

Investigation of Prospective women teacher's Cognitive style in terms of different variables

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ABSTRACT

Cognitive style is a hypothetical construct developed to explain the process of mediation between stimuli and responses. The term cognitive style refers to the characteristics ways in which individuals conceptually organize the environment. Cognitive styles have more recently been defined as "individual differences in processing that are integrally linked to a person's cognitive style; they are a person's preferred way of the processing; they are partly fixed, relatively stable and possibly innate preferences" (Peterson, Rayner, & Armstrong, 2009). The present study was conducted to investigate the cognitive style of prospective women teachers concerning their background variables. The investigator has selected 350 future women teachers from the Coimbatore district. A simple random sampling technique has been used to collect the sample. For collecting data, the investigator has used the Cognitive Style Inventory (CSI) constructed and standardized by Praveen Kumar Jha in 2001. For result analysis, the t' test has been used. Upon verifying the hypothesis, a significant difference has been found between Cognitive Styles among Prospective women teachers due to variation in their type of institution, locality of residence.

Keywords : Cognitive style, Systematic style, Intuitive style, Prospective teachers.

Introduction

Individual differences play an important part in modern schooling. Learners' judgments of how they approach learning activities and how the training process affects them have a significant impact on learning products. Individual differences and their application within a learning setting may be an important feature of learning for both teachers and students. One of the most important variables in determining individual differences is the teaching styles that students choose. Learners use a variety of teaching methods, including thinking styles, learning styles, and cognitive styles. The way in

Within Education, the speed of social change and knowledge building has accelerated as a result of globalisation and the knowledge age. The constructivist classroom concept will only succeed if it begins in the teacher education program. The

which learners can learn materials is referred to as learning styles; the way in which learners can believe contents is referred to as thinking styles; and the way in which information is obtained is referred to as cognitive styles. Cognitive style might be a hypothetical construct created to figure out how stimuli and reactions are mediated. Cognitive styles have more recently been defined as "individual differences in processing that are integrally linked to a person's cognitive style; they are a person's preferred way of the processing; they are partly fixed, relatively stable and possibly innate preferences" (Peterson, Rayner, & Armstrong, 2009).

researcher attempted to identify the cognitive style of potential female teachers based on their background characteristics in this study.

STATEMENT OF THE PROBLEM

The statement of the present study is “**Investigation of Prospective women teacher's Cognitive style in terms of different variables**”.

OBJECTIVES OF THE STUDY

- To determine the extent of Cognitive Style and its dimensions of prospective women teachers.
- To find out if there is any significant difference in Cognitive style about their background variables.

HYPOTHESIS OF THE STUDY

- There is no significant difference between cognitive style and academic qualification of prospective teachers.
- There is no significant difference between cognitive style and locality of residence of prospective teachers.
- There is no significant difference between cognitive style and the type of institution of prospective teachers.

VARIABLES OF THE STUDY

- The investigator has chosen Educational Qualification, Locality of Residence, type of Institution as variables.

METHOD OF THE STUDY

As the present study deals with the Cognitive style of prospective women teachers in Coimbatore District, the investigator adopted the Normative Survey method, which was found suitable together with the essential and relevant data.

SAMPLE

For this present study, 350 prospective women teachers from Government, Government Aided and Self - Finance colleges in Coimbatore were selected as the sample for the analysis. A simple random sampling method was used to collect the sample.

TOOL USED FOR COLLECTING DATA

The data was collected using the Cognitive Style Inventory (CSI), which was created and standardized by Praveen Kumar Jha (2001). The CSI is made up of 40 assertions, half of which apply to the systematic style and the other half to the intuitive style. Each report is given a score based on how much the respondent agrees with it. The respondents next transfer their responses to the scoring sheet, which generates both a systematic and intuitive score. These results are then transferred to the interpretation sheet, which allows the researcher to select how much emphasis they place on organized and intuitive styles.

STATISTICAL TECHNIQUES USED

The investigator used descriptive analysis for the preliminary analysis of the data. The t-test, ANOVA and Correlation were also used for analysis purpose.

RESULTS AND DISCUSSION

1. Level of Cognitive Style of Student teachers

The table below gives the level of Cognitive Style of prospective women teachers.

TABLE 1
LEVEL OF COGNITIVE STYLE OF PROSPECTIVE WOMEN TEACHERS

S. No	Cognitive Style	N=350	%
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1	High	154	44
2	Average	116	33
3	Low	80	23

The above table reveals the level of Cognitive Style of prospective women teachers. Forty-four per cent of future women teachers had a high level of Cognitive Style, 33 per cent of female student teachers had an average level of Cognitive Style. This result contrasts with the study of **Renjith (2014)**, who conducted 'A survey of the cognitive style of prospective teachers in

Malappuram' found that 20% of the students have a high mental sort, 65% medium, 15% low.

2. Dimensions of Cognitive Style of Selected Sample about Different Variables

The table below reveals the dimensions of the Cognitive Style of prospective women teachers in relation to different variables.

TABLE 2: COGNITIVE STYLE OF SELECTED SAMPLE WITH REFERENCE TO BACKGROUND VARIABLES

S. No	Variables	Category	Systematic style		Intuitive style	
			N=179	%	N=171	%
1	Educational qualification	UG	112	63	130	76.0
		PG	67	37	41	24.0
2	Type of college	Government	35	20	30	18.0
		Aided	63	35	102	60.0
		Self-Finance	81	46	39	23.0
3	Locality of residence	Rural	81	45.2	60	35.1
		Urban	114	63.6	111	64.9

Type of college :

Educational Qualification:

Prospective Graduate teachers have a higher Systematic Cognitive style (63 per cent) and Intuitive Cognitive style (76 per cent) than future Postgraduate teachers (37 per cent & 24 per cent).

Prospective teachers studying in Self-financing colleges possessed a higher Systematic Cognitive style (46 per cent), whereas students from Government aided College possessed a high intuitive Cognitive Style (60 per cent).

The locality of Residence:

The prospective women teachers from an urban area have a higher Systematic Cognitive style and Intuitive Cognitive style (63.6 per cent & 64.9 per cent) than the future teachers belonging to rural areas (45.2 per cent & 35.1 per cent).

3. Difference in Cognitive Style of Prospective women teachers concerning their Educational Qualification

The table below shows the difference in cognitive style of B. Ed students concerning their Educational Qualification.

TABLE 3: DIFFERENCE IN COGNITIVE STYLE OF PROSPECTIVE TEACHERS WITH RESPECT TO THEIR EDUCATIONAL QUALIFICATION

Educational Qualification	N =350	Mean	SD	't' Value
UG	242	73.07	15.5	1.97*
PG	108	73.85	14.32	

*

-Significant at 5% level

The calculated 't' value is 1.97, which is higher than the table value of 1.96 at 5% level of significance. Since the calculated 't' value is higher than the table value, it is inferred that the Cognitive style varies significantly between Graduates and Postgraduates. Hence the null hypothesis stated that there is no significant difference in the Cognitive style of prospective teachers in relation to their academic qualification is rejected.

4. Difference in Cognitive Style of prospective teachers with respect to their locality of residence

The table below reveals the difference in Systematic Cognitive Style of prospective teachers with respect to their locality of Residence.

TABLE 4 DIFFERENCE IN COGNITIVE STYLE OF PROSPECTIVE WOMEN TEACHERS WITH RESPECT TO THEIR LOCALITY OF RESIDENCE

Locality of residence	N =350	Mean	SD	't' value
Rural	125	75.14	13.5	1.97*
Urban	225	72.30	15.8	

* -Significant at 5% level

The 't' test was used to determine the difference in Cognitive Style of potential instructors from rural and urban locations, as shown in table 2. At the 5% level, it can be observed that the estimated t-value (1.97) is higher than the table

value (1.96). As a result, the null hypothesis that there is no substantial variation in the cognitive styles of potential female teachers based on where they live is rejected.

When the Mean Scores of Cognitive Style (75.14) of rural prospective teachers were compared to the Mean Scores of Cognitive Style of Urban prospective teachers, it was discovered that rural prospective teachers had a better cognitive style than their counterparts.

the cognitive style of prospective women teachers regarding Type of College.

TABLE 4

DIFFERENCE IN COGNITIVE STYLE OF PROSPECTIVE WOMEN TEACHERS WITH RESPECT TO TYPE OF COLLEGE

Sources of Variance	Sum of Squares	df	Mean Squares	F Value
Between Group	2776.7	2	1388.35	3.02*
Within Group	77122.7	347	222.25	
Total	78801.88	343		

*-Significant at 5% level

To see if mean improvement scores differ substantially among potential instructors from Government, Self-finance, and Aided Colleges, a one-way ANOVA (F test) was used. The estimated F-value (3.02) is larger than the table value (6.24) in the previous table, indicating that there is a substantial variation in prospective instructors' Cognitive Style in connection to the type of college. As a result, the null hypothesis claimed that there is no substantial difference in future teachers' cognitive styles based on the type of college rejected.

Findings

At the conclusion of the study, 51.8 percent of the participants had a systematic cognitive style, whereas 48.2 percent had a field-intuitive cognitive style. The majority of pre-service teachers were found to have an organized cognitive style. This

5.Difference in Cognitive Style of Prospective Teachers with Respect to Type of College

The table below shows the difference in

study's findings were compared to those of previous research. The findings of this study, as well as other investigations, reveal that the students have an usually organized cognitive approach. It was discovered that there was a correlation between the prospective women teachers' cognitive types and their living location (rural vs. urban). The cause of this disparity could be due to a variety of factors. The underlying perspective gained in everyday life or absorbed from the environment is not the same as cognitive styles. In this way, cognitive types are recognized through contact and have a personality. Thus, it is commonly assumed that pre-advanced education training, previous interactions, socioeconomic level, and social milieu influence potential teachers' cognitive patterns.

Conclusion

A person's cognitive style refers to how he or she responds to, interprets, and uses stimuli in the

sense of learning. As a result, cognitive style is less concerned about what learners want to learn and more concerned with how they want to. Students' cognitive styles can be said to be developed by teaching-learning strategies. An instructor may play a critical role in assisting students in developing a formal cognitive style. Teachers should recognise

strong cognitive style trends in their classrooms and use appropriate approaches to accommodate individual cognitive style patterns. To use proper methods to improve meaningful learning, curriculum designers and classroom teachers should consider cognitive style preferences.

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