

# A STUDY OF SELF-CONCEPT AND STUDY HABITS OF STUDENTS OF ARTS AND SCIENCE STREAMS

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*Individuality is at the core of the human subject's personality and plays a vital role in guiding one's endeavour in specific conditions. This paper defines individuality as a self-concept and seeks to determine its validity with respect to areas of arts and science. Distinction between these two areas gets finally reflected in arts students who are found to have higher social self-concept and conversely in science students who are found to have higher intellectual self-concept.*

**KEY WORDS :** individual difference; motivation; intelligence.

## INTRODUCTION

The assessment of individual differences is one of the oldest areas of psychology and with age it has become more meaningful since search could be made with the help of measurement tools for the talent in different areas along which steps or measures could be taken to let psychology further grow. There is also a greater awareness among the parents regarding the educational, vocational, and social guidance towards their children along with curiosity about their future.

Self-concept is operationally defined as the individual way of looking at oneself; it signifies individual way of thinking, feeling and behaving. Self-concept is the measure of six dimensions – physical, social, intellectual, moral, educational and temperamental.

The measurement of self-concept is done by individual scores on each dimension of the Self-Concept Questionnaire by Saraswat (1992).

To study habits is the tendency of a student to study, whether it is systematic or unsystematic, efficient or inefficient and implies a sort of more or less permanent method of studying.

Its measurement is done by individual scores on each dimension regarding study i.e. comprehension, concentration, task -orientation, interaction, drilling, supports, recording and total scores on Study Habit Inventory by Mukhopadhyaya and Sansanwal (2002).

#### **STUDIES RELATED TO STUDY HABITS**

Sharma (1971) compared the study habit of 65 Gurukula and 65 non-Gurukula students. The difference between study habits of Gurukula and non-Gurukula students were not significant at any level of significance.

Chinna (1985) conducted a study on 'study habits' in relation to over and under achievement in English. It was concluded that over-achievers in English had significantly better study habits as compared to under-achievers in the same subject.

Dinesh (2003) in his investigation on a sample of 300 students (science stream = 86, arts stream = 125 and commerce stream = 89) of IX class selected randomly from government and private senior secondary schools of Chandigarh concluded significant difference in the study habits of students belonging to science and arts streams.

Kaur (2005) investigated the study habits of male and female adolescents belonging to arts and science streams. The investigation revealed insignificant difference in the study habits of students belonging to urban and rural areas. However, significant difference was found in the study habits of male and female adolescents, as well as between adolescents studying in arts and science streams.

Singla (2007) conducted her study on a sample of 200 boys and girls studying in 10+1 class in the senior secondary schools of Chandigarh in order to compare their study habits. The Study Habit Inventory by Mukhopadhyay and Sansanwal (1992) was used to assess the study habits of students. Insignificant difference was found in the study habits of students studying in Arts and Commerce streams. Similarly insignificant difference was found in the study habits of boys and girls.

#### **STUDY RELATED TO SELF-CONCEPT**

Bhogayata (1986) in his study found insignificant difference in the self-concept of boys and girls.

Nadeem and Malik (1986) in their study on 75 physically handicapped adolescents and 75 normal children of District Anantnag of J & K state found significant difference in the 'perceived self' and 'ideal self' of handicapped and normal adolescents.

Singh (2004) conducted a study on 708 hosteller and non-hosteller adolescents and found significant difference in the self-concept of hostellers and non-hostellers. Results were in favour of hostellers.

Arora (2005) conducted a study on 1600 male and female students of XI class studying in secondary urban and rural schools of Kathua, Udhampur and Rajouri districts of J & K state. The Study revealed that students belonging to the urban area were possessing a favourable self-concept for factors 'behaviour' and 'intellectual', as compared to the students belonging to the rural area.

### **EMERGENCE OF THE PROBLEM**

The problem of dealing with differences among children is complicated by the size and heterogeneity of groups which constitute grade levels or subject matter areas. Teachers may have as many as forty to fifty students in a class. Under such conditions, providing for differences in reading or learning becomes a major problem. Therefore, there is need to study this area.

Although the individual person differs in many aspects, yet the role of social intelligence, level of achievement motivation, good study habits and self-concept cannot be denied in the life of the individual.

Therefore, out of the large number of factors where individual differences are seen, the investigator has selected the above factors for her investigation.

From the Second, Third, Fourth, Fifth and Sixth Survey of Research in Education, it has been found that very few studies have been conducted in this field where thorough individual differences in individual behaviour are understood.

### **OBJECTIVES OF THE PRESENT STUDY**

1. To find and compare the difference in the study habits of students of Arts and Science streams.
2. To find and compare the difference in the self-concept of students of Arts and Science streams.

### **HYPOTHESES**

1. There will be no significant difference in the study habit of students of Arts and Science streams. In order to test this hypothesis, following sub hypotheses were formulated.
  - 1a. There will be no significant difference in the comprehension of students of Arts and Science streams.
  - 1b. There will be no significant difference in the concentration of students of Arts and Science streams.
  - 1c. There will be no significant difference in the task orientation of students of Arts and Science streams.
  - 1d. There will be no significant difference in the sets of students of Arts and Science streams.
  - 1e. There will be no significant difference in the interaction of students of Arts and Science streams.
  - 1f. There will be no significant difference in the drilling students of Arts and Science streams.
  - 1g. There will be no significant difference in the support of students of Arts and Science streams.
  - 1h. There will be no significant difference in the recording habits of

students of Arts and Science streams.

- 1i. There will be no significant difference in the language capability of students of Arts and Science streams.
2. There will be no significant difference in the self-concept of students of Arts and Science streams.  
In order to test this hypothesis following sub hypotheses were formulated.
  - 2a. There will be no significant difference in the physical dimension of self-concept of students of Arts and Science streams.
  - 2b. There will be no significant difference in the social dimension of self-concept of students of Arts and Science streams.
  - 2c. There will be no significant difference in the temperamental dimension of self-concept of students of Arts and Science streams.
  - 2d. There will be no significant difference in the educational dimension of self-concept of students of Arts and Science streams.
  - 2e. There will be no significant difference in the moral dimension of self-concept of students of Arts and Science streams.

#### **SAMPLE**

A randomization technique of sampling was employed for selecting the government and private senior secondary schools of Chandigarh. Out of nearly 140 Sr. Sec. Schools of Chandigarh a random sample of 5 schools was selected. Whenever there were more than one Arts and Science sections, one section was selected randomly. From the selected five schools one section from the Arts stream and another section from the Science (non-medical) stream was selected to be included in the final sample.

Thus, the present study was conducted on a sample of 509 male and female students studying in 10+1 class in the Arts and the Science stream (Arts stream = 303, Science stream = 206) students.

#### **TOOLS USED**

1. Study Habit Inventory (By Mukhopadhyaya and Sansanwal, 2000).
2. Self-Concept Scale (By Saraswat, 1992).

#### **STATISTICAL TECHNIQUES USED**

Mean S.D. and t-ratio techniques were used for analyzing the data.

#### **ANALYSIS OF DATA AND INTERPRETATION OF RESULTS**

In order to ascertain the difference in the nine measures of study habits and study habits (total) of science and arts streams, the values of mean,

SD and t-ratios were calculated, the results of which have been presented in table 1.

TABLE 1

**Values of mean, SD and t-ratios to locate difference between students of Science and Arts streams on the variable of study habit**

Vr. No.	Variable	Group	N	Mean	SD	DF	t	Level of Significance
1	Comprehension	Science	206	33.01	8.48	507	0.528	
2	Concentration	Science	206	28.53	7.51	507	0.920	
		Arts	303	27.87	8.18			
3	Task Orientation	Science	206	21.46	7.78	507	0.49	
	Habits	Arts	303	21.82	8.19			
4	Sets	Science	206	17.50	5.84	507	0.25	—
		Arts	303	17.35	6.27			
5	Interaction	Science	206	8.09	2.95	507	0.55	—
		Arts	303	7.93	3.45			
6	Drilling	Science	206	7.82	2.45	507	0.08	—
		Arts	303	7.84	2.53			
7	Supports	Science	206	6.51	2.85	507	0.76	—
		Arts	303	6.71	2.89			
8	Recording	Science	206	4.27	1.88	507	0.19	—
		Arts	303	4.23	2.10			
9	Language Capability	Science	206	4.81	1.78	507	2.66**	.01
		Arts	303	4.40	1.68	507		
				131.8	35.9			
10	Study Habits	Science	206	7	0	507	0.56	—

Insignificant difference was observed between students of Science and Arts streams on the comprehension measure of study habit due to insignificant t-value ( $t=0.528$ ) at .05 level.

As per the results, insignificant difference was observed in the concentration habits of students of Science and Arts streams due to insignificant t-value at .05 ( $t=0.920$ ).

Insignificant difference was obtained in the task orientation habit of students of Science and Arts streams due to insignificant t-value ( $t=0.49$ ) as was evident from the results of table 1.

Insignificant difference was found between students of Science and

Arts streams on the measure of sets due to insignificant t-value ( $t=0.25$ ) at 0.05 level.

On the measure of interaction habits of students of Science and Arts streams insignificant difference was found between two groups due to insignificant t-value ( $t=0.55$ ) at .05 level.

As per the perusal of table 1 insignificant difference was obtained in the drilling habits of students of Science and Arts streams as t-ratio was insignificant at .05 level.

According to the results of table 1, insignificant difference was observed between the students of Science and Arts streams on the support measure signification of study habits due to insignificant t-value at .05 level ( $t=0.76$ ).

On the measure of recording habit, students of science and arts streams differed insignificantly as the obtained t-value was insignificant ( $t=0.019$ ) at .05 level.

Results as depicted in table 1 revealed significant difference in the language capability of students of Science and Arts streams as t-value was found to be significant ( $t=2.66$ ) at .01 level. From their mean scores value it was revealed that language capability of science students was better (mean=4.81) as compared to arts students (mean=4.40).

As far as study habits of students of science and art stream in totality was concerned insignificant difference was found between the students of Science and Arts streams due to insignificant t-value ( $t=0.56$ ) at .05 level. From their mean scores students of the Science stream were better, especially as far as their language capability was concerned (mean=131.87) as compared to the study habits of Arts stream students (mean=129.97), even as in totality both the groups did not differ significantly in their study habits.

The above results of the present study regarding insignificant difference in the study habits of students of Science and Arts stream may be due to the fact that in these days there is a lot of competition in getting admission as well as jobs. This stress has resulted in good study habits in both Science as well as Arts students in the form of good concentration, recording, drilling, interaction, supports and managing the time task orientation.

Thus, the hypothesis 1 that there will be no significant difference in the study habits of students of Arts and Science streams was accepted in this study.

The above results of the present study are in line with the results of Sharma (1971) and Singla (2007), but contrary to the results of Dinesh (2004) and Kaur (2005).

**SELF-CONCEPT**

In order to find the difference in the six measures of self-concept, and self-concept (total) of students of science and art streams, mean, SD and t-ratios were calculated, the results of which have been entered in table 2.

**TABLE 2**

**Values of mean, SD and t-ratios to locate difference between students of Science and Arts streams on the measures of Self-concept**

Vr. No.	Variable	Group	N	Mean	SD	df	t	Level of Significance
1	Physical Self-Concept	Scienc	206	18.61	3.62	507	9.98**	.01
		Arts	303	22.21	4.24			
2	Social Self-con cept	Science	206	18.91	3.77	507	8.89**	.01
		Arts	303	22.24	4.37			
3	Temperamental Self-concept	Science	206	21.38	21.81	507	0.73	—
		Arts	303	22.33	4.68			
4	Educational Self-concept	Science	206	17.36	8.55	507	2.15	.05
		Arts	303	16.07	4.95			
5	Moral Self-concept	Science	206	16.07	8.63	507	2.59**	.01
		Arts	303	14.56	4.40			
6	Intellectual Self-concept	Science	206	19.10	9.77	507	4.97**	.01
		Arts	303	15.35	7.21			
7	Self-concept (Total)	Science	206	110.02	25.10	507	1.99**	.05
		Arts	303	113.98	18.41			

According to the results of table 2, significant difference was found in the physical Self-concept of students of science and art streams due to significant t-value at .05 level ( $t=9.98$ ). After comparing the mean scores, it was found that physical Self-concept of students of the Arts stream was higher (mean=22.21) as compared to the physical Self-concept of science students.

Results as depicted in table 2 indicated the significant difference in the Social Self-concept of students of Science and Arts streams due to significant t-value ( $t=8.89$ ) at .05 level of significance. When mean scores of both the groups on the measure of social self-concept were compared it was found that Social Self-concept were compared it was found that Social Self-Concept of students of the Arts stream (mean=22.24) was higher as compared to the students of the Science stream (mean=18.91).

Insignificant difference in the temperamental self-concept of students of Science and Arts streams was obtained due to insignificant t-value ( $t=0.73$ ) at .05 level.

On the measure of Educational Self-concept, significant difference was

found between the students of Science and Arts streams as obtained t-value ( $t=2.15$ ) was significant at .05 level. When their mean scores were compared, it was found that science students' Educational Self-concept was higher (mean=17.36) as compared to the Educational Self-concept of students of the Arts stream (mean=16.07). Thus, science students consider themselves educationally at a higher esteem.

On the perusal of results of table 2, it was found that significant difference exists between the students of Science and Arts streams on the moral measure of self-concept as t-value was significant ( $t=2.59$ ) at .01 level. After comparing the mean scores of the two groups it was concluded that Moral Self-concept of science students was higher (mean=16.07) as compared to the arts students (mean=14.56).

The results of table 2 revealed significant difference between the students of Science and Arts streams on the Intellectual dimension of Self-concept since t-value ( $t=4.97$ ) was significant at .01 level. After comparing the mean scores of both the group on the Intellectual measure of Self-concept, it was concluded that the Intellectual Self-concept of science students was higher (mean=19.10) as compared to that of their counterparts.

As per the results entered in table 2, significant difference was found in the Self-Concept of Science and Arts streams as obtained t-value ( $t=1.99$ ) was significant at .05 level of significance. In other words, students of Science and Arts streams differed significantly in their level of Self-concept. On comparing their mean scores it was found that the Self-concept of students of the Arts Stream (mean=113.98) was higher as compared to that of students of the Science stream (mean=110.02).

Now, the reasons for the above results may be that Arts students might be in a position to better understand the human behaviour in society, their interaction with human beings is more while Science students don't have enough time to move in society, that is why Arts students have higher Physical Concept as well as Social Self-concept. On the other hand, Science students have higher Educational Self-concept, Moral Self-Concept and Intellectual Self-concept.

For this reason hypothesis 2 that there will be no significant difference in the Self-concept of students of Arts and Science streams was not retained in the present investigation.

Results of the present study are similar to the results of Nadeem and Malik (1996) and Arora (2005).

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