COGNITIVE STYLE AND ACADEMIC ACHIEVEMENT OF OUTGOING UNDERGRADUATE HISTORY STUDENTS

Research Paper

ABSTRACT

The present study deals with what may well turn out to be the missing element in the study of individual differences in cognitive style. This research attempts to find out the relationship between cognitive style and academic achievement of outgoing undergraduate history students in colleges affiliated to Manonmaniam Sundaranar University, Tirunelveli. For the present study the investigator randomly selected 760 final year undergraduate history students from the colleges affiliated to Manonmaniam Sundaranar University, in Tirunelveli, Tuticorin and Kanyakumari districts. After framing the objectives and hypotheses, appropriate analysis was carried out on the collected data. From the analysis, it was found that the outgoing undergraduate history students differ in their cognitive style and academic achievement. This study revealed that there was significant relationship between cognitive style and academic achievement of outgoing undergraduate history students with reference to certain background variables.

INTRODUCTION

In Indian society, people think and talk a lot about individual differences. People differ in many respects. Probably, people are more aware of physical differences than different cognitive styles. Such differences in cognitive style greatly affect the way the people are and the manner in which they behave and interact with others. It is right to say that cognitive style reflects the fundamental make-up of a person. A person's cognitive style, probably an inbuilt and automatic way of responding to information or situations affects a wide range of individual functioning. An important key to facilitate students' learning and their academic achievement is to deal with individual differences in cognitive style.

Among the other variables cognitive style is considered as an important variable in the past few decades. A person's cognitive style also influences a person's general attainment or achievement in learning situations. Therefore, it is theoretically reasonable to take the individual differences in cognitive style to explain the differences in the academic achievement of the outgoing undergraduate history students in the colleges affiliated to Manonmaniam sundaranar university, Tirunelveli.

SIGNIFICANCE OF THE STUDY

The major aim of education is the unification of knowledge existing in different branches of learning subjects. A student receives the sum-total of experiences by learning different subjects. History is considered an important subject in the curriculum primarily to promote self-understanding. History gives a proper conception of time, space and society, teaches tolerance, cultivates valuable intellectual attitudes, broadens the intellect, teaches moral principles, cultivates a forward attitude, imparts mental training and helps in resolving social and individual problems. So history is taught as a subject in primary, secondary, higher secondary and in higher education.

At the college level, there exists enormous difference in the academic achievement of students in general and history students in particular, ranging from high to low. It

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is understood that a majority of history students are not able to get an important position in the social structure because of their poor academic achievement. There are many history students in colleges whose academic achievement seems to be falling below their mental ability. There are many others whose achievement is higher than their mental ability. There must exist certain cognitive and non-cognitive factors which influence the academic achievement of history students. Among the various cognitive factors the investigator has selected only the cognitive style of the outgoing undergraduate history students. The investigator has taken up history students at the under graduate level, since they are at their peak of aspiration and achievement. They have to select various professional and academic courses and different jobs after their college education.

OBJECTIVES OF THE STUDY

The following are the objectives of the present study

1. To find out the level of cognitive style and the academic achievement of outgoing undergraduate history students in terms of certain background variables.

2. To find out the difference, if any, in cognitive style and its dimensions and the academic achievement of outgoing undergraduate history students in terms of certain background variables

3. To find out the relationship, if any, between cognitive style and its dimensions and the academic achievement of outgoing undergraduate history students in terms of certain background variables.

HYPOTHESES OF THE STUDY

The following are the hypotheses of the present study

1. There is no significant difference in cognitive style and its dimensions of outgoing undergraduate history students in terms of certain background variables.

2. There is no significant difference in the academic achievement of outgoing undergraduate history students in terms of certain background variables.

3. There is no significant relationship between cognitive style and its dimensions and the academic achievement of outgoing undergraduate history students in terms of background variables.

METHOD USED

The method adopted by the investigator to study the relationship between cognitive style and the academic achievement of outgoing undergraduate history students in the present study is survey.

SAMPLE

The sample consists of 760 final year undergraduate history students in arts and science colleges in Tirunelveli, Tuticorin and Kanyakumari districts affiliated to Manomaniam Sundaranar University, Tirunelveli. The investigator has used the simple random sampling technique for selecting the sample from the population.

TOOLS USED FOR THE PRESENT STUDY

The investigator has used the following tools for data collection :

1. Cognitive Style Inventory developed and validated by Dr.Praveen Kumar Jha (2001)

2. The results of the fifth semester examination published by Manonmaniam Sundaranar University, Tirunelveli were the source of the students' academic achievement.

STATISTICAL TECHNIQUES USED

According to the nature of the hypotheses of the study, the investigator used mean, standard deviation, t-test and correlation as the statistical techniques for analyzing and interpreting the data.

ANALYSIS OF THE DATA

Table 1

LEVEL OF COGNITIVE STYLE OF OUTGOING UNDERGRADUATE HISTORY STUDENTS IN TERMS OF BACKGROUND VARIABLES

Background variable	Category	Low		Moderate		High	
		No	%	No	%	No	%
Gender	Male	42	19.4	137	66.7	100	18.4
	Female	93	17.1	362	67	52 52	24
Locality	Rural	99	19.1	326	63.1	92	17.8
	Urban	37	15.2	169	69.5	37	15.2
Status	Autonomous	29	15.6	126	67.7	31	16.7
	Non-autonomous	111	19.3	368	64.1	95	16.6

It is inferred from table 1 that among the outgoing undergraduate history male students 19.4% have low, 66.7% have average and 18.4% have high level of cognitive style. Regarding female students 17.1% have low, 67.0% have average and 24.0% have high level of cognitive style.

Among rural students 19.1% have low, 63.1% have average and 17.8% have high level of cognitive style. Regarding urban students 15.2% have low, 69.5% have average and 15.2% have high level of cognitive style.

Among autonomous college students 15.6% have low, 67.7% have average and 16.7% have high level of cognitive style. Regarding non-autonomous college students 19.3% have low, 64.1% have average and 16.6% have high level of cognitive style.

Table 2

LEVEL OF ACADEMIC ACHIEVEMENT OF OUTGOING UNDERGRADUATE HISTORY STUDENTS IN TERMS OF BACKGROUND VARIABLES

Background variable	Category	Low		Moderate		High	
		No	%	No	%	No	%
Gender	Male	28	12.9	163	75.1	26	18.8
	Female	90	16.6	378	69.6	75	16.6
Locality	Rural	109	21.1	339	65.6	69	13.3
	Urban	47	19.3	162	66.7	34	14
Status	Autonomous	38	20.4	117	62.9	31	16.7
	Non-autonomous	101	17.6	397	69.2	76	13.2

It is inferred from the table3 that among the outgoing undergraduate history male students 12.9% have low, 75.1% have average and 18.8% have high level of academic achievement. Regarding female students 16.6% have low, 69.6% have average and 16.6% have high level of academic achievement.

Among rural students 21.1% have low, 65.6% have average and 13.3% have high level of academic achievement. Regarding urban students 19.3% have low, 66.7% have average and 14.0% have high level of academic achievement.

Among autonomous college students 20.4% have low, 62.9% have average and 16.7% have high level of academic achievement. Regarding non-autonomous college students 17.6% have low, 69.2% have average and 13.2% have high level of academic achievement.

Null Hypothesis-1: There is no significant difference in cognitive style and its dimensions of outgoing undergraduate history students in terms of background variables.

Table 3

DIFFERENCE IN COGNITIVE STYLE OF OUTGOING UNDERGRADUATE HISTORY STUDENTS IN TERMS OF BACKGROUND VARIABLES

Dimensions	Background variable	Category	Count	Mean	SD	t-value	Remark
Systematic style	Gender	Male	217	74.18	18.74	0.98	NS
		Female	543	75.61	16.28		
	Locality	Rural	517	75.54	16.75	0.8	NS
		Urban	243	74.47	17.6		
	Status	Autonomous	186	77.65	17.84	2.19	S
		Non-Autonomous	574	74.41	16.69		
Intuitive Style	Gender	Male	217	74.19	18.41	0.79	NS
		Female	543	73.06	15.67		
	Locality	Rural	517	73.74	16.3	0.86	NS
		Urban	243	72.63	16.92		
	Status	Autonomous	186	74.41	16.07	1	NS
		Non-Autonomous	574	73.05	16.63		
Cognitive Style	Gender	Male	217	148.4	32.84	0.12	NS
		Female	543	148.7	29.21		
	Locality	Rural	517	149.3	29.76	0.91	NS
		Urban	243	147.1	31.35		
	Status	Autonomous	186	152.1	30.08	1.81	NS
		Non-autonomous	574	147.5	30.27		

(At 5% level of significance, the table value of 't' is 1.96)

It is inferred from table 2 that there is no significant difference between male and female, rural and urban outgoing undergraduate history students in their systematic style, intuitive style and cognitive style. Further, there is no significant difference between autonomous and non-autonomous college students in their intuitive style and cognitive style. But there is significant difference in their systematic style.

Null Hypothesis-2: There is no significant difference in the academic achievement of outgoing undergraduate history students in terms of background variables.

Table 4

DIFFERENCE IN ACADEMIC ACHIEVEMENT OF OUTGOING UNDERGRADUATE HISTORY STUDENTS IN TERMS OF BACKGROUND VARIABLES

Background variable	category	Count	Mean	SD	t-value	Remark
Gender	Male	217	58.01	9.36	2.96	S
	Female	543	60.15	8.06		
Locality	Rural	517	59.42	8.18	0.54	NS
	Urban	243	59.79	9.14		
Status	Autonomous	186	59.7	7.24	0.33	NS
	Non-autonomous	574	59.49	8.87		

(At 5% level of significance, the table value of 't' is 1.96)

It is inferred from table 4 that there is no significant difference between rural and urban, autonomous and non-autonomous college outgoing undergraduate history students in their academic achievement. But there is significant difference between male and female students in their academic achievement.

Null Hypothesis- 3 There is no significant relationship between cognitive style and its dimensions and academic achievement of outgoing undergraduate history students in terms of background variables.

Table 5

RELATIONSHIP BETWEEN COGNITIVE STYLE AND ITS DIMENSIONS AND ACADEMIC ACHIEVEMENT OF OUTGOING UNDERGRADUATE HISTORY STUDENTS IN TERMS OF BACKGROUND VARIABLES

Dimensions	Background variable	Category	Count	df	g-value	Table value	Remark
Systematic style	Gender	Male	217	215	0.026	0.113	NS
		Female	543	541	0.038	0.062	NS
	Locality	Rural	517	515	0.012	0.062	NS
		Urban	243	241	0.079	0.113	NS
	Status	Autonomous	186	184	0.155	0.138	S
		Non-autonomous	574	572	0.019	0.062	NS
Intuitive style	Gender	Male	217	215	0.06	0.113	NS
		Female	543	541	0.085	0.062	S
	Locality	Rural	517	515	0.033	0.062	NS
		Urban	243	241	0.146	0.113	S
	Status	Autonomous	186	184	0.257	0.138	S
		Non-autonomous	574	572	0.025	0.062	NS

Cognitive style	Gender	Male	217	215	0.019	0.113	NS
		Female	543	541	0.067	0.062	S
	Locality	Rural	517	515	0.011	0.062	NS
		Urban	243	241	0.123	0.113	S
	Status	Autonomous	186	184	0.229	0.138	S
		Non-Autonomous	574	572	0.003	0.062	NS

It is inferred from table 5 that there is no significant relationship between systematic style, intuitive style, cognitive style and academic achievement of male, rural, and non-autonomous college outgoing undergraduate history students. But there is significant relationship between systematic style, intuitive style, cognitive style and academic achievement of the autonomous college students.

Further, there is significant relationship between intuitive style, cognitive style and academic achievement of the female and urban students.

FINDINGS

1. A majority of the outgoing undergraduate history students have moderate level of Systematic style, Intuitive style cognitive style and academic achievement irrespective of the background variables and their categories.

2. There is no significant difference between Male and Female, Rural and Urban outgoing undergraduate history students in their Systematic style, Intuitive style and Cognitive Style.

3. There is no significant difference between Autonomous and non-autonomous college outgoing undergraduate history students in their Intuitive style and Cognitive Style. But significant difference is noticed in their Systematic style.

4. There is no significant difference between Rural and Urban, Autonomous and non- autonomous colleges outgoing undergraduate history students in their academic achievement. But significant difference was found between Male and Female students in their academic achievement.

5. There is no significant relationship between systematic style, intuitive style, cognitive style and the academic achievement of male, rural, and non-autonomous college outgoing undergraduate history students.

7. There is significant relationship between systematic style, intuitive style, cognitive style and the academic achievement of autonomous college students.

8. There is significant relationship between intuitive style, cognitive style and the academic achievement of the female and urban students.

CONCLUSION

The academic achievement of the outgoing undergraduate history students is found to be determined by their cognitive style. This study proves that the male students are found to be lower in their academic achievement when compared to their counterparts because the female students may consciously respond to the situations by selecting the most appropriate cognitive style. From this study, it is also evident that students from autonomous colleges show better systematic style and there is significant relationship between their cognitive style and their academic achievement. The reason may be the teacher related factors like innovative curriculum, method of teaching, class room interaction, proper learning environment and student related factors like student's attitude, mental ability, social adjustment, cultural influence, parents' education, occupation and their income are considered equally important.

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