

A study of critical thinking skills among prospective teachers of secondary schools

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Abstract:

The critical thinking skills of prospective teachers of secondary school of Ajmer district were studied. The data were collected through critical thinking skills scale from 640 prospective teachers of secondary school. Descriptive Survey Method was used for this study. The analysis of collected data was carried out with the help of 't' test. It was found that majority of the prospective teachers were found to have favorable attitude towards critical thinking skills. Female prospective teachers possessed positive attitude towards critical thinking skills than male prospective teachers. The findings showed that the need to develop the ability to think clearly and rationally about what to do and how to behave among male prospective teachers of secondary school, so that they can engaged themselves in reflective and independent thinking and understand the logical connections between ideas.

Keywords: Critical Thinking, Prospective Teachers, Secondary School

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Introduction

It is a long history of research on critical thinking thus it is not a easy task to reach a consensus on its conception. There are as many definitions to clarify the concept of critical thinking. A continuous endeavor to understand the concept of critical thinking is undertaken under so many assumptions that it is a conducive to the effective instruction of critical thinking in educational settings. There are three different ways to understand this concept is philosophical, psychological and educational. [1-4]

Critical thinking is just not a mere generic operation. Critical thinking must be in meaningful contexts and, for teachers; these contexts should be problems or challenges related to young generation in general and with their students in particular. These should also be embedded in the curriculum. Otherwise critical thinking remains a ceremonial term that is indulged in only after the subject matter has been covered. [5]

Perspective teachers are the group which is going to affect the thinking of coming generations for decades hence it is necessary to have ability of critical thinking in prospective teachers. Therefore present study was planned to study the critical thinking skills of prospective secondary school teachers as- (a) Interpretation, (b) Analysis and Evaluation, (d) Inference, (e) Explanation and (f) Self-regulation. It was also decided to visualize the effect of prospective teachers' on critical thinking skills.

Methodology

Method:-Descriptive Survey Method was used for this research study.

Sample:-The present study is conducted on prospective teachers of secondary school. The study is restricted to prospective teachers of Ajmer District.

Tools used:- Critical thinking skills scale used by the investigator. It consists of general information about the institute (gov./pri), area(rural/urban),gender (Male/female),level of academic qualification(graduate/post graduate), educational gap(continuous/discontinuous), prospective teachers (I year B.Ed. course/II year B.Ed. course).

Statistical Techniques used:- The collected data was analyzed by using mean, S.D. and't' test.

Results and Discussion

The data was analyzed keeping the variables in view. 'p' value was computed for the frequencies institution wise, gender wise, area wise, academic qualification wise, educational gap wise, prospective teachers B.Ed. course wise. The mean and standard deviation of the total sample were 129.083 and 11.070 respectively. The score ranged from 36 to 180. It was concluded that the prospective teachers have average level on critical thinking skills and its dimensions. (Table 1)

There was no significant difference in the prospective teachers of government institute and private institute on critical thinking skills as the 'p' value (0.354) was found to be not significant at 0.05/0.01 level. Both prospective teachers of government and private institutes differ in their critical thinking skills.

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There was no significant difference in the prospective teachers of male and female gender on critical thinking skill as the 'p' value (2.320) was found to be significant at 0.05/0.01 level. Therefore, it can be inferred that there is no significant difference between male and female prospective teachers of secondary schools on critical thinking skills.

Table No.1

Column	Variable		N	Mean	S.D.	p-value	Significance at 0.05/0.01 level
1	Total sample		640	129.083	11.070		
2	Institute	Gov.	320	129.238	11.584	0.354	Not significant
		Pri.	320	128.928	10.528		
3	Gender	Male	320	128.072	10.822	2.320	Significant
		Female	320	130.094	11.222		
4	Area	Rural	320	128.334	10.893	1.714	Significant
		Urban	320	129.831	11.194		
5	Academic qualification	Graduate	545	129.172	11.106	0.499	Not significant
		Post.Grad.	95	128.568	10.847		
6	Educational Gap	Continuous	609	129.149	10.940	0.566	Not significant
		Discontinuous	31	127.774	13.297		
7	Prospective teachers	I st Year B.Ed.	320	128.975	11.721	0.246	Not significant
		II nd Year B.Ed.	320	129.191	10.379		

It was evident that there was no significant difference between prospective teachers of rural background and prospective teachers of urban background on critical thinking skills as the 'p' value (1.714) was not found to be significant at 0.05/0.01 level. Therefore, it can be inferred that there is no significant difference between rural and urban area of prospective teachers of secondary schools. It was observed that there is no significant difference on the critical thinking skills as per the level of academic qualification of prospective teacher of secondary schools. As the 'p' value (0.499) was not found to be significant at 0.05/0.01 level. Therefore, it can be inferred that there is no significant difference on critical thinking skills as per the level of academic qualification of prospective teachers of secondary schools. (Table 1)

From the table no.1 it is evident that there is no significant difference on critical thinking skills between continuous and discontinuous prospective teachers of secondary schools. As the 'p' value (0.566) was not found to be significant at 0.05/0.01 level. Therefore it can be inferred that there is no significant difference on critical thinking skills between continuous and discontinuous prospective teachers of secondary schools. It was observed that there is no significant difference between prospective teachers of 1st year B. Ed course and prospective teachers of IInd year B.Ed course on critical thinking skills as the 'p' value(0.246) was not found to

be significant at 0.05/0.01 level. Therefore, it can be inferred that there is no significant difference prospective teachers of 1st year and IInd year B.Ed. course on critical thinking skills. (Table 1)

The total sample of prospective teachers of secondary schools has reflected above average performance on critical thinking skills. There was found to be no significant effect on the type of institution on the total means scores of critical thinking skills. Female prospective teachers of secondary schools were found significantly higher than male prospective teachers on total mean of critical thinking skills. Urban prospective teachers of secondary schools were found significantly higher than rural prospective teachers on total mean of critical thinking skills.

Graduate prospective teachers of secondary schools were found significantly higher than post graduate prospective teachers on total mean of critical thinking skills. Continuous prospective teachers of secondary schools were found to be higher than discontinuous prospective teachers on total mean of critical thinking skills. Prospective teachers of IInd year B. Ed course were found to be higher than prospective teachers of Ist year B. Ed course on total mean of critical thinking skills. The results of the present study are also corroborated by the findings of Halvorsen ,2005[6] and Kimbrough ,2007 [7], who also introduced the various techniques for incorporating critical thinking-debate, media analysis and problem-solving, discussion, group-work, reasoning and questioning strategies which will allowed teachers to express their ideas and involved content relevant to student lives. On the contrary these results are not agreed with the findings of Karimi and Veisi, 2016 who concluded that there is hardly any significant difference between critical thinking in male and female. [8]

Conclusion

Result has shown that no significant difference is found among government and private, rural and urban, level of academic qualification, educational gap, I & II year prospective teachers of secondary school on critical thinking skills. But the level of critical thinking skills of male prospective teachers of secondary school is low than female prospective teachers of secondary schools. Therefore it has become necessary to focus our attention on males critical thinking skills and we have to enhance their critical thinking by creating situations in which they can participate and involve such situation make them easy and familiar towards on critical thinking. The mentors who are the agents of transformations of young generation. They have to concentrate on accelerating the critical thinking skills of males prospective teachers of secondary school by organizing activities like group discussion, debate, article writing. One of the main objectives of educational programme must be to develop their self concept, self esteem, self management etc. It will make them more thoughtful and prepare them to think critically in all respect. So that they would soar to the heights of excellence, successfully in their future life and profession.

Recommendations

The following recommendations can be made for educational institutions on the basis of the results of the study.

1. We should include the issues of the life skills like person interpretation, self evaluation, self regulation etc. in curriculum.
2. Ensure that all the students to take part in critical thinking skills projects activities and inspire those students who are not taking interest in these activities by giving some attractive opportunities.
3. Male's critical thinking skills were low. Therefore attention may be paid the males to improve them in those activities which are related to brain storming, problem solving and make able to think from different angles.

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