COGNITIVE STYLES OF SCHOOL TEACHERS IN RELATION TO THEIR SOCIAL BACKGROUND

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ABSTRACT

The main objective of the present investigation is to make a comparative study of cognitive styles of school teachers from high schools and elementary schools due to variation in community. The study is based on analyses of previous researches in this area. Each of these researches has been conducted on sample size of 60 school teachers located in Kuppam, and Gudupalli Mandals. Simple random sampling technique has been used to select samples for these investigations. The Cognitive Style Inventory (Praveen Kumar Jha, 2001) has been used in all these studies for collection of data so as to find out the cognitive styles of school teachers. Result from the present analyses reveal that there is no significant difference in cognitive styles among school teachers due to variation in community, for example, scheduled social backgrounds (SC), scheduled tribes (ST), backward classes (BC), and other communities (OC).

INTRODUCTION

Cognitive style refers to the styles' in which the persons organize stimuli and construct meanings for themselves out of their experiences. It is an important component of total personality and cognitive processes. Allport (1937) mentions cognitive style as an individual's habitual or typical way of perceiving, remembering, thinking, and problem solving. Also, it has been indicated as a person's preferred way of gathering, processing and evaluating information; it influences how people scan their environment for information, and how they organize and interpret this information, and how they integrate their interpretations into the mental model and subjective theories that guide their actions (Hayes & Allinson, 1998). Srinivas Kumar (2011) defined that cognitive style has to be considered as a wholistic process of cognition that begins with the perception, and mediated by information processing, and the resultant retrieval; it varies from person to person and it is affected by various personality factors, such as, previous information, heredity and environment, interest, thinking, attitude, value system, intelligence, creativity, social and economic status and so on. It is a fact that human beings are gregarious in nature right from birth to death. Also there are variations among persons. Persons are different and hence, their ways of perception, understanding, and retrieval are different. Teachers form an important chunk of human population. Cognitive style is described as a personality dimension which influences attitudes, values and social interaction. It is need-based.

In the light of these observations, the present study gains significance and it has been considered to make a comparative study of cognitive styles based on the social background of school teachers from high schools and elementary schools. The main objective of the present survey is to find out the difference in cognitive styles of school teachers due to variation in their social background. It has been hypothesized that there may not be any significant difference in cognitive styles of school teachers due to variation in social background. Hence, an attempt is made to study this situation.

METHOD

The methodology involves an analytical study of earlier researches pertaining to cognitive styles that have been made in respect of high school and elementary school teachers with specific reference to community difference. These studies have been carried out by Hemalatha (2011), Prabhakar (2011), Sunitha (2011), Usharani (2011), and Vijaychakradhar (2011) on the samples of teachers working in and around

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schools of three Mandals of Chittoor district of Andhra Pradesh State, namely, Kuppam, Gudupalli, and Shantipuram. Survey method has been adopted in each of these studies.

It has been found that all the said investigators have employed the 'simple random sampling technique' for selection of samples.

The Cognitive Styles Inventory (CSI) has been used as a tool in all the studies that have been reviewed now. It has been standardized for Indian population by Praveen Kumar Jha (2001). The CSI is a self-report measure of the ways of thinking, judging, remembering, storing information, decision making, and believing in interpersonal relationships. The CSI comprises 40 statements from which 20 statements are related to Systematic Style and the other 20 statements to Intuitive Style and are to be responded on five-point scale running from 'Strongly Agree' to 'Strongly Disagree' with three middle responses of 'Agree', 'Undecided', and 'Disagree'. It enables to assess the five styles, namely, systematic style, intuitive style, integrated style, undifferentiated style, and split style.

1. Systematic Style: An individual who typically operates with a systematic style uses a well defined step-by-step approach while solving a problem; looks for an overall method or pragmatic approach; and then makes wholistic plan for problem solving.
2. Intuitive Style: An individual with intuitive style uses an unpredictable ordering of analytical steps when solving a problem, depends on experience pattern characterized by universalized areas or hunches and explores and abandons alternatives quickly.
3. Integrated Style: A person with an integrated style is able to change styles quickly and easily. Such style changes seem to be unconscious and take place in a matter of seconds. The result of this 'rapid fire' ability is that it appears to generate energy and a proactive approach to problem-solving. In fact, integrated people are often referred to as 'problem-seekers' because they consistently attempt to identify potential problems as well as opportunities in order to find better ways of doing things.
4. Undifferentiated Style: A person with such style appears not to distinguish or differentiate between the two style extremes, that is, systematic and intuitive, and therefore, appears not to display a style. In a problem-solving situation, he/she looks for instructions or guidelines from outside sources. Undifferentiated individuals tend to be withdrawn, passive and reflective and often look to others for problem-solving strategies.
5. Split Style: A person with split style shows fairly equal degrees of systematic and intuitive characteristics. However, persons with split-style do not possess an integrated behavioural response; instead they exhibit each separate dimension in completely different settings using only one style at a time based on the nature of the tasks. In other words, they consciously respond to problem-solving by selecting the most appropriate style.

RESULTS

Upon analyses of the data gathered from the said research reports, the following results have been obtained in respect of cognitive styles among high school teachers and elementary school teachers, in terms of Systematic Style, Intuitive Style, Integrated Style, Un-differentiated Style, and Split Style, due to variation in community.

Hypothesis 1

There is no significant difference in the cognitive styles of high school social studies teachers due to variation in social background (Hemalatha, 2011) (N=60)

Table 1: Showing chi-square test value in respect of cognitive styles of high school social studies teachers due to variation in social background

Community	Cognitive Style					Total	Chi-square test value
	Systematic	Intuitive	Integrated	Undifferentiated	Split		
Other Communities	8	0	4	4	3	19	3.84@
BC	11	0	9	5	7	32	
SC/ST	4	0	1	0	4	9	

Table value: 15.507 at 0.05 level df=8
@ not significant

As per the chi-square test value indicated in Table 1, the hypothesis that there is no significant difference in the cognitive styles of high school social studies teachers due to variation in social background.

Hypothesis 2

There is no significant difference in the cognitive styles of high school Telugu teachers due to variation in social background (Prabhakar, 2011) (N=60)

Table 2: Showing chi-square test value in respect of cognitive styles of high school Telugu teachers due to variation in social background

Community	Cognitive Style					Total	Chi-square test value
	Systematic	Intuitive	Integrated	Undifferentiated	Split		
Other Communities	1 (2)	0 (0.7)	6 (2.7)	1 (1.2)	7 (8.2)	15	9.78@
BC	7 (4.8)	2 (1.8)	4 (6.6)	3 (3)	20 (19.8)	36	
SC/ST	0 (1.2)	1 (0.4)	1 (1.6)	1 (0.7)	6 (4.9)	9	

Table value: 15.507 at 0.05 level df=8
@ not significant

As per the chi-square test value indicated in Table 2, the hypothesis that there is no significant difference in the cognitive styles of high school Telugu teachers due to variation in social background.

Hypothesis 3

There is no significant difference in the cognitive styles of high school mathematics teachers due to variation in social background (Usharani, 2011) (N=60)

Table 3: Showing chi-square test value in respect of cognitive styles of high school mathematics teachers due to variation in social background

Community	Cognitive Style					Total	Chi-square test value
	Systematic	Intuitive	Integrated	Undifferentiated	Split		
Other Communities	3	2	5	1	5	26	6.59@
BC	5	3	10	1	19	38	
SC/ST	0	1	0	0	5	6	

Table value: 15.507 at 0.05 level df=8
@ not significant

As per the chi-square test value indicated in Table 3, the hypothesis that there is no significant

difference in the cognitive styles of high school mathematics teachers due to variation in social background.

Hypothesis 4

There is no significant difference in the cognitive styles of high school English teachers due to variation in social background (Vijay Chakradhar, 2011) N=60

Table 4: Showing chi-square test value in respect of cognitive styles of high school English teachers due to variation in social background

Community	Cognitive Style					Total	Chi-square test value
	Systematic	Intuitive	Integrated	Undifferentiated	Split		
Other Communities	4	0	8	2	6	20	3.68@
BC	8	0	10	2	11	31	
SC/ST	0	0	5	1	3	9	

Table value: 15.507 at 0.05 level df=8
@ not significant

As per the chi-square test value indicated in Table 4, the hypothesis that there is no significant difference in the cognitive styles of high school English teachers due to variation in social background.

Hypothesis 5

There is no significant difference in the cognitive styles of elementary school teachers due to variation in social background (Sunitha, 2011) N=60

Table 5: Showing chi-square test value in respect of cognitive styles of elementary school teachers due to variation in social background

Community	Cognitive Style					Total	Chi-square test value
	Systematic	Intuitive	Integrated	Undifferentiated	Split		
Other Communities	0	0	4	0	5	9	3.34@
BC	2	1	18	5	15	41	
SC/ST	0	0	15	2	3	10	

Table value: 15.507 at 0.05 level df=8
@ not significant

As per the chi-square test value indicated in Table 5, the hypothesis that there is no significant difference in the cognitive styles of elementary school teachers due to variation in social background.

DISCUSSION

From Tables 1 to 5, it could be observed that there exists a variety of cognitive styles among the school teachers ranging from systematic cognitive style to split cognitive style. A close examination of the results in respect of cognitive styles versus social background indicates as under.

English high school teachers: It has been revealed that there is no significant difference in the cognitive styles of English high school teachers due to variation in social background.

Telugu high school teachers: It has been found that there is no significant difference in the cognitive styles of Telugu high school teachers due to variation in social background.

Social studies high school teachers: Results indicate that there is no significant difference in the cognitive styles of Social studies high school teachers due to variation in social background.

Mathematics high school teachers: It has been observed from the results that there is no significant difference in the cognitive styles of Mathematics high school teachers due to variation in social background.

Elementary school teachers: It has also been found that there is no significant difference in the cognitive styles of elementary school teachers due to variation in social background.

It is evident from the results that there is similarity of cognitive styles among school teachers notwithstanding their social background. The components of cognitive style include the processes of perception, information processing, memory, retrieval. It would also be interesting to note that these processes are prone to the influence of attitudes, values, interests, etc. It could be inferred that on the whole there exists a kind of uniformity of occurrence of these features and their influence of the cognitive styles. Such interesting coincidence of cognitive styles may be due to "Education" and the resultant changes thereafter due to the process of Education. Ultimately this could have lead to the presence of egalitarian features like equity and equality among different communities that have been studied in these studies. Manifestation of 'equity' and 'equality'

among school teachers might have taken place due to the acquisition of educational and professional qualifications irrespective of social background, such as, backward classes, and scheduled castes and scheduled tribes, and other communities. Other obvious influences in this regard might be their teaching experience and life experiences that have been accrued over a period of their service. Also the similarity in the results could be attributed to the fact that all school teachers strive towards building citizens for the country.

CONCLUSION

Finally, it is concluded that the there exists similar cognitive styles among school teachers despite variations in their social background. Interesting factors may be attributed to these findings, such as, acquisition of equal level of qualifications, similarity in respect of perceptions, information processing, memory, retrieval processes, value system, attitudes etc because all school teachers focus on development future citizenry for the country. However, further studies may also be made by taking larger samples in order to corroborate the results of the present study.

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