ATTITUDE TOWARDS CYBER RESOURCES AND COGNITIVE DISSONANCE OF PROSPECTIVE TEACHERS

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Abstract: *The present study was undertaken to investigate the attitude of teachers towards Cyber Resources and their Cognitive Dissonance. The sample of study comprised of 200 prospective teachers, who were selected from Education Colleges of Chandigarh. Attitude towards using Cyber Resource Scale by Dr. S. Rajasekar (2010), and Cognitive Dissonance scale constructed by the researcher were used for the purpose of data collection. Findings of the study were that there was a significant difference in the attitude of prospective teachers towards cyber resources in government and private colleges of education. Significant differences were found in cognitive dissonance of prospective teachers in government and private colleges of education and Attitude towards cyber resources of prospective teachers was found to be significantly related to their cognitive dissonance.*

Keywords: *Cyber Resources, Cognitive Dissonance, prospective teachers*

INTRODUCTION

In the digital era, the cyber resources play an important role in both teaching and learning. Cyber is a prefix used to describe a person, thing, or idea as part of the computer and information age. Cyber resources includes mainly all the online applications of computer, like email, web based applications, search engines and so on. Attitude towards Cyber Resources is an expression of favor or disfavor toward cyber resources which play an important role in learning. It enhances learning process and makes learning accurate and up-to-date.

Cognitive dissonance refers to a situation involving conflicting attitudes, beliefs or behaviors. This produces a feeling of discomfort leading to an alteration in one of the attitudes, beliefs or behaviors to reduce the discomfort and restore balance etc. For example, when people smoke (behavior) and they know that smoking causes cancer (cognition).

Festinger's (1957) cognitive dissonance theory suggests that we have an inner drive to hold all our attitudes and beliefs in harmony and avoid disharmony (or dissonance).

Attitudes may change because of factors within the person. An important factor here is the principle of cognitive consistency, the focus of Festinger's (1957) theory of cognitive

dissonance. This theory starts from the idea that we seek consistency in our beliefs and attitudes in any situation where two cognitions are inconsistent.

Cyber resources have been used widely in education in the present decade. Multitasking has become a new sought after trend. One individual is seen focusing on various aspects at one point of time which may give rise to inconsistency or dissonance. Classroom should provide a virtual environment that allows learners to understand practically of what learning and teaching is all about and also helps learners to have long retention of subject content. Cognitive Dissonance of a teacher may affect this major aim of education. The teacher of modern age has to use variety of sources to keep his knowledge updated. Teachers can share innovative ideas and different methods of teaching with suitable examples among themselves from anywhere in the world through cyber resources. This approach emphasizes and enhances teacher's professional competency. A professionally competent teacher should also have cognitive consistency. Inconsistent Cognition or Cognitive Dissonance may significantly affect the teaching and learning goals.

Cox et al (1999) conducted a study to investigate the factors which have contributed to the continuing use of ICT by teachers experienced in using it for teaching. Findings show that the motivational factors which correlated most positively with ICT use were: perceived ability to use IT; level of resources available and their satisfaction with IT; and whether using IT in teaching is considered to be interesting and enjoyable (internal locus of control). The most significant negative factor was difficulties experienced in using IT.

Greenfield (2009) analyzed a classroom study showing that students who were given access to the Internet during class and were encouraged to use it during lectures did not process what the speaker said as well as students who did not have Internet access. When students were tested after class lectures, those who did not have Internet access performed better than those who used internet.

Vikander (2013) inferred on the basis of his study that teenagers' scores on standardized reading tests have declined or stagnated, some argue that the hours spent prowling the Internet are the enemy of reading — diminishing literacy, wrecking attention spans and destroying a precious common culture that exists only through the reading of books.

Sang et al (2010) conducted a study on the impact of Chinese student teachers' gender, constructivist teaching beliefs, teaching self-efficacy, computer self-efficacy and computer

attitudes on their prospective ICT use. Results show that prospective ICT integration significantly correlates with all teacher related variables, except for gender. Building on the results of a path analysis model, prospective ICT integration could be directly predicted on the base of teacher thinking variables i.e. constructivist teaching beliefs, teacher self-efficacy, computer self-efficacy, locus of control and computer attitudes in education.

Onen (2012) conducted a study to determine the relationship between pre-service teachers' beliefs about education and their attitudes towards utilizing computers and internet in a descriptive study. The sampling of the study consisted of 270 pre-service teachers. The potential relationship between the beliefs of pre-service teachers about education and their attitudes towards using computers and internet was analyzed and the results were evaluated. The study concluded that there are positive significant relationships between pre-service teachers' beliefs about education and their attitudes towards using internet and computers.

Festinger and Carlsmith (1959) investigated that making people perform a dull task would create cognitive dissonance through forced compliance behavior.

DESIGN OF THE STUDY

For the purpose of present investigation, descriptive survey method of research was employed.

SAMPLE

The sample of the present study comprised of 200 prospective teachers; out of which 100 were randomly selected each from one government and on private college of education in UT, Chandigarh.

TOOLS

Following tools were employed for the purpose of data collection.

1. Attitude towards using Cyber Resource Scale by Dr. S. Rajasekar (2010).
2. Cognitive Dissonance questionnaire made by Researcher

OBJECTIVES

The study was designed to attain the following objectives:

1. To compare the attitude towards cyber resources of prospective teachers in government and private colleges of education.

2. To compare the cognitive dissonance of prospective teachers in government and private colleges of education.

3. To study attitude towards cyber resources of prospective teachers in relation to their cognitive dissonance.

HYPOTHESES

The study was designed to test the following hypotheses:

1. There will be no significant difference in the attitude of prospective teachers towards cyber resources in government and private colleges of education.

2. There will be no significant difference in cognitive dissonance of prospective teachers in government and private colleges of education.

3. There will be no significant difference in the attitude towards cyber resources of prospective teachers in relation to their cognitive dissonance.

RESULTS AND DISCUSSION

Table: 1 Mean, Standard Deviation, Mean Differentials of Attitude towards Cyber Resources of Prospective teachers in Government (N=100) and Private (N=100) Colleges of Education

Variable	Group	N	Mean	Standard deviation	t-ratio (df=198)
Attitude Towards Cyber Resources	Govt.	100	66.22	13.76	3.06**
	Private	100	71.30	12.5	

Note: *Significant at .01 level

Discussion of the results based on Table 1

Table 1 represents the mean, standard deviation, and mean differentials of attitude towards cyber resources of prospective teachers in government and private colleges of education. Entries made in table 1 show that the mean score of attitude towards cyber resources of would be teachers in government and private colleges are respectively 66.22 and 71.30 and respective standard deviation scores are 13.76 and 12.5. The calculated t-ratio between the mean score of government and private college of education with regard to their attitude towards cyber resources is 3.06 which is significant at .01 level.

Thus, the first null hypothesis stating that "There will be no significant difference in the attitude of prospective teachers towards cyber resources in government and private colleges of education" is rejected.

Hypothesis-2

Hypothesis-2 states, "There will be no significant difference in cognitive dissonance of prospective teachers in government and private colleges of education"

Table 2 has been prepared to test hypothesis 2.

Table 2

Mean, Standard Deviation, Mean Differentials of Cognitive Dissonance of Prospective teachers in Government (N=100) and Private (N=100) Colleges of Education.

Variable	Group	N	Mean	Standard deviation	t-ratio (df=198) (t_{tab}=2.60)
Cognitive Dissonance	Govt.	100	49.60	7.34	
	Private	100	45.56	6.97	3.991**

Note: **Significant at .01

Discussion of the results based on Table 2

Table 2 represents the mean, standard deviation and mean differentials of cognitive dissonance of prospective teachers in government and private colleges of education. Entries made in table 2 show that the mean score of cognitive dissonance of prospective teachers in government and private colleges are respectively 49.60 and 45.56 and respective standard deviation scores are 7.34 and 6.97.

The calculated t-ratio between the mean score of would be teachers in government and private college of education with regard to their cognitive dissonance is 3.991 which is greater than tabulated value of 2.60 at 198 degree of freedom which is significant at .01 level.

Thus, the second null hypothesis stating that "There will be no significant difference in cognitive dissonance of prospective teachers in government and private colleges of education" is also rejected.

Hypothesis-3

Hypothesis-3 states, "There will be no significant difference in the attitude towards cyber resources of prospective teachers in relation to their cognitive dissonance."

Table 3 has been prepared to test hypothesis 3.

Table 3: Mean, Standard Deviation, Mean Differentials of Attitude towards cyber resources of Prospective Teachers with high and low cognitive dissonance

variable	Cognitive Dissonance	N	Mean	Standard deviation	t-ratio (df=106) (t_{tab}=2.63)
Attitude towards Cyber Resources	High	54	69.83	6.87	
	Low	54	59.65	7.62	3.68**

Note: *Significant at .01

Discussion of the results based on Table 3

Table 3 represents the mean, standard deviation, and mean differentials of attitude towards cyber resources of prospective teachers in relation to their cognitive dissonance. Entries made in table 3 show that the mean score of attitude towards cyber resources of prospective teachers with high and low cognitive dissonance are respectively 69.83 and 59.65 and respective standard deviation scores are 6.87 and 7.62.

The calculated t-ratio between the mean score of prospective teachers in relation to their cognitive dissonance is 3.68 which is greater than tabulated value of 2.63 at 106 degree of freedom which is significant at .01 level.

Thus the third hypothesis stating that "There will be no significant difference in the attitude towards cyber resources of prospective teachers in relation to their cognitive dissonance." is rejected.

CONCLUSIONS

1. There was a significant difference in the attitude of prospective teachers towards cyber resources in government and private colleges of education.

2. Significant differences were found in cognitive dissonance of prospective teachers in government and private colleges of education.

3. Attitude towards cyber resources of prospective teachers was found to be significantly related to their cognitive dissonance.

DISCUSSION OF THE RESULTS

Cyber Resources are contributing to a great extent in the teaching and learning perspectives. Both teachers are learners are being benefitted from internet and Cyber knowledge but too much dependence on these may adversely affect the cognitive abilities as suggested by Greenfield (2009) in his study. So both teachers and learners should try to

avoid the overdependence on these resources and should try to work depending on their insight and develop their cognitive consistency. Cyber Resources have been created by human mind and growing trend of enslaving human mind by excessive use of these should be avoided.

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