



## The Effect of Yogic Exercises on Self-Concept

\* Dr. Manjappa .P \*\*Dr. Shivarama Reddy M

\* Sports secretary, G.H.S, S.G.halli, Basaveshwaranagar, Bangalore

\*\* Director of Physical Education, B.M.S College of Engineering, Basavanagudi

### ABSTRACT

*Psychology is the "study of the soul" or "study of the mind" is an academic and applied discipline which involves the scientific study of mental functions and behaviours. Psychologists attempt to understand the role of mental functions in individual and social behaviour, while also exploring the underlying physiological and neurological processes.*

*Self-concept means what you understand about yourself, social character or abilities, physical appearance and body image. The self-concept is composed of relatively permanent self-assessments, such as personality attributes, knowledge of one's skills and abilities, one's occupation and hobbies. Person's self-concept may change with time, possibly going through turbulent periods of identity crisis and reassessment.*

*The purpose of the present study was to investigate the effect of yogic exercises on psychological self-concept consists of Behaviour, Intellectual and school status, Physical appearance and attributes, Anxiety, Popularity, Happiness and satisfaction.*

*Yoga is a part of physical education and the way of life, an art of righteous living or an integrated system for the benefit of the body, mind and inner spirit. It's a science that consists of ancient theories, observations and principles about the body and mind connection which is now being proved by modern medicine. The benefits of yoga are grouped into three categories such as physiological, psychological, biochemical. Yoga can help to solve the problems of any receptive individual, whether those problems are of a physical, physiological and mental.*

*To know the effect of eight weeks yogic exercises on self concept, thirty high school boys were selected randomly. Their age ranged between 14 to 15 years, the age of the subjects was ascertained from the school admission records. The collection of data was pre and post-test design. Before the yogic exercise training pre-test was administered. After eight weeks of training post test was administered to collect post training data to determine the effect of yogic training on self concept. S.P. Ahluwalia Children's Self Concept Scale (CSCS) questionnaire was utilized to obtain the self concept. These questionnaires consist of 80 questions, a maximum score was presumed to indicate favourable self-concept. It is concluded that pre and post test result revealed the development of self concept.*

**Keywords : Yoga, Meditation, Self Concept**

### Introduction

Modern world is the outcome of many scientific inventions through centuries. Scientific machineries have helped to lead the daily life with ease and comfort. The modern generation depends mostly upon the scientific equipment for his daily routine, involving in his mental powers to have a comfortable life, resulting in fall and deterioration in his physical health and capacity.

Physical activity engaged in early age can encourage fitness throughout the lifespan. Moreover psychological dynamics associated with seeking and maintaining health, especially in the schools and colleges are of utmost importance. The health of students can be more effectively maintained when institutions administrators and experts in physical education collaborate to truly serve the students.

Today there is a lot of discussion on yoga all over the world. The seminars, workshops and research studies are being conducted to find out the effect of yoga on health. Yoga as a discipline claims to develop physical, mental, moral, spiritual abilities and culminates in to harmony and well-being of individual. In general yogic practices induce more physical and vital effects than ordinary physical exercises. It's an alternative based education for the sanathana dharma system of education.

### Design of the study:

The study was conducted on thirty subjects, their age ranged between 14 to 15 years and they were selected randomly from Government High School, Saneguruvanahally, Basaveshwaranagar, Bangalore-79.

Before commence the yogic training S.P. Ahluwalia Children's Self Concept Scale (CSCS) questionnaire was administered. These questionnaires consist of 80 equations, the subjects have to tick all questions either yes or no, the maximum score was presumed to indicate favourable self-concept. The selected subjects were trained yogic exercises for duration of 45 minutes, 5 days a week and a period of 8 weeks. After completion of training the subjects were re-tested to collect post-test data to determine the effect of yogic exercises on self-concept. The schedule of the exercises was strictly followed. The table-1(a) indicate the selected yogic exercises and duration.

Table 1 (a) : The List Of Selected Yogasanas

Asanas	Duration
<ul style="list-style-type: none"> <li><b>Suryanamaskara.</b></li> <li><b>Standing Posture</b> Ardakati Chakrasana, Trikonasana, Rukshsana Thadasana.</li> <li><b>Sitting Posture</b> Padmasana, Parvathasana, Ushtrasana Janusirasana, Sputa Vajrasana</li> <li><b>Prone Posture</b> Bhujangasana, Dhanurasana, Shalabhasana</li> <li><b>Supine Posture</b> Sarvangasana, Halasana, Mastyasana, Chakrasana</li> <li><b>Pranayama</b> Bramari, Omkar (A-U-M) Relax with Shavasana</li> </ul>	45 minutes

Procedure: Children's self concept scale (CSCS) questionnaire booklet was distributed to all the subjects. The direction was read by the researcher as a diction speed to make the subjects understand about what they exactly do with the questionnaire. The subjects has to tick each question either Yes are No. The below table 1(b) indicate maximum and minimum possible scores.

Table 1(b) : Maximum And Minimum Possible Scores Of Children's Self Concept

Sl.No	Area	Possible Score	
		Maximum	Minimum
I	Behaviour	16	0
II	Intellectual and school status	18	0
III	Physical appearance and attributes	12	0
IV	Anxiety	12	0
V	Popularity	12	0
VI	Happiness and satisfaction	10	0
	Total Score	80	0

Scoring: The scores obtained by subjects on each statement were added up, which was represents one's total score of children's self concept. The scale items were scored in a positive or negative direction, a maximum score was presumed to indicate favourable self-concept, higher the score, higher the self concept

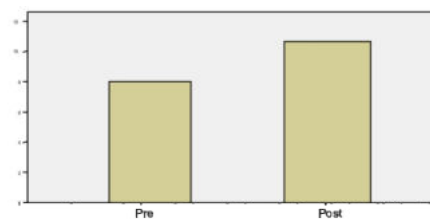
Statistical analysis: The general descriptive statistics like mean, standard deviation and standard error of mean has been computed. The paired t-test has been carried out to find out the difference between the means for arriving at the results.

Table 1 : Pre And Post-Test Descriptive Statistics Of Behaviour

Test	N	Mean	Std. Deviation	Std. Error Mean
Pre-test	30	9.20	1.12	.20
Post-test	30	11.70	1.53	.28

The table 1 show the pre and post-test behaviour mean, Std. Deviation and Std. Error mean. The pre and post-test mean is 9.20 and 11.70. The pre and post-test Std. Deviation is 1.12 and 1.53. The pre and post-test Std. Error Mean is .20 and .28 respectively.

Figure 1 : Bar Plot Of Pre And Post-Test Mean Behaviour



The mean score in the table -1 is denotes in the bar plot (figure 1), there is an increase in the mean behaviour in post-test when compared with pre-test.

Table 2 : Paired T-Test Of Behaviour

Sub-scale	Mean	Std. Dev	Std. Error Mean	Std. Dev	p-value
Behaviour	-2.50	1.52	.27	29	.00*

\*indicate significant (p value<0.05)

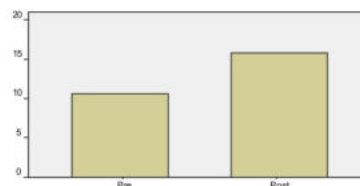
The table - 2 indicate that since p-value is < 0.05, there is a significant difference in behavior between pre and post-test. This confirms that yogic exercises have enhanced the behavior.

Table 3 : Pre And Post-Test Descriptive Statistics Of Intellectual And School Status

Test	N	Mean	Std. Deviation	Std. Error Mean
Pre-test	30	10.56	.73	.13
Post-test	30	15.80	.72	.13

The table 3 shows the pre and post-test intellectual and school status mean, Std. deviation and Std. error mean. The pre and post-test mean is 10.56 and 15.80, the pre and post-test Std. Deviation is .73 and .72. The pre and post-test Std. error mean is .13 and .13 respectively.

Figure 2 : Bar Plot Of Pre And Post-Test Mean Intellectual And School Status



The mean score in the table -3 is denotes in the bar plot (figure 2), that there is an increase in the mean of the intellectual and school status in post-test when compared with pre-test.

Table 4 : Paired T- Test Of Intellectual And School Status

Sub-Scale	Mean	Std. Dev	Std. Error Mean	Mean	Std. Dev	p-value
Intellectual School status	-5.23	.82	.15	-35.07	29	.00*

\*indicate significant (p value<0.05)

The table - 4 indicate that since p-value is < 0.05, we reject the hypothesis and conclude that there is significant difference in intellectual and school status between the pre and post-test. This confirms that yogic exercises have enhanced the intellectual and school status.

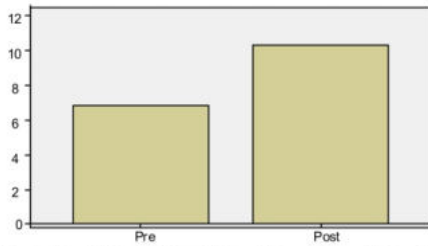
Table 5 : Pre And Post-Test Descriptive Statistics Of Physical Appearance And Attributes

Test	N	Mean	Std. Deviation	Std. Error Mean
Pre-test	30	6.87	.68	.12
Post-test	30	10.33	.60	.11

The table 5 shows the pre and post-test intellectual and school status mean, Std. Deviation and Std. Error mean. The pre and post-test mean is 6.87 and 10.33, the pre and post-test Std. Deviation is .68 and .60. The pre and post-test Std. Error mean is .12 and .11 respectively.

The mean score in the table -5 is represented graphically as shown in the bar plot (figure 3). The bar plot denotes that there is an increase in the mean of physical appearance and attributes in post-test when compared to pre-test.

Figure 3 : Bar Plot Of Pre And Post-Test Mean Physical Appearance And Attributes



The mean score in the table -5 is represented graphically as shown in the bar plot (figure 3). The bar plot denotes that there is an increase in the mean of physical appearance and attributes in post-test when compared to pre-test.

Table 6 : Paired T- Test Of Physical Appearance And Attributes

Sub-Scale	Mean	Std. Dev	Std. Error Mean	Mean	Std. Dev	p-value
Physical Appearance and Attributes	-3.47	.69	.12	-27.86	29	.00*

\*indicate significant (p value<0.05)

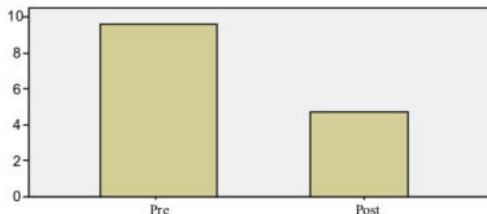
The table - 6 indicate that since p-value is < 0.05, there is significant difference in physical appearance and attributes between the pre and post-test. This confirms that yogic exercises has enhanced the physical appearance and attributes.

Table 7 : Pre And Post-Test Descriptive Statistics Of Anxiety

Test	N	Mean	Std. Deviation	Std. Error Mean
Pre-test	30	9.60	1.03	.19
Post-test	30	4.70	.53	.10

The table 7 shows the pre and post-test anxiety mean, Std. Deviation and Std. Error Mean. The pre and post-test mean is 9.60 and 4.70, Std. Deviation is 1.03 and .53, and Std. Error Mean is .19 and .10 respectively.

Figure 4 : Bar Plot Of Pre And Post-Test Mean Anxiety



The mean score in the table -7 is represented graphically as shown in the bar plot (figure 4). The bar plot denotes that, there is a decrease in the mean anxiety in post-test, when compared to pre-test.

Table 8 : Paired T- Test Of Anxiety

Sub-Scale	Mean	Std. Dev	Std. Error Mean	Mean	Std. Dev	p-value
Anxiety	4.90	.96	.17	27.97	29	.00*

\*indicate significant (p value<0.05)

The table - 8 indicates that since p-value is < 0.05, there is significant difference in anxiety between the pre and post-test. This confirms that yogic exercises have decreased anxiety.

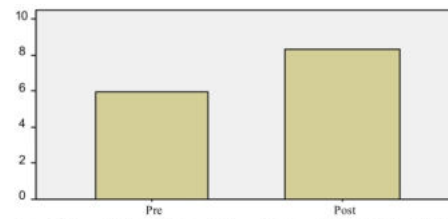
Table 9 : Pre And Post-Test Descriptive Statistics Of Popularity

Test	N	Mean	Std. Dev	Std. Error Mean
Pre-test	30	5.93	1.01	.18
Post-test	30	8.33	1.29	.24

The table 9 shows the pre and post-test popularity mean, Std. Deviation and Std. Error Mean. The pre and post-test mean is 5.93 and 8.33. Std. Deviation is 1.01 and 1.29. Std.

Error Mean is .18 and .24 respectively

Figure 5 : Bar Plot Of Pre And Post-Test Mean Popularity



The mean score in the table -9 is represented graphically as shown in the bar plot (figure 5). The bar plot denotes that, there is an increase in the mean of the popularity in post-test when compared to pre-test.

Table 10 : Paired T- Test Of Popularity

Sub-Scale	Mean	Std. Dev	Std. Error Mean	Mean	Std. Dev	p-value
Popularity	-2.40	.72	.13	-18.15	29	.00*

\*indicate significant (p value<0.05)

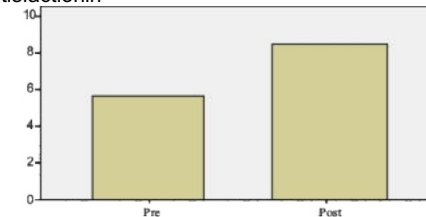
The table - 8 indicates that, since p-value is < 0.05, we reject the hypothesis and conclude that there is significant difference in popularity between the pre and post-test. This confirms the fact that, yoga has enhanced the popularity.

Table 11 : Pre And Post-Test Descriptive Statistics Of Happiness And Satisfaction

Test	N	Mean	Std. Dev	Std. Error Mean
Pre-test	30	5.67	.61	.11
Post-test	30	8.47	.78	.14

The table 11 shows the pre and post-test happiness and satisfaction in mean, Std. Deviation and Std. Error Mean. The pre and post-test mean is 5.67 and 8.47, Std. Deviation is .61 and .78 and Std. Error Mean is .11 and .14 respectively.

Figure 6 : Bar Plot Of Pre And Post-Test Mean Happiness And Satisfaction



The mean score in the table -11 is denotes in the bar plot (figure -6), there is an increase in the mean of happiness and satisfaction in post-test when compared to pre-test.

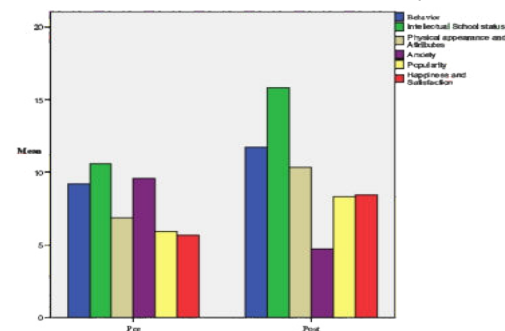
Table 12 : Paired T- Test Of Happiness And Satisfaction

Sub-Scale	Mean	Std. Dev	Std. Error Mean	Mean	Std. Dev	p-value
Happiness and Satisfaction	-2.80	.66	.12	-23.08	29	.00*

\*indicate significant (p value<0.05)

The table - 12 indicates that, since p-value is < 0.05, we reject the hypothesis and conclude that there is significant difference in happiness and satisfaction between pre and post-test. This confirms that yogic exercises have enhanced happiness and satisfaction.

Bar Plot Of Pre And Post-Test Mean Self Concept



**Conclusion**

From the results of the study, it is concluded that the yogic exercises helped to develop self-concept among Behaviour, Intellectual and school status, Physical appearance and attributes, Popularity, Happiness and Satisfaction and decreased Anxiety. The self concept was significantly improved due to the influence of eight weeks of yogic exercises. Because yogic activates are postural pattern, this can be achieved slowly, the slow and deep abdominal breathing is also beneficial for the respiratory system and

helps to induce a sense of relaxation. The yogic practice makes the body more flexible and helps to relax even in the midst of a stress stricken environment. The finding was however in conformity with a clinical trial done in 1994 at the university of Wurzburg found that the volunteer subjects who had practiced yoga scored higher in life satisfaction, with lower levels of irritability and psychosomatic complaints than the control group.

**The Six Sub-Scales Of The Children's Self Concept**

Sl.No	Area of Self-Concept	Response	Items No.
I	Behaviour	YES	12 *, 67, 76.
		NO	4, 13, 14, 22, 25, 31, 32, 34, 56, 59*, 64, 78, 80.
II	Intellectual and school status	YES	5, 9, 12*, 16, 17, 21, 27*, 30, 33*, 42, 49, 57, 70.
		NO	7*, 11*, 26, 53, 66.
III	Physical appearance and attributes	YES	15, 27*, 29, 41*, 49*, 54, 55*, 57*, 60, 63, 73.
		NO	8.
IV	Anxiety	YES	44, 55*.
		NO	6, 7*, 8*, 10, 20, 28, 37, 40*, 74, 79.
V	Popularity	YES	33*, 49*, 51, 57*, 69.
		NO	1, 3, 11*, 40*, 46, 58, 77.
VI	Happiness and satisfaction	YES	2, 8*, 36, 39, 41*, 52.
		NO	38, 50, 57*, 59*.
<b>Lie Score Items</b>			<b>18, 19, 23, 24, 35, 43, 45, 47, 48, 61, 62, 65, 68, 71, 72, 75.</b>

**Children's Self Concept Scale Inventory Key**

Area-I		Area-II		Area-III		Area-IV		Area-V		Area-VI	
Behaviour		Intellectual and school status		Physical appearance and attributes		Anxiety		Popularity		Happiness and satisfaction	
16 points		18 points		12 points		12 points		12 points		10 points	
Item No	Score one for	Item No	Score one for	Item No	Score one for	Item No	Score one for	Item No	Score one for	Item No	Score one for
4	No	5	Yes	8	No	6	No	1	No	2	Yes
12	Yes	7	No	15	Yes	7	No	3	No	8	Yes
13	No	9	Yes	27	Yes	8	No	11	No	36	Yes
14	No	11	No	29	Yes	10	No	33	Yes	38	No
22	No	12	Yes	41	Yes	20	No	40	No	39	Yes
25	No	16	Yes	49	Yes	28	No	46	No	41	Yes
31	No	17	Yes	54	Yes	37	No	49	Yes	50	No
32	No	21	Yes	55	Yes	40	No	51	Yes	52	Yes
34	No	26	No	57	Yes	44	Yes	57	Yes	57	No
56	No	27	Yes	60	Yes	55	Yes	58	No	59	No
59	No	30	Yes	63	Yes	74	No	69	Yes		
64	No	33	Yes	73	Yes	79	No	77	No		
67	Yes	42	Yes								
76	Yes	49	Yes								
78	No	53	No								
80	No	57	Yes								
		66	No								
		70	Yes								
<b>Total</b>	<b>16</b>	<b>Total</b>	<b>18</b>	<b>Total</b>	<b>12</b>	<b>Total</b>	<b>12</b>	<b>Total</b>	<b>12</b>	<b>Total</b>	<b>10</b>

Lie score items: [ 18 19 23 24 35 43 45 47 48 61 62 65 68 71 72 75].

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