficits.
- (c) Boys under medication for health problems

**Design**

A single group pre-post study



**Assessments**

Assessments were made using Rosenberg Self-Esteem Scale (RSE) to assess the SE of children. The RSE scale is a widely used SE measurement developed by Rosenberg in 1965 (Rosenberg, M, 1965).

The scale measures SE, which is a positive evaluation of one's attributes and sense of self-worthiness. It consists of 10 items Likert scale. Participants indicate their agreement-disagreement level for each item along a four point scale, ranging from "strongly agree" to "strongly disagree". The maximum possible score is 30 and the minimum is 0. Higher scores in the scale indicate higher SE. The scores below 15 suggest low esteem of the children.

**Reliability and validity of the RSE Scale**

Multiple studies have been conducted to investigate the validity and reliability of the RSE scale. Whereas some studies have shown that the scale is a valid and reliable unidimensional measure of self-esteem. In summary, it appears that the internal reliability and factor structure of the RSE is psychometrically sound across many languages and cultures of different nations (David P. Schmitt et al, 2005).

**Intervention**

All the subjects participated in the IYM for 5 days. The module was selected from the integrated set of Yoga practices for positive health (Nagarathna, et al., 2003). IYM consists of Kriya (Yogic cleansing processes), Sukshma Vyayama (loosening and stretching practices), Asanas (physical postures), Pranayama (breathing techniques), Krida Yoga (yogic games), Bhakti Yoga (devotional sessions), Jnana Yoga (Scholarly lectures on philosophy of Yoga), Raja Yoga (meditation), Karma Yoga (selfless service), Krida Yoga (Games) and a healthy yogic diet to bring about a total personality transformation at physical, mental, emotional, social and spiritual levels(Nagarathna, 2003).

**Table – 2**  
**Schedule of IYM practice for 3 hours**

Time	Activity
10.00 AM	Prayer & Lectures on Karma Yo ga, Bhakti Yoga, Jnana Y oga & Raja Yoga
	Surya Namaskara ,
11.00 AM	Asanas- standing, sitting, prone and supine postures
	<b>Pranayama – Kapalabhati, Nadishuddhi, B hramari</b>
	<b>Krida Yoga, Meditation</b>
12.00 PM	<b>Lunch</b>
01.00PM	

### Data Collection and Analysis

The RSE was administered for all the boys before and after 5 days of intervention by a person not connected with intervention guided by a psychologist. The questionnaire was given to all the students in group. The SE data was collected systematically and were scored as per the norms prescribed in the RSE test.

Statistical analysis was done with the help of Statistical Package for Social Sciences [SPSS]-16. The data were tested using Kolmogorov-Smirnov test which showed that the data were not normally distributed. Hence Wilcoxon Sign Ranked test was used. Data were analyzed for the total group as also for each age.

### Results

**Table – 3**  
**Results of SE scores**

Age (in years)	N	Mean $\pm$ Standard deviation		Percentage Increase	<i>p</i>
		Before IYM	After IYM		
14	26	19.2 $\pm$ 2.06	21.64 $\pm$ 2.23	12.70	<0.001*
15	31	19.35 $\pm$ 2.43	22.10 $\pm$ 2.27	14.21	<0.001*
16	7	17.57 $\pm$ 3.10	20.57 $\pm$ 1.90	17.07	0.048
TOTAL	64	19.06 $\pm$ 2.39	21.72 $\pm$ 2.23	13.96	0.001

There was over all significant increase in SE score of 13.96%, ( $p < 0.01$ ) in total group. The age-wise result shows that 16 year- old students showed the highest improvement of 17.07% ( $p < 0.05$ ) in SE score while the 14 year-olds showed the least improvement of 12.70% ( $p < 0.001$ ) in SE score. The 15 year-old students showed 14.21% significant increase ( $p < 0.001$ ) in SE score. Thus, the result shows effectiveness of short duration of 5 days IYM in enhancing SE score in high school students.

## Discussion

In baseline observations, 15 year old boys performed better than any other group followed by 14 year olds and the 16 year olds respectively. A similar trend is observed in the post values also. Deshpande S et al (2009) have reported in their study to find the effect of integrated approach to Yoga module conducted on healthy normal volunteers aged 18-71 years of both sexes' on SE using Self Esteem Questionnaire that Global SE showed an improvement of 5.98%, 7.45% in Social SE, 7.27% in Moral SE and 9.42% in Family SE, which shows a similar trend of increase among both sexes due to IYM administered for eight weeks, one hour daily, six days a week. Compared to this, the percentage change in the present study was 13.96% noticed among under privileged children, which is really significant.

Previous report on SE revealed that damaged SE was associated with depressive symptoms, suicidal tendencies, and loneliness (Creemers DH, 2011). A study on mountaineering experience in students shows that SE was correlated with bodily pain, and its improvement was correlated with mental health and depression ( $P < 0.05$ ) (Bahaeloo-Horeh S, 2008). Physical activity is an essential part of a healthy lifestyle in adolescence. Previous studies have shown that socio-economic status and SE to be associated with physical activity; Adolescents with higher socio-economic status report more physical activity and more likely to report higher SE. There was a decrease in association between socio-economic status and physical activity after including SE, suggesting that at least a part of this association is mediated by SE (Veselska Z, 2011). Earlier studies also indicate that in general those with higher socio-economic status report higher SE than those with lower socio-economic status (Veselska Z, 2010). Students participating in Yoga reported using fewer negative behaviors in response to stress and had better balance than a comparison group. Improvements in wellbeing, specifically in behaviors directly targeted by Yoga, were reported. These results suggest a possible role of Yoga as a preventive intervention as well as a means of improving children's perceived well-being (Berger DL, 2009). Yoga National Center for Complementary and Alternative Medicine asserts that Yoga practices focus on the interactions among the brain, mind, body, and behavior, enhance overall health and well-being (NCCAM, 2010). The reason for increase in SE in our study could be: when a student is enjoying a better health physically, mentally, emotionally and spiritually, naturally he is out of stress and can think clearly, attention and concentrate is better. This paves the way for better performance in his academics. The module had a holistic approach which was designed especially for the children of this age. The students enjoyed the yogic intervention thoroughly, particularly Krida Yoga or Yogic Games as it was full of fun and happiness.

## Conclusion and Recommendations

This study was unique because yoga was administered on under privileged students and can be used to bridge the gap between them and the mainstream students. The study shows that even a short term Integrated Yoga Module administered in 15 hours is found to show significant increase in the self esteem in high school under privileged students which may pave way for their academic excellence.

This type of IYM can be implemented as an add-on course in all lower income strata schools, giving them a brighter future and better careers. The limitation of the study was it was not a randomized/control trial and the sample size was small. Recommendations for the future study are a bigger sample group. More long term and follow up studies. This study can be done on underprivileged college students also. Additional well-designed studies are needed before a strong recommendation can be made.

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