

## Effect of yogic exercise on selected psychological variables among college level students

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### Abstract

This study is an attempt to investigate about the Effect of Yogic Exercise on Selected Psychological Variables among college level students. Psychological variables are Self-Esteem, Self-Concept, Trait and State Anxiety. For the study, one hundred girl students of Mahishadal Girls' College were selected within the age range of sixteen to twenty years. Self-esteem was measured by Rosenberg's Self-Esteem Scale. Self-concept was measured by Dr. R. K. Saraswat's Manual of Self-concept Questionnaire. The trait anxiety and state anxiety were measured by Spielberger's State Trait Anxiety Inventory (STAI). Pre-test and Post-test results were taken and compared by employing 't' test. In results, it was found that there were significant difference between pre-tests and post-tests. So, it was evident that Meditation impact significantly on Selected Psychological Variables namely Self-Esteem, Self-Concept, Trait Anxiety and State Anxiety among college level students.

**Keywords:** yogic exercise, self-esteem, self-concept, trait anxiety, state anxiety

### Introduction

Yoga is a systematic process for all round development like physical, mental, intellectual and emotional as well spiritual also. People practice yoga to fit body and mind, to cure from different diseases etc.

In sociology and psychology, self-esteem reflects a person's overall subjective emotional evaluation of his or her own worth. It is a judgment of oneself as well as an attitude toward the self. Self-concept is the multidimensional construct to perceive physical competence throughout childhood and beyond.

Anxiety is an important bio-psychological parameter in our life. It is a multidimensional construct which reflects emotional impact or cognitive dimension of arousal. Martens (1977) suggested that anxiety reactions would result from an objective environmental demand interpreted as threatening by an individual.

There are two kinds of anxiety like state anxiety and trait anxiety. Spielberger (1983) described state anxiety as existing in a transitory emotional state that varies in intensity and fluctuates over time. On the other hand, trait anxiety refers to a stable susceptibility or a proneness to experience state anxiety frequently.

State anxiety may be denoted as an emotional state, characterized by subjective, consciously perceived feelings of apprehension and tension, accompanied by or associated by or associated with activation or arousal of the autonomic nervous system. On the other hand, trait anxiety may be denoted as a motive or acquired behavioral disposition to perceive a wide range of circumstances as threatening and respond to state anxiety.

### Statement of the problem

The problem of the study was to investigate about the Effect of Yogic Exercise on Selected Psychological Variables among college level students.

### Hypothesis

It was hypothesized that there will be positive effect of Yogic Exercise on Psychological Variables likely Self-Esteem, Self-Concept, Trait and State Anxiety college level students.

### Delimitations

1. The study was delimited to only girl college level students.
2. The subjects were selected from Mahishadal Girls' College in Purba Medinipur district.

### Limitations

1. The subjects were from different socio-economic status, different mode of living etc. Hence uniform response might not be occurred which were another limitation of the study.
2. During test taken, same response was not obtained from all the subjects. It was also the limitation of this study.

### Significance of the Study

1. This study will provide descriptive information about the Self-Esteem, Self-Concept, Trait and State Anxiety among college level students.
2. The result of this study will also have great significance in identifying the areas which can be easily developed.
3. This study will serve as a guideline to the teacher.
4. The findings of this study might give some clues to the concerned personnel in better understanding the aged people and which may results better social adjustability.

### Procedure

#### Selection of Subjects

1. For the study, one hundred girl students of were selected.

2. The age range was eighteen to twenty years.

**Selection of Variables**

In order to assess this study, the following variables were selected: -

1. Self-esteem
2. Self-concept
3. Trait and State Anxiety.

**Criterion Measures**

1. Self-esteem was measured by Rosenberg’s Self-Esteem Scale.

2. Self-concept was measured by Dr. R. K. Saraswat’s Manual of Self-concept Questionnaire.
3. The trait anxiety and state anxiety were measured by Spielberger’s State-Trait Anxiety Inventory (STAI).

**Statistical Analysis**

Pre-test and Post-test results were taken and compared by employing ‘t’ test.

**Level of Significance**

For testing hypothesis the level of significance was set at 0.05 level.

**Exercise Programme**

**Table 1**

| Name of Exercise |  | Monday  | Wednesday | Friday  |
|------------------|--|---------|-----------|---------|
| Surya Namaskar   |  | 8 min.  | 8 min.    | 8 min.  |
| Asanas           | Padmasana, Dhanurasana, Halasana, Shirasana, Ardhamatseyendrasana, Chakrasana, Sabbangasana, Mayurasana, Bakasana and Paschimatyasana. | 25 min. | 25 min.   | 25 min. |
| Pranayam         | Anulom-Vilom and Kapalbhathi   | 7 min.  | 7 min.    | 7 min.  |
| Meditation       |  | 5 min.  | 5 min.    | 5 min.  |

**Programme Schedule**

**Table 2**

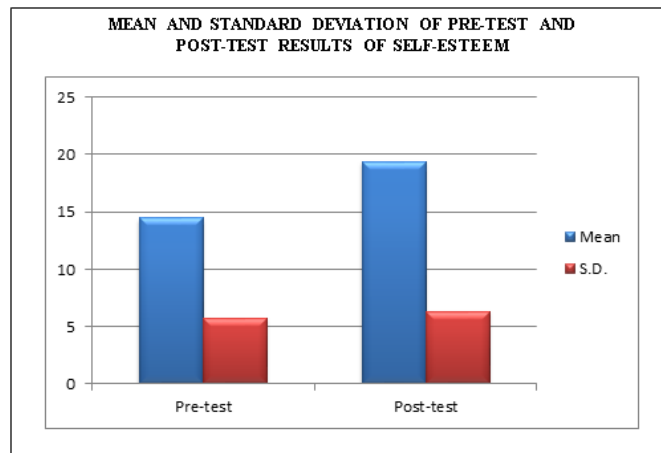
|           |                   |
|-----------|-------------------|
| Frequency | 03 days in a week |
| Duration  | 45 minutes        |
| Time      | 2:00 pm – 2:45 pm |

**Presentation and Analysis of Data**

**Table 3:** Mean and Standard Deviation of Pre-Test and Post-Test Results of Self-Esteem among College Level Students

| Variables   | Pre-test |      | Post-test |      |
|-------------|----------|------|-----------|------|
|             | Mean     | S.D. | Mean      | S.D. |
| Self-esteem | 14.45    | 5.76 | 19.36     | 6.34 |

From table -3 it was observed that mean of post-test result was higher than pre-test result which means Self-esteem becomes better through Yogic Exercise.



**Fig 1:** Mean and Standard Deviation of pre-test and post-test results of Self-esteem among college level students.

**Table 4:** Mean Difference of Pre-Test and Post-Test Results of Self-Esteem among College Level Students

| Variable    | Tests     | Mean   | Standard Deviation | Standard Error | ‘t’ value |
|-------------|-----------|--------|--------------------|----------------|-----------|
| Self-esteem | Pre-test  | 14.450 | 5.760              | 1.211          | 4.0531 *  |
|             | Post-test | 19.360 | 6.340              |                |           |

\* Significant at 0.05 level of Confidence  
 $t_{.05 (99)} = 1.980$

From Table -4 it was observed that that there was significant difference between pre-test and post-test

result on Self-Esteem (calculated value was greater than tabulated value).

**Table 5:** Mean and Standard Deviation of Pre-Test and Post-Test Results of Self-Concept Among College Level Students

| Variables    | Pre-test |       | Post-test |       |
|--------------|----------|-------|-----------|-------|
|              | Mean     | S.D.  | Mean      | S.D.  |
| Self-concept | 165.100  | 8.427 | 187.325   | 9.076 |

From table -5 it was observed that mean of post-test result was higher than pre-test result which means Self-

concept becomes better through Yogic Exercise.

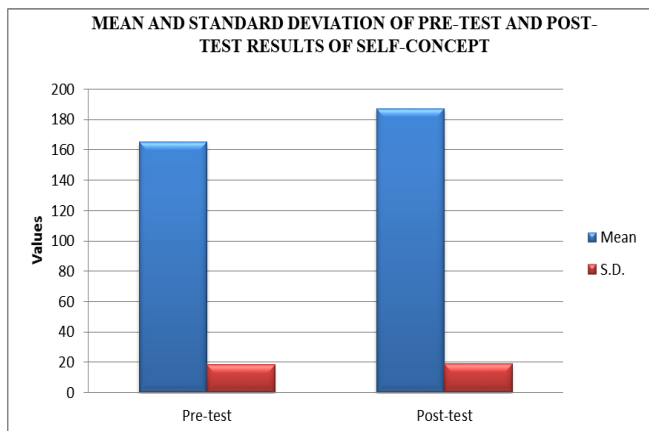


Fig 2: Mean and Standard Deviation of pre-test and post-test results of Self-concept among college level students.

Table 6: Mean Difference of Pre-Test and Post-Test Results of Self-Concept among College Level Students

| Variable     | Tests     | Mean    | Standard Deviation | Standard Error | 't' value |
|--------------|-----------|---------|--------------------|----------------|-----------|
| Self-concept | Pre-test  | 165.100 | 8.427              | 1.751          | 12.689*   |
|              | Post-test | 187.325 | 9.076              |                |           |

\* Significant at 0.05 level of Confidence  
 $t_{.05} (99) = 1.980$

From Table – 6 it was observed that that there was significant difference between pre-test and post-test result on Self-concept (calculated value was greater than tabulated value).

Table 7: Mean And Standard Deviation Of Pre-Test And Post-Test Results Of State Anxiety Among College Level Students

| Variables     | Pre-test |       | Post-test |       |
|---------------|----------|-------|-----------|-------|
|               | Mean     | S.D.  | Mean      | S.D.  |
| State Anxiety | 49.375   | 3.356 | 43.625    | 3.439 |

From table -7 it was observed that mean of post-test result was lower than pre-test result which means State Anxiety become less through Yogic Exercise.

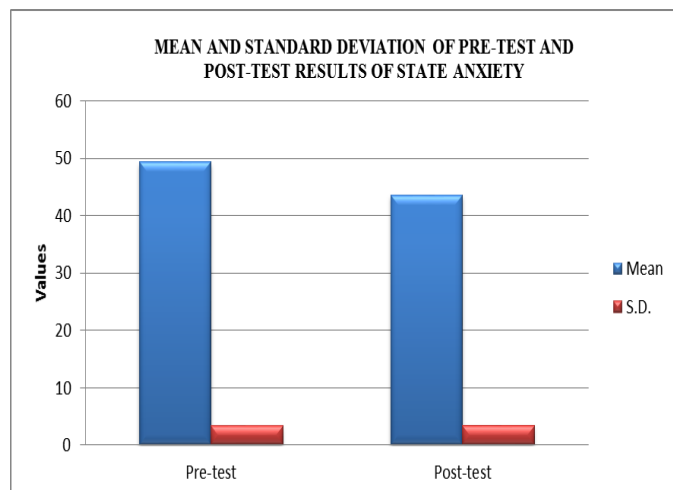


Fig 3: Mean and Standard Deviation of pre-test and post-test results of State Anxiety among college level students.

Table 8: Mean Difference of Pre-Test and Post-Test Results of State Anxiety among College Level Students

| Variable      | Tests     | Mean   | Standard Deviation | Standard Error | 't' value |
|---------------|-----------|--------|--------------------|----------------|-----------|
| State Anxiety | Pre-test  | 49.375 | 3.356              | 0.461          | 8.461*    |
|               | Post-test | 43.625 | 3.439              |                |           |

\* Significant at 0.05 level of Confidence  
 $t_{.05} (99) = 1.980$

From Table – 8 it was observed that that there was significant difference between pre-test and post-test result on State Anxiety (calculated value was greater than tabulated value).

Table 9: Mean and Standard Deviation of Pre-Test and Post-Test Results of Trait Anxiety among College Level Students

| Variables     | Pre-test |       | Post-test |       |
|---------------|----------|-------|-----------|-------|
|               | Mean     | S.D.  | Mean      | S.D.  |
| Trait Anxiety | 48.825   | 5.344 | 41.950    | 2.650 |

From table – 9 it was observed that mean of post-test result was lower than pre-test result which means Trait Anxiety become less through Yogic Exercise.

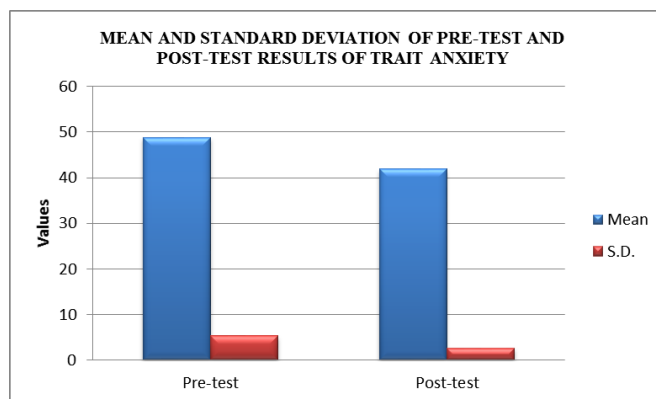


Fig 4: Mean and Standard Deviation of pre-test and post-test results of Trait Anxiety among college level students.

Table 10: Mean Difference Of Pre-Test And Post-Test Results Of Trait Anxiety Among College Level Students

| Variable      | Tests     | Mean   | Standard Deviation | Standard Error | 't' value |
|---------------|-----------|--------|--------------------|----------------|-----------|
| Trait Anxiety | Pre-test  | 48.825 | 5.344              | 0.711          | 8.149*    |
|               | Post-test | 41.950 | 2.650              |                |           |

\* Significant at 0.05 level of Confidence  
 $t_{.05} (99) = 1.980$

From Table – 10 it was observed that that there was significant difference between pre-test and post-test result on Trait Anxiety (calculated value was greater than tabulated value).

**Discussion of the Findings**

Self-esteem and Self-concept are the important bio-psychological parameter in our life. Self-esteem reflects a person's overall subjective emotional evaluation of his or

her own worth. It is a judgment of oneself as well as an attitude toward the self. Self-concept is the multidimensional construct to perceive physical competence throughout life. Through the practice Yogic Exercise, emotion, confidence, self-realization etc. become higher that results improvement of self-esteem and self-concept.

Anxiety reflects emotional impact of an arousal which results from an objective environmental demand interpreted as threatening by an individual. There are two kinds of anxiety like trait anxiety and state anxiety.

Spielberger (1983) described that state anxiety as existing in a transitory emotional state that varies in intensity and fluctuates over time. It is an emotional state, characterized by subjective, consciously perceived feelings of apprehension and tension, accompanied by or associated by or associated with activation or arousal of the autonomic nervous system. On the other hand, trait anxiety refers to a stable susceptibility or a proneness to experience state anxiety frequently. It is a motive or acquired behavioral disposition to perceive a wide range of circumstances as threatening and respond to state anxiety.

Practice of Yogic Exercise helps the individuals to minimize the anxiety level - both trait anxiety and state anxiety.

### Conclusion

In conclusion, it was found that there were significant difference between pre-tests and post-tests. So, it was evident that Yogic Exercise impact significantly on psychological variables namely Self-Esteem, Self-Concept, Trait Anxiety and State Anxiety among college level students.

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