A Study of Mental Map of Students Regarding Indian Culture

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Abstract

Indian Culture is an embodiment of material and non-material culture. This includes religious tolerance, coordinating capacity, and adjusting power, the broad outlook of looking at this world as a large family, freedom of thought, unity in diversity, etc. Mental Map refers to the spatial environment about the country perceived by the students covering areas of Indian Culture. In this study, the researcher wants to find out the relation between Indian culture and their Mental Map. The purpose of the present study is to study the Mental Map of the students regarding Indian Culture.

Keywords : Mental map, Indian culture, national integration

Nowadays Mental maps are being studied in various fields such as psychology, education, geography, architecture, etc. Interest in this phenomenon has been increased tremendously since the evolution of the mental map concept. Psychologists have attempted to understand the causes and nature of the functioning of mental maps. Geographers, on the other hand, have attempted to understand the various decisions taken by individuals in terms of their preferential or non-preferential schematization regarding different places around the world. It has provided them the space to understand the inner complications of the existing man-environment relationship. Tolman (1948) was the man who first created the term 'Mental Map'. Mental Map covers various types of

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mental processing composed of a series of psychological transformations by which an individual can acquire code, store, recall, and decode information about the relative locations and attributes of different phenomena in their everyday or metaphorical spatial environment.

Mental Maps and Culture:

Sawyer (1976) in his article titled, 'Using Physical Maps to Transfer Mental Maps' attempted to explore the importance of understanding mental maps as the hardwiring aspect of culture. According to him, "One's theories, built from experiences, serve as the mental maps that guide one's everyday actions. Mental maps determine how we see, the world, our work, each other, and ourselves. They guide our daily behaviour." Edgar Schein (1976) defines the organizational culture, as "The ways in which a group of people has done things for so long that they simply come to be seen as the only appropriate ways of doing things. Culture is, in part, our collection of the mental maps that support our success."

Indian Culture:

The culture of India refers to the patterns of human activity and symbolism associated with India and its people. India's languages, religions, dance; music, architecture, food, and customs differ from place to place within the country but nevertheless possess a commonality. Indian culture is often labeled as an amalgamation of these diverse sub-cultures spread all over the Indian subcontinent and traditions that are several millennia old.

The culture of India has been shaped by the long history of India, its unique geography, and the absorption of customs, traditions, and ideas from some of its neighbors as well as by preserving its ancient heritages, which were formed during the Indus Valley Civilization

and evolved further during the Vedic age, rise and decline of Buddhism, Golden age, Muslim conquests and European colonization. India's great diversity of cultural practices, languages, customs, and traditions are examples of this unique co-mingling over the past five millennia.

India is also the birthplace of several religious systems such as Hinduism, Jainism, Buddhism, and Sikhism. The various religions and traditions of India that were created by these amalgamations have influenced other parts of the world. Religious beliefs especially Hinduism have influenced Indian culture for a long time in the Indian subcontinent.

According to Dr. Radhakrisnan, "India's cultural heritage is not only one of the most ancient, but it is also one of the most extensive and varied. To it have contributed, throughout the ages, many races and people, who have either temporarily come into contact with India or have permanently settled within her borders, joining the ranks of her children and helping to evolve a distinctive Indian Culture, the keynote of which is a synthesis on the basis of eternal values."

Indian Culture is perhaps one of the oldest and richest cultures in the world. There are various features of Indian Culture that are linked with National Integration like the concept of unity in diversity, tolerance, cooperation, broad outlook etc. Therefore, it is need of the hour to motivate the students of schools and colleges not only to learn about the salient features of Indian Culture but know about those parts of the culture that are helpful in fostering a feeling of National Integration. For this purpose, it is important to know how much Indian youth know about the salient features of Indian Culture. It can be assessed by studying the student's mental map of Indian Culture. This mental map of Indian Culture may be utilized in making an educational programme for fostering the feeling of National Integration among students.

Objectives of the study

1. To study the Mental Map of the students regarding Indian Culture.

2. To compare the Mental Map of the students regarding Indian Culture in relation to –

   (a) Academic achievement of the students (Percentage of class X Board marks).

   (b) Socio-Economic Status (SES)

   (c) Types of Schools according to their examination board affiliation(ICSE, CBSE, and UP Board).

   (d) Gender of Students.

Hypothesis : "There will be no significant difference in the mental map of students regarding Indian Culture, in relation to their academic achievement, Socio-Economic Status, types of schools and gender differences".

This major hypothesis is further divided into sub-hypotheses for the purpose of testing.

Methodology

For the present study, which is about XI grade students, all the students studying in class XI in the institutions situated within the urban limit of Lucknow, formed the population.

The selection of samples has been done using a random sampling procedure. Two-stage sampling was done. In the first stage,

institutions were divided into three groups on the basis of their recognition by the three boards, namely those of ICSE board, CBSE board, UP board. Six institutions were randomly selected, taking two institutions from each category.

In the second stage of sampling, one section of XI grade was taken randomly which was selected from each institution. The students of this class section have been included in the study. The distribution of the sample has been given in Table 1.

Table 1
Distribution of Sample

Board	Name of school	Boys	Girls	Total	Grand Total
UP Board	Motilal Nehru Balika Vidyalaya	–	54	54	99
	Shanti Convent Inter College	45	–	45	
ICSE Board	Lucknow Public School	45	15	60	95
	Career Convent Girls College	–	35	35	
CBSE Board	Central Academy	30	17	47	98
	Bright way College	25	26	51	
Total		145	147	292	292

TOOL

In the present study, a mental map refers to the spatial environment of the country's cultural scenario as perceived by the students. To

study the students' mental map of Indian Culture, a tool was constructed.

For the construction of the tool, a thorough study of the literature on Indian Culture was done. After discussion with experts of this field, twenty-five (25) concepts of Indian Culture, which have some relevance for National Integration, were identified.

This list included the following concepts:

Unity in Diversity, Religious Tolerance, Universal Brotherhood, Theory of Karma, Coordination Power, Simple Living & High Thinking, Importance of family, Multireligious Society, Broad Outlook, Multilingual Society, Power of Adoption, Humanity, Tolerance, Dhyan& Yoga, Spiritualism, Theory of Truth, Non-Violence, Salvation or Moksha, Lok- Parlok, Geographical Broadness, Niskam Karma, Democratic Society, Sacrifice, Parmarth, Pilgrimage.

This list of 25 concepts was given to experts (Out of these five were from the Department of Education, University of Lucknow and fifteen from different B. Ed. Colleges of Lucknow) and they were asked to mark all those concepts of Indian culture which are important for National Integration. They were further asked to write any other concepts of Indian culture which they deemed fit from their point of view.

On the basis of experts' opinion, eighteen concepts of Indian culture which in their opinion had relevance for National Integration were selected to form the tool. Out of eighteen concepts, fourteen were from the original list of 25, and 4 were added on the advice of experts. These included Antiquity, Indian Ideal,Atithisatkar, and Karmkand. These 18 concepts were included in the tool for the study of students' Mental Map of Indian Culture.

Procedure for collection of Data:

The data was collected in natural classroom settings by the researcher. The sample for this study was selected from six secondary schools of Lucknow city.

RESULTS AND DISCUSSION

Hypothesis

'There will be no significant difference in the mental map of students regarding Indian Culture, in relation to their academic achievement, Socio-Economic Status, types of schools and gender differences.'

Sub-hypothesis 1.1

'There will be no significant difference between the mental map of high academic achievers and low academic achievers.'

Table 2
Difference between Mental Map Scores of high achievers and low achievers

S.N.	Sub-group	Scores of Mental Map			df	't' value	significance
		M	σ	N			
1	High achievers	11.2	6.3	114	290	5.8	p < 0.01 highly significant
2	Low achievers	7.6	4.0	148			

Result:

Table 2 shows the Mean and SD values for the high achievers and low achievers sub-groups on the mental map of Indian Culture. The obtained value of 't' is 5.8 which is highly significant (p<0.01). Thus,

sub-hypothesis 1.1 is rejected and on the basis of mean values given in Table 2 and Fig. 1, it may be inferred that high achievers have a better mental map of Indian Culture.

Fig. 1
Mean Mental Map scores of high achievers
and Low achievers
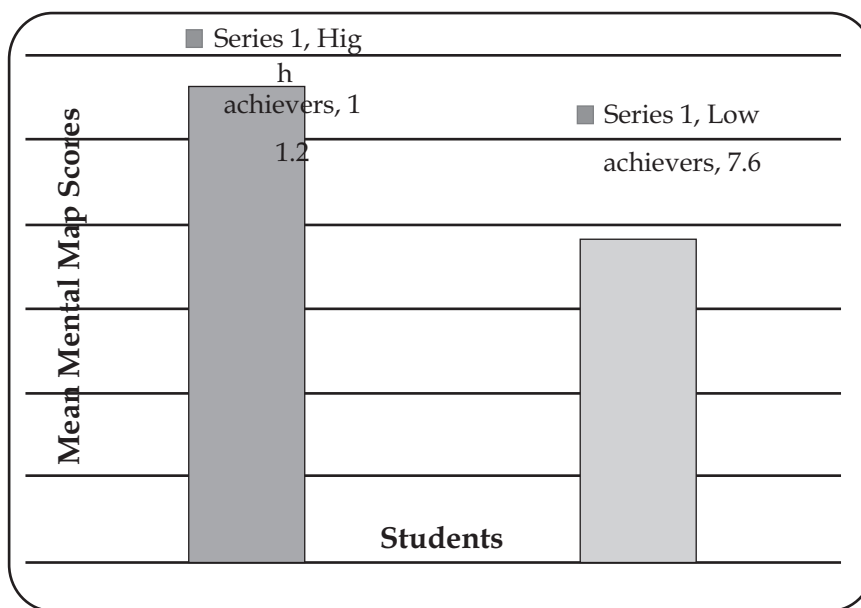
Discussion :

The result shows that academic achievement has a relationship with the mental map of students regarding Indian Culture. The students with a high level of achievement have a better mental map of Indian Culture. Perhaps this is due to the fact that students whose academic achievement is high are more studious and have better observation, understanding, and grasping power besides good memory. They study extra reading materials, some of which may be connected with

Indian Culture. They may also be attending workshops, seminars, etc. All these have made them aware of salient features of Indian Culture.

Sub-hypothesis 1.2

'There will be no significant difference between the Mental map of students belonging to low Socio-Economic Status (SES) and high SES groups.'

Table 3
Difference between Mental Map scores of high SES & low SES groups

S.N.	Sub-group	Scores of Mental Map			df	't' value	significance
		M	σ	N			
1	Low SES	7.00	3.6	147	290	7.69	p < 0.01 highly significant
2	High SES	11.52	6.08	145			

Results :

Table 3 shows the Mean and SD values of low SES and high SES subgroups on the mental map of Indian Culture. The obtained value of 't' is 7.69 which is highly significant (p < 0.01). Thus, sub hypothesis 1.2 is rejected and on the basis of mean values given in Table 3 and Fig. 2, it may be inferred that students belonging to the high SES group have a better mental map of Indian Culture.

Fig. 2
Mean Mental Map scores of students belonging
to low SES and High SES
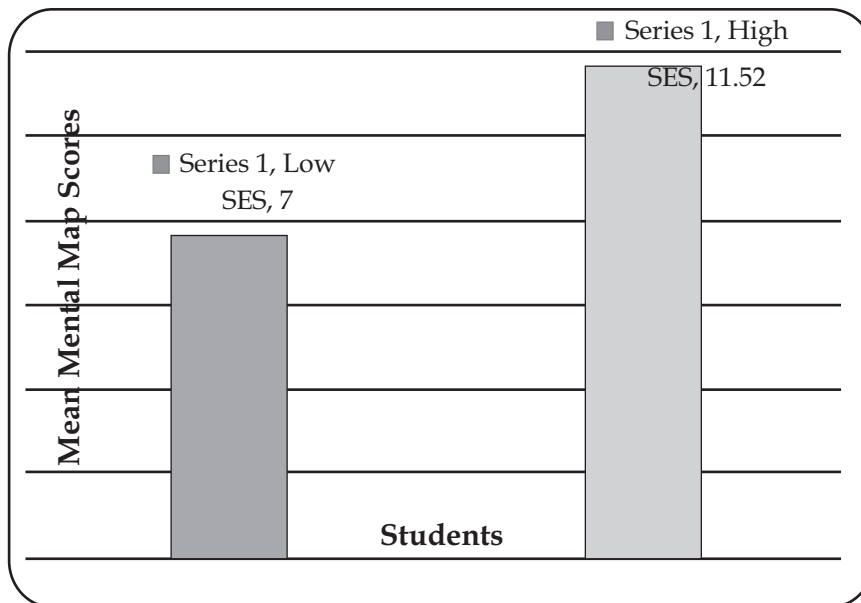
Discussion :

The result shows that socio-economic status has a relationship with the mental map of students regarding Indian Culture. The students with high SES have a better mental map of Indian Culture.

Perhaps this is due to the fact that the students who belong to high SES have better exposure to the country and Indian Culture. They have abetter facility of exposure to additional reading material and have a better chance of visiting different places of India which gives them a better understanding of India and its culture and has made them aware of the characteristics of Indian Culture. They also have better chances of socialization.

This result is supported by Hazen (1982), who found individual differences in the development of cognitive mapping ability, and by Jahoda (1963) who found that there are socioeconomic differences in the mental map of children. Dueck (1976) found that the socialization process is directly related to children's mental map.

Sub-hypothesis 1.3

'There will be no significant difference in the Mental Map of students attending different types of schools (affiliated to different boards). '

Sub-hypothesis 1.3 (a)

'There will be no significant difference in the mental map of students studying in ICSE board and CBSE board.'

Table 3
Difference between Mental Map scores of ICSE board
and CBSE board

S.N.	group	Scores of Mental Map			df	't' value	significance
		M	σ	N			
1	ICSE Board	7.63	5.8	95	191	4.6	p < 0.01 highly significant
2	CBSE Board	11.34	5.3	98			

Result:

Table 3 shows the Mean and SD values of students studying in ICSE board and CBSE board on Mental Map of Indian Culture. The obtained value of 't' is 4.6 which is highlysignificant (p < 0.01). Thus the sub-hypothesis 1.3.1 is rejected and on the basis of mean values,

it may be inferred that students studying in CBSE board schools have a better mental map of Indian Culture.This result is also shown in Fig.3

Sub-hypothesis 1.3(b)

'There will be no significant difference between the Mental Map of students studying in CBSE board and UP board.'

Table 4
Difference between Mental Map Scores of CBSE and UP Board

S.N.	Group	Scores of Mental Map			df	't' value	significance
		M	σ	N			
1	CBSE Board	11.34	5.30	98	195	4.00	p < 0.01 highly significant
2	U.P. Board	8.57	4.36	99			

Result:

Table 4 shows the mean and SD values of students studying in the CBSE board and U.P. board on Mental Map of Indian Culture. The obtained value of 't' is 4.00 which is highly significant (p< 0.01). Thus the sub-hypothesis 1.3(b) is rejected. On the basis of mean values, it may be inferred that students studying in the CBSE board have a better mental map of Indian Culture.

Sub-hypothesis 1.3(c)

'There will be no significant difference between the Mental Map of students studying in UP board and ICSE board.'

Table 5
Difference between Mental Map Scores of UP board
and ICSE board

S.N.	Group	Scores of Mental Map			df	't' value	significance
		M	σ	N			
1	UP Board	8.57	4.36	99	192	1.27	p > 0.05 not significant
2	ICSE Board	7.63	5.8	95			

Result :

Table 5 shows the mean and SD values of students studying in U.P. board and ICSE board on Mental Map of Indian Culture. The obtained value of 't' is 1.27 which is not significant (p > 0.05). Thus the sub-hypothesis 1.3(c) is sustained. Based on mean values, it may be inferred that there is no significant difference between the mental map of students studying in U.P. board and ICSE board.

Fig. 3
Mean Mental Map Scores of students studying in
ICSE, CBSE and UP boards
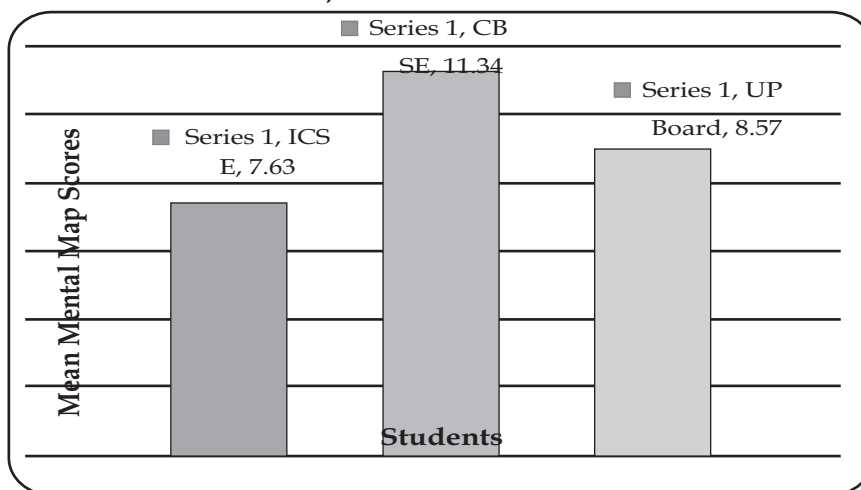
Discussion :

The results shown in Fig.3 and the analysis of scores on the mental map of students studying in schools affiliated to different boards show that CBSE board's students have the superior type of mental map based on Indian Culture. Perhaps this is due to thefact that CBSE board schools have students who have visited relatively more parts of the country and acquainted themselves with the regional differences and unity in diversity etc., while in the case of the ICSE board and UP board most of the students are from the local area having relatively little or no exposure to the multiplicity of different regions and their regional differences.

Sub-hypothesis 1.4

'There will be no significant difference between the mental map of boys and girls.'

Table 6
**Difference between Mental Map scores of boys and girls**

S.N.	Groups	Scores of Mental Map			df	't' value	significance
		M	σ	N			
1	Boys	9.00	5.03	145	290	0.48	p > 0.05 not significant
2	Girls	9.31	6.00	147			

Result

Table 6 shows the mean and SD values of boys and girls on the mental map of Indian Culture. The obtained value of 't' is 0.48 which is not significant (p>0.05). Thus, sub-hypothesis 1.4 issustained. On the basis of mean values, it may be inferred that there is no

significant difference in the Mental Map of boys and girls students regarding Indian Culture. This result is also shown in Fig. 4.

Fig. 4
Mean Mental Map Scores of boys and girls
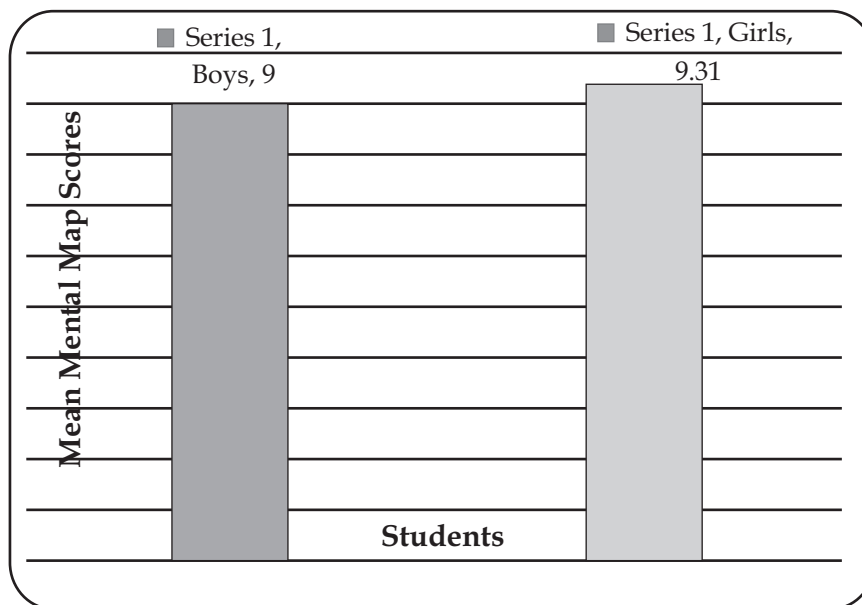
Discussion :

The results show that mental maps of boys and girls regarding Indian Culture have no significant difference. It may be attributed to the fact that the exposure to Indian Culture is more or less the same for both genders and their knowledge about Indian Culture is near to equal level.

This result is contrary to the finding of Anooshion et. al. (1981) whose finding showed gender differences in developing cognitive maps. This result is also contrary to the finding of Mathew (1984),

Chiodo (1993), and Montello, et. al. (1999) who have reported that male students scored higher than their female counterparts and boys showed a broader understanding of space. But the result is supported by Kashima, et. al. (1995), who found that gender has no relationship with culture.

Findings

On the basis of the analysis of data, the following results may be drawn :

1.   There is a significant differenced between the mental map of high academic achievers and low academic achievers ($t = 5.8$, $p < 0.01$).

2.   There is a significant difference between the mental map of students belonging to low socio-economic status and high socio-economic status ($t = 7.69$, $p < 0.01$).

3.   There is a significant difference in the mental map of students studying in ICSE board and CBSE board ($t = 4.6$, $p < 0.01$).

4.   There is a significant difference between the mental map of students studying in the CBSE board and UP board ($t = 4.0$, $p < 0.01$).

5.   There is no significant difference between the mental map of students studying in the UP board and ICSE board ($t = 1.27$, $p > 0.05$).

6.   There is no significant difference between the mental map of boys and girls ($t = 0.48$, $p > 0.05$).

Conclusion

In the light of the objectives of the study and on the basis of results, certain conclusions may be drawn. These conclusions are as follows:

❑ High Academic achiever students and students belonging to high Socio-Economic Status group have better Mental Map of Indian Culture.

❑ Students studying in the CBSE board have the best Mental Map of Indian Culture in comparison to students of ICSE and UP board.

❑ The Mental Map of Boys and girls regarding Indian Culture shows no difference.

Implications of Study:

Some of the implications of the present study in the area of school education may be as follows:

1. Awareness about Indian Culture in the students is not very good. Some common programs regarding Indian Culture need to be introduced in the schools. Some of the areas specified in the present work can provide the basis in this direction.

2. Knowledge of Indian Culture has a clear-cut relationship with factors like academic achievement, socio-economic status, and gender. This fact may be kept under consideration while providing training to students.

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