



# Cognitive Styles And Level Of Modernization Among School Teachers Belonging To Tribal Community In Relation To Their Income.

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## Abstract

The present study has been conducted to find out the patterns of Cognitive styles and level of modernization among School teachers belonging to tribal community in relation to their Income. The sample for the investigation was drawn from the school teachers belonging to tribal community . By using simple random sampling technique. It comprises 310 school teachers. Standardized tool was used in the present study, Cognitive Style

Inventory (CSI) developed by Praveen Kumar Jha The Comprehensive Modernization Inventory (CMI) developed by Ahluwalia S.P. and Kalia A.K.(1998) The study also revealed that there is no significant difference between in the Patterns of cognitive styles and Level of modernization among school teachers belonging to tribal community in the respect of their Income. Hence, the Null hypothesis is accepted.

## Cognitive Style

Cognitive style depends on the cognitive processing of an individual. Actually cognitive style is a hypothetical construct which has been developed to explain the process of mediation between stimulus and response. In fact the term cognitive style refers to the characteristic ways in which an individual conceptually organizes the environment. It shows the way an individual filters and processes stimuli so that the environment is meaningful

for him/her. Further it also reveals the existence of one-to-one relationship between stimulus and response. In these process there exists cognitive representation for each and every aspect.

For example: a man, a woman, a snake, a child, cold weather, hot weather, red shirt, a lion, a tiger and so on. Otherwise stimuli would have been irrelevant and an individual would respond to any stimulation in a similar fashion without any differentiation

## **Modernization:**

Jha (1978) depicted modernization as, "Modernization is absolute reorientation of man's conviction, viewpoint and demeanors." David (2003) Converses, "Modernization infers two things one change in material setting including frameworks (political, monetary and instructive) and establishments, furthermore it might likewise suggest change to esteem framework or esteem accord.

## **Objectives of the Study**

- (1) To find out the patterns of cognitive styles and Level of Modernization among school teachers belonging to tribal community.
- (2) To find out the pattern of cognitive styles and Level of Modernization among school teachers belonging to tribal community due to variation in their Income.

## **Hypotheses of the study**

- (1) There may not be any significant difference in the patterns of cognitive style and Level modernization among school teachers belonging to tribal community due to variation in their Income.

## **Methodology:**

Descriptive survey research method has been used.

## **Tools Used:**

Two standardized tools were used in the present study.

- a) Cognitive Style Inventory (CSI) developed by Praveen Kumar Jha (2001).
- b) The Comprehensive Modernization Inventory (CMI) developed by Ahluwalia S.P. and Kalia A.K.(1998)

**Variables:**

- a) **Independent (attribute) Variable: Cognitive Styles**
- b) **Dependent Variable: Modernization**
- c) **Demographic / Background variables. Income**

**Cognitive style vs. Level of Modernization vs. Income****Table (a): Systematic Style**

Income		Level Modernization				Total
		Low	Moderate	High	Very high	
Between Rs.10001- 30000	Count	1	3	22	0	26
	% within Income	3.8%	11.5%	84.6%	0.0%	100.0%
	% within Level_Mod	33.3%	21.4%	24.4%	0.0%	24.1%
	% of Total	0.9%	2.8%	20.4%	0.0%	24.1%
Between Rs.30001- 60000	Count	2	9	66	1	78
	% within Income	2.6%	11.5%	84.6%	1.3%	100.0%
	% within Level_Mod	66.7%	64.3%	73.3%	100.0%	72.2%
	% of Total	1.9%	8.3%	61.1%	0.9%	72.2%
Between Rs.60001- 90000	Count	0	2	2	0	4
	% within Income	0.0%	50.0%	50.0%	0.0%	100.0%
	% within Level_Mod	0.0%	14.3%	2.2%	0.0%	3.7%
	% of Total	0.0%	1.9%	1.9%	0.0%	3.7%
Total	Count	3	14	90	1	108

% within Income	2.8%	13.0%	83.3%	0.9%	100.0%
% within Level_Mod	100.0%	100.0%	100.0%	100.0%	100.0%
% of Total	2.8%	13.0%	83.3%	0.9%	100.0%

Table (a) shows the distribution of respondents who are in systematic style with regard to level of modernization on the basis of their income. Among 108 respondents who are in systematic cognitive style, 78 (72.2%) of them are in the income range between Rs.30001-Rs.60000, 26 (24.1%) of them in the income range of Rs.10001-Rs.30000 and only 4 (3.7%) are in the income range between Rs.60001-Rs.90000. Out of 78 respondents who are in the income range of Rs.30001-Rs.60000, majority 66( 84.6%) of them fall under high level of modernization, 9 (11.5%) of them are under moderate level, 2 (2.6%) of them are in low level of modernization and 1 (1.3%) is in very high level of modernization. Similarly, out of 26 respondents who in the income range of Rs.10001-Rs.30000, majority 22(84.6%) of them fall under high level of modernization, 3 (11.5%) are under moderate level and 1 (3.8%) is in low level of modernization and no one in very high level of modernization. Likewise, out of 4 respondents who are in the income range of Rs.60001-Rs.90000, an equal number (2, 50.0%) of them fall under high level of modernization and moderate level of modernization and no one in very high level of modernization. On the whole, majority 90 (83.3%) of them are in high level of modernization, 14 (13.0%) are in moderate, 3 (2.8%) are in low level and 1 (0.9%) are in very high level of modernization. From this analysis, it is found that majority 90(83.3%) of them are in high level of modernization either any range of income i.e., Rs.10001-Rs.30000 22(24.4%) or Rs.30001-Rs.60000 66(84.6%) or Rs.60001-Rs.90000 2(50.0%).

### Chi-Square Tests

Systematic Style	Value	Df	Asymp. Sig. (2sided)
Pearson Chi-Square	5.565	6	0.474
Likelihood Ratio	4.231	6	0.645
Linear-by-Linear Association	0.134	1	0.714
N of Valid Cases	108		

Chi-square test has been used for testing the hypothesis to know the significant difference. The obtained Pearson chi-square test value (5.565) is lower than the table value (12.592) at 0.05 level of significance for 6 degree of freedom. It shows that there is no significant difference between systematic cognitive style and level of modernization among the school teachers belonging to tribal community on the basis of their income.

**Table (b): Intuitive Style**

Income		Level Modernization				Total
		Low	Moderate	High	Very high	
Between Rs.10001- 30000	Count		0	1		1
	% within Income		.0%	100.0%		100.0%
	% within Level_Mod		.0%	33.3%		25.0%
	% of Total		.0%	25.0%		25.0%
Between Rs.30001- 60000	Count		1	2		3
	% within Income		33.3%	66.7%		100.0%
	% within Level_Mod		100.0%	66.7%		75.0%
	% of Total		25.0%	50.0%		75.0%
Total	Count		1	3		4
	% within Income		25.0%	75.0%		100.0%
	% within Level_Mod		100.0%	100.0%		100.0%
	% of Total		25.0%	75.0%		100.0%

Table (b) shows the distribution of respondents who are in intuitive style with regard to level of modernization on the basis of their income. Among 4 respondents who are in intuitive cognitive style, 3 (75.0%) of them are in the income range of Rs.30001-Rs.60000 and 1 (25.0%) are in the income range of Rs.10001-Rs.30000. Out of 3 respondents who are in the income range of Rs.30001-Rs.60000, majority 2(66.7%) of them fall under high level of modernization and 1 (33.3%) is in moderate level of modernization. The only 1 (100.0%) respondent who is in the income range of Rs.10001-Rs.30000 fall under high level of modernization. On the whole, majority 3 (75.0%) of them are in high level of modernization and only 1 (25.0%) is in moderate level of modernization. From this analysis, it is found that majority (3, 75.0%) of them are in high level of modernization and they are

either in the income range of Rs.30001-Rs.60000 2(66.7%) or in the income range of Rs.10001-Rs.30000 (1, 100%).

### Chi-Square Tests

Intuitive Style	Value	df	Asymp. Sig. (2sided)
Pearson Chi-Square	0.444	1	0.505
Likelihood Ratio	0.000	1	1.000
Linear-by-Linear Association	0.680	1	0.410
N of Valid Cases	4		

Chi-square test has been used for testing the hypothesis to know the significant difference. The obtained Pearson chi-square test value (0.444) is lower than the table value (3.841) at 0.05 level of significance for 1 degree of freedom. It shows that there is no significant difference between intuitive cognitive style and level of modernization among the school teachers belonging to tribal community on the basis of their income.

**Table (c):**

### Integrated Style

Experience		Level Modernization				Total
		Low	Moderate	High	Very high	
Between Rs.10001-30000	Count	1	5	14	6	26
	% within Income	3.8%	19.2%	53.8%	23.1%	100.0%
	% within Level_Mod	50.0%	15.2%	11.9%	75.0%	16.1%
	% of Total	.6%	3.1%	8.7%	3.7%	16.1%
Between Rs.30001-60000	Count	1	27	101	2	131
	% within Income	.8%	20.6%	77.1%	1.5%	100.0%
	% within Level_Mod	50.0%	81.8%	85.6%	25.0%	81.4%

	% of Total	.6%	16.8%	62.7%	1.2%	81.4%
Between	Count	0	1	3	0	4
Rs.60001-	% within Income	.0%	25.0%	75.0%	.0%	100.0%
90000	% within Level_Mod	.0%	3.0%	2.5%	.0%	2.5%
	% of Total	.0%	.6%	1.9%	.0%	2.5%
	Count	2	33	118	8	161
	% within Income	1.2%	20.5%	73.3%	5.0%	100.0%
Total	% within Level_Mod	100.0%	100.0%	100.0%	100.0%	100.0%
	% of Total	1.2%	20.5%	73.3%	5.0%	100.0%

Table (c) shows the distribution of respondents who are in integrated style with regard to level of modernization on the basis of their income. Among 161 respondents who are in integrated cognitive style, 131 (81.4%) of them are in the income range of Rs.30001-Rs.60000, 26 (16.1%) of them are in the income range of Rs.10001-Rs.30000 and 4 (2.5%) are in the income range of Rs.60001-Rs.90000. Out of 131 respondents who are in the income range between Rs.30001-Rs.60000, majority 101(77.1%) of them fall under high level of modernization, 27 (20.6%) of them are under moderate level, 2 (1.5%) of them are in very high level of modernization and 1 (0.0%) is in low level of modernization.

Similarly, out of 26 respondents who are in the income range between Rs.10001-Rs.30000, majority (14, 53.8%) of them fall under high level of modernization, 6 (23.1%) are under very high level of modernization another 5 (19.2%) are in moderate level of modernization and 1 (3.8%) is in low level of modernization. Likewise, out of 4 respondents who are in the income range between Rs.60001-Rs.90000, majority 3(75.0%) of them fall under high level of modernization and only 1 (25.0%) is under moderate level of modernization. On the whole, majority 131 (81.4%) of them are in the income range of Rs.30001-Rs.60000, 101 (77.1%) are in high level, 27 (20.6%) are in moderate level, 6 (23.1%) are in very high level of modernization and only 1 (3.8%) is in low level of modernization. From this analysis, it is found that majority 18(73.3%) of them are in high level of modernization either any income level.

### Chi-Square Tests

Integrated Style	Value	df	Asymp. Sig. (2sided)
Pearson Chi-Square	23.835*	6	0.001
Likelihood Ratio	16.787	6	0.010
Linear-by-Linear Association	2.126	1	0.145
N of Valid Cases	161		

Chi-square test has been used for testing the hypothesis to know the significant difference. The obtained Pearson chi-square test value (23.835) is higher than the table value (12.592) at 0.05 level of significance for 6 degree of freedom. It shows that there is a significant difference between integrated cognitive style and level of modernization among the school teachers belonging to tribal community on the basis of their income.

**Table (d): Undifferentiated Style**

Income		Level Modernization				Total
		Low	Moderate	High	Very high	
Between Rs.10001- 30000	Count			1		1
	% within Income			100.0%		100.0%
	% within Level_Mod			25.0%		25.0%
	% of Total			25.0%		25.0%
Between Rs.30001- 60000	Count			3		3
	% within Income			100.0%		100.0%
	% within Level_Mod			75.0%		75.0%



Total	% of Total			75.0%	75.0%
	Count			4	4
	% within Income			100.0%	100.0%
	% within Level_Mod			100.0%	100.0%
	% of Total			100.0%	100.0%

Table (d) shows the distribution of respondents who are in undifferentiated cognitive style with regard to level of modernization on the basis of their income. Among 4 respondents who are in undifferentiated cognitive style 3 (75.0%) of them fall under the income range of Rs.30001-Rs.60000 and 1 (25.0%) is in the income range of Rs.10001-Rs.30000. All the 4 (i.e., 100.0%) respondents are in high level of modernization.

**Table (e): Split Style**

Income		Level Modernization				Total
		Low	Moderate	High	Very high	
Between Rs.10001- 30000	Count	1	3	3		7
	% within Income	14.3%	42.9%	42.9%		100.0%
	% within Level_Mod	100.0%	30.0%	13.6%		21.2%
	% of Total	3.0%	9.1%	9.1%		21.2%
Between Rs.30001- 60000	Count	0	7	19		26
	% within Income	.0%	26.9%	73.1%		100.0%
	% within Level_Mod	.0%	70.0%	86.4%		78.8%
	% of Total	.0%	21.2%	57.6%		78.8%
Total	Count	1	10	22		33
	% within Income	3.0%	30.3%	66.7%		100.0%

% within Level_Mod	100.0%	100.0%	100.0%	100.0%
% of Total	3.0%	30.3%	66.7%	100.0%

Table (e) shows the distribution of respondents who are in split style with regard to level of modernization on the basis of their income. Among 33 respondents who are in split cognitive style, 26 (78.8%) of them are in the income range of Rs.30001-Rs.60000 and 7 (21.2%) are in the income range of Rs.10001-Rs.30000. Out of 26 respondents who are in the income range of Rs.30001-Rs.60000, majority 19(73.1%) of them fall under high level of modernization, 7 (26.9%) of them are under moderate level and no one in low level of modernization. Similarly, out of 7 respondents who are in the income range of Rs.10001-Rs.30000, 3 (42.9%) of them fall under high level of modernization, other 3 (23.1%) are under moderate level of modernization and 1 (14.3%) are in low level of modernization. On the whole, majority 22 (66.7%) of them are in high level of modernization, 10 (30.3%) are in moderate, 1 (3.0%) are in low level of modernization. From this analysis, it is found that majority 22 (66.7%) of them are in high level of modernization either in the income range of Rs.10001-Rs.30000 7(21.2%) or in the income range of Rs.30001-Rs.60000 (26, 68.8%).

#### Chi-Square Tests

Systematic Style	Value	df	Asymp. Sig. (2sided)
Pearson Chi-Square	4.932	2	0.085
Likelihood Ratio	4.363	2	0.113
Linear-by-Linear Association	3.628	1	0.057
N of Valid Cases	33		

Chi-square test has been used for testing the hypothesis to know the significant difference. The obtained Pearson chi-square test value (4.932) is lower than the table value (5.991) at 0.05 level of significance for 2 degree of freedom. It shows that there is no significant difference between split cognitive style and level of modernization among the school teachers belonging to tribal community on the basis of their Income.

### Cognitive styles vs. Level of Modernization vs. Income

- (a) **Systematic Style:** it is found that majority 90, (83.3%) of them are in high level of modernization either any income group. Further, there is no significant difference between systematic cognitive style and level of modernization among the school teachers belonging to tribal community on the basis of their income.
- (b) **Intuitive Style:** it is found that majority 3,(75.0%) of them are in high level of modernization either between Rs.10001-30000 or between Rs.30000-60000 income ranges. Further, there is no significant difference between intuitive cognitive style and level of modernization among the school teachers belonging to tribal community on the basis of their income.
- (c): **Integrated Style:** it is found that majority 118, (73.3%) of respondents are in high level of modernization either in the income range of Rs.10001-30000 14,(11.9%) or in the income range of Rs.30001-Rs.60000 101,(85.6%) or in the income range of Rs.60001-90000 3,(2.5%).Further, there is a significant difference between integrated cognitive style and level of modernization among the school teachers belonging to tribal community on the basis of their income.
- (d) **Undifferentiated Style:** It is found from the study that among 4 respondents who are in undifferentiated cognitive style 3 (75.0%) are in the income range of Rs.30001 to Rs.60000 and 1 (25.0%) respondents are in the income range of Rs.60001 to Rs.90000 and they are in high level of modernization.
- (e) **Split Style:** it is found that majority 22, (66.7%) of them are in high level of modernization either in the income range of Rs.10001 to Rs.30000 (3, 13.6%) or in the income range of Rs.30001 to Rs.60000 19,(86.4%). Further, there is no significant difference between split cognitive style and level of modernization among the school teachers belonging to tribal community on the basis of their experience.

### HYPOTHESES TESTING

**Hypothesis:** *“There is no significant difference among school teachers belonging to tribal community in respect of their Income*

**Result:** The calculated F value is 0.094 and the tabulated F value is 2.99 ( $p=0.05$ ) with  $n_1 = 2$  and  $n_2 = 307$ . Since the calculated F value is lower than the tabulated F value at 5% level of probability, the deviation in the mean value of the three groups are not significant.

Hence, the hypothesis is accepted.

## Suggestions for further study

1. A similar study may be carried out drawing the sample from Model College teachers.
2. Studies may be conducted to know the cognitive styles among KGBV Teachers.
3. A similar study may be conducted to know the level of modernization among B. Ed Students.
4. A similar study may be conducted to know the cognitive styles of Degree college principles in other districts of Telangana state.

## CONCLUSIONS

It is concluded that there is no significant difference among school teachers

belonging to tribal community on the basis of their income. However, majority teachers who fall under income range of Rs.30001 to Rs.60000 (54.4%) and 50.0% of respondents in the income range of Rs.60000 to Rs.60000 possess integrated cognitive style. As these type of school teachers have unpredictable mind due to financial problems. Now-a-days the money plays a main role in the society, in every aspect money required. The school teachers who get more than Rs.30000 salary reaches a complex family, they need different types of financial problems such as construction of own house, children's education/marriage and old age parents as such they can't meet the human needs in the family. So, they make them these issues as a major problem and do not concentrate on their teaching.

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