

## COGNITIVE STYLE IN RELATION TO PEDAGOGIC CONTENT KNOWLEDGE AMONG SECONDARY SCHOOL TEACHERS

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### ABSTRACT

*Teaching is a noble profession. It creates all other professions. But now a days teachers face a lot of problem regarding adjustment and effectiveness. The aim of this study is to find out the effectiveness and adjustment among secondary school teachers with regard to gender, type of school, location of the school, discipline, marital status and experience in teaching profession. The study was carried out on a sample of 300 secondary school teachers. The results revealed that majority of the secondary school teachers showed a moderate level of cognitive style and pedagogic content knowledge. There is a positive correlation between cognitive style and pedagogic content knowledge among secondary school teachers.*

### INTRODUCTION

Teachers play the most important role in education. They are said to be the builders of a nation. Teacher is the central log in the machinery of education. Thus in order to reform the society and the nation as a whole it was felt to pay special attention to the teachers and development of personality. The quality and worth of teachers determine the quality of education. Teaching facilitates learning. Learning is a complex phenomenon that has been explained differently. The teaching profession ranks high on the success list of a society. Henry Adams corroborates the above views with these words "A teacher affects eternity. One can never tell where his influence stops. He plays an important role in shaping and moulding the habits, the tastes, the manner and above all the character of the students He inculcates human values in the minds of the youngsters"

### OBJECTIVES

1. To find out the level of cognitive style among prospective teachers
2. To find out the level of pedagogic content knowledge among prospective teachers
3. To find out the relationship between cognitive style and pedagogic content knowledge among secondary school teachers

### HYPOTHESES

1. The cognitive style among secondary school teachers is moderate
2. The pedagogic content knowledge among secondary school teachers is moderate
3. There exists significant relationship between cognitive style and pedagogic content knowledge of secondary school teachers

### METHODOLOGY

The investigator used survey method for conducting the study

### SAMPLE

The present study has been conducted on a sample of 400 prospective teachers. The sample was selected by stratified random sampling & technique.

### TOOLS USED FOR THE STUDY

The tools used for the study are

1. Cognitive style scale
2. Pedagogic content knowledge inventory

### STATISTICAL TECHNIQUES USED

1. Descriptive statistics like mean, median, mode, SD, skewness and kurtosis.

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2. Test of significance of difference between mean scores.
3. Karl Pearson's product moment coefficient of correlation

**FINDINGS**

It is clear from the table that 65% of secondary school teachers showed a moderate level of Cognitive style and 69% of them showed moderate level of Pedagogic content knowledge

**Table 1 level of cognitive style and pedagogic content knowledge among secondary school teachers**

| Variables       | Low |      | Moderate |      | High |      | Total |     |
|-----------------|-----|------|----------|------|------|------|-------|-----|
|                 | No  | %    | No       | %    | No   | %    | No    | %   |
| Cognitive style | 61  | 29.3 | 156      | 68.3 | 45   | 14.3 | 300   | 100 |
| PCCK            | 51  | 17.7 | 207      | 69   | 40   | 13.3 | 300   | 100 |

From table 2 shows that there is significant difference between private and government school teachers in their cognitive style. The private school teachers showed higher level of cognitive style than the government school secondary teachers.

**Table 2 Difference between private and government school teachers in their extend of cognitive style**

| Variables       | Private |       | Government |       | Calculated t value | Remarks at 0.05 level |
|-----------------|---------|-------|------------|-------|--------------------|-----------------------|
|                 | Mean    | SD1   | Mean 2     | SD2   |                    |                       |
| Cognitive style | 80.46   | 13.48 | 76.73      | 12.62 | 2.43               | S                     |

Table 3 shows significant association between cognitive style and total number of years of teaching experience.

**Table 3: Association between cognitive style and total number of years of experience of secondary school teacher**

| Variable        | Years of experience | low |    | moderate |    | High |    | Calculated chi-square value | Remarks at 0.05 level |
|-----------------|---------------------|-----|----|----------|----|------|----|-----------------------------|-----------------------|
|                 |                     | O   | E  | O        | E  | O    | E  |                             |                       |
| Cognitive style | 1-10 yrs            | 25  | 26 | 85       | 83 | 14   | 18 | 13.58                       | S                     |
|                 | 11-20 yrs           | 27  | 18 | 50       | 57 | 11   | 13 |                             |                       |
|                 | 21 yrs and above    | 9   | 17 | 35       | 36 | 13   | 12 |                             |                       |

Table 4 shows that there is no significant difference between men and women secondary school teachers in their level of cognitive style.

**Table 4: Difference between Men and Women secondary school teachers in their extent of cognitive style**

| Variable        | Men=46 |       | Women=154 |       | Calculated t value | Remarks at 0.05 level |
|-----------------|--------|-------|-----------|-------|--------------------|-----------------------|
|                 | Mean 1 | SD1   | Mean 2    | SD2   |                    |                       |
| Cognitive style | 77.36  | 14.26 | 75.85     | 12.54 | 1.51               | NS                    |

The 't' value shown in table 5 indicates that there is a significant difference between urban and rural school teachers.

**Table 5: Difference between urban and rural secondary school teachers in their extent of pedagogic content knowledge**

| Variable                    | Urban=32 |       | Rural=147 |       | Calculated t value | Remarks at 0.05 level |
|-----------------------------|----------|-------|-----------|-------|--------------------|-----------------------|
|                             | Mean 1   | SD1   | Mean 2    | SD2   |                    |                       |
| Pedagogic content knowledge | 133.34   | 14.40 | 146.75    | 18.75 | 3.67               | S                     |

**Table 6: Difference between married and unmarried secondary school teachers in their extent of pedagogic content knowledge**

| Variable                    | Married=194 |       | Unmarried=101 |       | Calculated t value | Remarks at 0.05 level |
|-----------------------------|-------------|-------|---------------|-------|--------------------|-----------------------|
|                             | Mean 1      | SD1   | Mean 2        | SD2   |                    |                       |
| Pedagogic content knowledge | 152.17      | 13.97 | 146.77        | 18.49 | 3.59               | S                     |

**Table 7: Association between pedagogic content knowledge and total number of years of experience of secondary school teachers**

| Variable                    | Years of experience | low |    | moderate |    | High |    | Calculated chi-square value | Remarks at 0.05 level |
|-----------------------------|---------------------|-----|----|----------|----|------|----|-----------------------------|-----------------------|
|                             |                     | O   | E  | O        | E  | O    | E  |                             |                       |
| Pedagogic content knowledge | 1-10 yrs            | 25  | 22 | 86       | 88 | 12   | 17 | 14.05                       | S                     |
|                             | 11-20 yrs           | 15  | 15 | 65       | 67 | 8    | 17 |                             |                       |
|                             | 21 yrs and above    | 8   | 15 | 56       | 59 | 20   | 11 |                             |                       |

**Table 8: Relationship between cognitive style and pedagogic content knowledge among secondary school teachers**

| No | ΣX | ΣY | ΣX <sup>2</sup> | ΣY <sup>2</sup> | ΣXY | Correlation coefficient r | Remarks at 0.05 level |
|----|----|----|-----------------|-----------------|-----|---------------------------|-----------------------|
|    |    |    |                 |                 |     |                           |                       |

**MAJOR FINDINGS**

The following are the major findings of the study

1. Majority of the secondary school teachers showed a moderate level of cognitive style and pedagogic content knowledge
2. There is significant difference between private and government school secondary teachers in their extent of cognitive style
3. There is significant difference between urban and rural school secondary teachers in their extent of pedagogic content knowledge.
4. There is significant difference between married and unmarried secondary school teachers in their extent of pedagogic content knowledge.
5. There is significant association between pedagogic content knowledge and total no. of years of teaching experience of secondary school teachers.
6. There is a positive correlation between cognitive style and pedagogic content knowledge among secondary school teachers.

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