

TEACHER TRAINEE'S META-COGNITIVE AWARENESS IN RELATION TO THEIR ATTITUDE TOWARDS TEACHING

Research
Paper

ABSTRACT

The second half of the twentieth century had tremendous concentration over the meta-cognitive aspects of knowledge which are involved in the active control of the cognitive processes engaged in the teaching and learning process. The main objectives of the present study is to find out if there exists any difference in teacher trainees' meta-cognitive awareness and attitude towards teaching in respect of their gender, age, and medium of study. A sample of 200 B.Ed. trainees were selected by using purposive sampling technique for the investigation. It is found that teacher trainees have low meta-cognitive awareness and have a favourable attitude towards teaching. Further it is found that there is significant difference in respect of gender, age and medium of study in respect of meta-cognitive awareness and attitude towards teaching. The study also indicates that there exists low and negligible relationship between meta-cognitive awareness and attitude towards teaching.

CONTEXTUALIZATION

Cognition is a universal language of thought process. Learners should be surrounded by constructive and lovely things so that their cognition will continue to grow and deepen. One of the crises that grip every teacher trainee is the inability to control and structure the cognitive processes in teaching and learning.

The information processing approach of Robert Siegler (1998) claims that this approach has made a strong influence over the learners' thinking process which is elastic and flexible in nature. In meta-cognition individual learners are made to confront with the realities and are exemplified with self modification strategies. Information processing is associated with one of the affective domain functions of formation of attitude. Therefore investigators have made an attempt to study teacher trainee's metacognitive awareness and attitude towards teaching.

OBJECTIVES OF THE STUDY

1. To study meta-cognitive awareness of teacher trainees.
2. To study teacher trainee's attitude towards teaching.
3. To study whether there is any significant difference between meta-cognitive awareness with respect to
a. gender b. age and c. medium of study

4. To study whether there is any significant difference between teacher trainees attitude towards teaching with respect to
a. gender
b. age and
c. medium of study
5. To study whether there is any significant relationship between meta-cognitive awareness and teacher trainee's attitude towards teaching.

HYPOTHESES OF THE STUDY

1. Teacher trainees have average meta-cognitive awareness.
2. Teacher trainees have favourable attitude towards teaching.
3. There is no significant difference between meta-cognitive awareness with respect to
a. gender b. age and c. medium of study
4. There is no significant difference between teacher trainee's attitude towards teaching with respect to

Simon Philip, Research Scholar, Dept. of Education,
Annamalai University.

Dr. N.O.Nellaiyapen, Professor and Head,
Dept. of Adult and Continuing
Education & Extension Services,
Annamalai University.

a. gender b. age and c. medium of study

There is no significant relationship between teacher trainee's meta-cognitive awareness and attitude towards teaching.

METHOD OF STUDY

Normative survey method is adopted in the present study

The sample for the present study is 200 commerce teacher trainees belonging to Kottayam and Ernakulam districts of Kerala State. The sample for the study has been selected by the purposive sampling technique.

The investigators used the meta-cognitive awareness scale constructed and validated by Babu, and Simon Philip (2007). This scale consists of 24 statements to measure the various facets of meta-cognition such as monitoring, planning and comprehension and has been prepared on a five point scale with strongly agree, agree, strongly disagree, disagree, and undecided. The maximum score in this scale is 120 and the minimum score is 0. Teacher trainees having a score of 90 and above are considered to have high meta-cognitive awareness and those with a score of 60-89 are considered to have average meta-cognitive awareness and those with a score of 30-59 are considered to have low meta-cognitive awareness and those with a score of less than 30 are considered to have very low meta-cognitive awareness. The reliability of the test is established by the investigators, which is found to be 0.86 by the test-retest method. The content validity of the statements were also established and items which have high discriminating power and those items which had 't' values significant at 0.05 level or higher have been included in the scale. In order to measure the attitude of teacher trainees towards teaching, the investigators applied the inventory constructed and standardized by Ummme Kulsum (2001). This inventory consists of 55 items of which 25 are favourable and 30 are unfavourable. Each item has four alternatives. They are strongly agree, agree, disagree, and strongly disagree. Scoring for favourable items is 4,3,2, and 1 and for unfavourable items scoring is in the reverse. This inventory is constructed for a maximum score of 220. Hence having a score of 110 and above indicates a favourable attitude towards teaching.

RESULTS OF THE STUDY

The results of the study of teacher trainee's meta-cognitive awareness and their attitude towards teaching are given below.

Research Paper

TABLE 1
MEAN AND STANDARD DEVIATION OF THE ENTIRE SAMPLE IN RESPECT OF TEACHER TRAINEE'S META-COGNITIVE AWARENESS AND THEIR ATTITUDE TO TEACHING

Entire Sample	N	Mean		Standard Deviation	
		Meta-cognitive Awareness	Attitude to Teaching	Meta-cognitive Awareness	Attitude to Teaching
	200	46.01	131.63	15.54	42.83

In Table-1 the mean (46.01) and standard deviation (15.54) scores of the entire teacher trainees show low meta-cognitive awareness. The mean (131.63) and standard deviation (42.83) scores of the teacher trainee's attitude towards teaching is favourable. It is found that the entire sample of teacher trainees reveals low meta-cognitive awareness and favourable attitude towards teaching.

TABLE 2
THE TEST OF SIGNIFICANCE ('t'- TEST) OF META-COGNITIVE AWARENESS OF TEACHER TRAINEES

Variables	Sub groups	N	Mean	S.D.	't' Value	Significance at 0.05 level
Gender	Male	75	56.99	19.58	12.63	Significant
	Female	125	33.54	5.29		
Age	Less than 22 Years	148	45.22	19.12	3.86	Significant
	Above 22 Years	52	53.65	18.06		
Medium of Study	English Medium	80	52.64	19.72	12.41	Significant
	Malayalam Medium	120	34.03	5.48		

It is found from Table-2 that there is significant difference in mean meta-cognitive awareness scores of

1. Male and female teacher trainees
2. Trainees who are less than 22 years of age and above 22 years of age
3. English and Malayalam medium teacher trainees.

Male teacher trainees show better meta-cognitive awareness than their counter parts. Trainees who are above 22 years of age show better meta-cognitive awareness than trainees who are less than 22 years of age. Trainees who have studied in English medium schools have better meta-cognitive awareness than Malayalam medium trainees. It is found from Table. 2 that the mean meta-cognitive awareness scores of teacher trainees fall in the range of 30-59. Hence it is concluded that teacher trainees have low meta-cognitive awareness.

TABLE 3
THE TEST OF SIGNIFICANCE ('t'-TEST)
OF TEACHER TRAINEE'S ATTITUDE
TOWARDS TEACHING

Variables	Sub groups	N	Mean	S.D.	't' Value	Significance at 0.05 level
Gender	Male	75	115.24	44.96	9.61	Significant
	Female	125	158.94	18.35		
Age	Less than 22 Years	148	101.07	44.17	6.04	Significant
	Above 22 Years	52	142.36	36.88		
Medium of Study	English Medium	80	159.72	18.48	10.32	Significant
	Malayalam Medium	120	112.90	44.24		

Table-3 shows that there is significant difference in mean attitude towards teaching scores of

1. Male and female trainees
2. Trainees who are less than 22 years of age and above 22 years of age
3. Trainees who studied in English and Malayalam medium schools.

Female teacher trainees show better attitude towards teaching than their counterparts. Teacher trainees who are less than 22 years of age show unfavourable attitude towards teaching. Trainees who are above 22 years of age show better attitude towards teaching than trainees who are less than 22 years of age. Trainees who studied in English medium schools have better attitude towards teaching than Malayalam medium trainees. Hence it is concluded that Male teacher trainees, female teacher trainees, teacher trainees who belong to the age group above 22 years, English and Malayalam medium teacher trainees have favourable attitude towards teaching. Teacher trainees who belong to the age group of less than 22 years have unfavourable attitude towards teaching.

TABLE 4
SHOWING THE RELATIONSHIP BETWEEN
META-COGNITIVE AWARENESS AND
ATTITUDE TOWARDS TEACHING

Variables	'r' Value	0.01 Level
Meta-cognitive awareness and attitude towards teaching	0.23	Not Significant

Table-4 shows that there is no significant relationship between meta-cognitive awareness and attitude towards teaching. The 'r' value is 0.23 at 0.01 level. This indicates that the relationship between meta-cognitive awareness and attitude towards teaching is low.

DISCUSSION

Male teacher trainees have better meta-cognitive awareness than female teacher trainees. But female teacher trainees are often reluctant to apply strategies that are previously used in their class room situations. Therefore female teacher trainees should be prompted to use these strategies and transfer them to new situations.

Learning to apply new approaches takes time. Only by practice the teacher trainees can learn to execute these strategies efficiently and competently. Results show that female teacher trainees have better favourable attitude towards teaching which is similar to various research

findings. The general assumption is that the trainees with above 22 years of age have varied exposures to media, newspapers and journals and show better meta-cognitive awareness and attitude towards teaching. It is often considered that the trainees who studied in English medium schools have better attitude towards teaching because of varied exposures and work experience received during their study. Trainees who belong to the age group of less than 22 years have exhibited unfavourable attitude towards teaching. This could be due to the lack of exposure to teaching and understanding the methodical approaches in teaching and learning. The correlation study has shown that there is low relationship between meta-cognitive awareness and attitude towards teaching. This also indicates that the relationship between metacognitive awareness and attitude towards teaching is negligible.

COMMENDATIONS

It is recommended that female teacher trainees be given better attention in sparing more time for reading and comprehending concepts and to control their thinking process.

More applied aspects of cognitive strategies should be used to analyse the learner's cognitive processes and to conduct analytical tests and comprehension tests in their respective class rooms.

It is recommended that competitions be conducted in class rooms to stimulate cognitive and non cognitive abilities among B.Ed. trainees.

CONCLUSION

It is important to focus our attention on laying emphasis on developing multiple competencies and applying and executing strategies for controlling the thinking process and monitoring the thinking styles of teacher trainees. It can be concluded that the teacher trainees who are resourceful agents of transformation of the young generation have to concentrate on accelerating the cognitive capabilities. The parents and teachers should evolve effective strategies.

REFERENCE

1. *Technology Application in Education: A Learning View* by Harold .F, O'Neil., Ray .S. Perez
2. Ahuja, Ram. 2003. *Research Methods*, Rawat Publications, Jaipur, India.
3. Best, J.W. 2006. *Research in Education*, Prentice Hall of India Private Limited, Delhi.
4. Dacey, John and Travers, John. 1999. *Human Development*, Fourth Edition, Mc Graw Hill, New York.
5. Flavell, J.H. 1979. *Metacognition and Cognitive Monitoring: A New Area of Psychological Inquiry*. *American Psychologist*, 34, pp.906-911.
6. Schraw, G., and Moshman, D. 1995. *Assessing Metacognitive awareness*. *Contemporary Educational Psychology* 19, pp. 460-475.
7. Siegler, R. 1998. *Children's Thinking* (3rd edition). Upper Saddle River, NJ: Prentice-hall.



Continuation of page 9

A STUDY ON LOCUS OF CONTROL...

REFERENCE

1. Hans, T., 2000, *A meta-analysis of the effects of adventure programming on locus of control*, *Journal of Contemporary Psychotherapy*, 30(1),33-60.
2. Heider, F., 1958, *The psychology of interpersonal relations*. New York: John Wiley & Sons.
3. Jones, E. E., D. E. Kannouse, H. H. Kelley, R. E. Nisbett, S. Valins, and B. Weiner, Eds., 1972, *Attribution: Perceiving the Causes of Behavior*. Morristown, N. J: General Learning Press.
4. Marsh, H. W. & Richards, G. E., 1986, *The Rotter Locus of Control Scale: The comparison of alternative response formats and implications for reliability, validity and dimensionality*. *Journal of Research in Personality*, 20, 509-558.
5. Marsh, H. W. & Richards, G. E., 1987, *The multidimensionality of the Rotter I-E Scale and its higher order structure: An application of confirmatory factor analysis*, *Multivariate Behavioral Research*, 22, 39-69.
6. Rotter, J. 1966, *Generalized expectancies for internal versus external control of reinforcements*, *Psychological Monographs*, 80, Whole No. 609.
7. Surabhi Purohit, Sarada Nayak and Udai Pareek, 2003; *Enhancing Personal Effectiveness*, Tata McGraw-Hill Publishing Company Limited, New Delhi.