

A Descriptive Study to Assess the Cognitive Style among Teachers Working in Selected Schools of Vadodara (With a View to Improve Cognitive Process)

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Abstract

Background: Cognitive style or “thinking style” is a concept used in cognitive psychology to describe the individuals think, perceive and remember information. In the areas of education and management it remains a major concept. So it is necessary for the teacher to have awareness of cognitive style so he can improve the teaching-learning process of the student.

Purpose: 1. To assess the present status of cognitive style among the teachers working in selected schools of Vadodara. 2. To find out the association between present status of the cognitive style among the teachers with their selected demographic variable.

Materials and Method: In this study a quantitative research approach with descriptive research design was used, data was collected from 40 teachers who are working in the selected schools of Vadodara. A Standardized alert cognitive style scale was used to assess cognitive styles of 1 teachers. The chi-square test is used to find out association between cognitive style and socio-demographic variable. The investigator obtained written consent from the concerned authority before the study.

Result: With regards to the assessment, out of 40 teachers most of the teachers 21 (52.5%) were using middle brain, 17 (42.5%) were using moderate left brain and very few 1 (2.5%) and 1 (2.5%) were using strong left brain and moderate right brain. There is no significant relationship between cognitive styles and selected socio-demographic variable.

Conclusion: As per the data drawn from results, most of the teachers are depends on middle brain and very few of them are depends on moderate left brain and further teachers are the backbone of the educational system so they should aware about their own cognitive style that helps to identify their own strength and weakness that promotes the quality of their teaching-learning activities.

Keywords: Cognitive style, teachers, standardized alert cognitive style scale.

Introduction

Cognitive style describe how individuals think, perceive and remember information. In the areas of education and management cognitive style it remains a

major concept. The chances of more positive learning experience are improved for the students if the students and teachers have similar cognitive style. Appropriate training and preparation are requires by the teacher because teaching is a highly professional job. Thomas (1992) said that great teachers give us a sense of who we are, and who we might become. They disclose our power, our mind and our imagination. Good teachers are made by hours of hard work and positive attitude towards teaching and their students. Teacher effectiveness depends on the variety of teacher behaviors, e.g. cognitive style, emotional competence, attitudes, teacher-student

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interaction, class-room environment they create, good mental health and adjustment etc.¹ Here the investigator intended to assess the cognitive style of the teachers through standardized alert cognitive style scale and in attempting to manipulate their cognitive process. As a result teachers' teaching-learning method can be improved.

Vidyanand sambhaji khanddagale (march-2016) conducted a study of cognitive style among teacher educators. The present study sample/cases contains of 25 teacher educators participate in refresher course in education during (02/02/2015) to (23/02/2015) at UGC ASC university of Kerala karivottom campus thiruvananthapuram, Kerala. The tool used for present study was alert cognitive style prepared by carol Philips. It was found that Most of the Teacher Educators are using Moderate Left Brain predominantly. The numbers of teachers using mid brain are moderate whereas very few are using Moderate Right Brain. This finding is useful for several reasons.² Masoomah Moslemi Mehni, Bahman Saeidipour (2016) were conducted a study to investigate the relationships between cognitive styles with entrepreneurship characteristics of bachelor's students. The statistical sample included 2496 bachelor's students. A sample size of 352 individuals was determined by stratified random sampling method. Results of the hypothesis showed that there were significant, direct, and positive relationships between three cognitive styles and entrepreneurship characteristics. The cognitive styles in order of concrete-sequential 45% (cs), abstract-sequential 29% (as), and abstract-random showed the highest and lowest significant positive relationship to the entrepreneurship characteristics.³ Bhalendu S Vaishnav, Smruti B Vaishnav (2018) were conducted a cross-sectional study on cognitive style assessment of Indian medical faculty was carried out using "standardized Alert Scale of Cognitive Style. They were selected a total of 130 samples, out of 130 samples only 88 samples participated voluntarily. The results indicated that there is no association between cognitive style and demographic variable. Study also enhanced cognitive style awareness, which was low before the intervention.⁴

Method

To conduct research study permission was obtained from Sumandeep Vidyapeeth institutional ethics committee (SVIEC). Number:SVIEC/ON/Nurs/BNPG18/D19002.

The research approach adopted for this study was quantitative research approach and the design used was non-experimental descriptive design. The samples for the research are 40 teachers who are working at Shree M.H Dayaram sharda mandir, Dabhoi. & Shree B.N high school chandod. further, samples of the study is selected by using non- Probability purposive Sampling technique according to inclusive criteria. The data was collected on 26/11/2018 and 27/11/2018.

The investigator used standardized alert cognitive style scale for data collection which was developed by Dr. Loren D. Crane, Western Michigan University, (1989). The tool consist of 21 pairs of sentences which is intended to check the dominance of the brain. Very same tool investigator has used to assess the cognitive styles (dominance of brain) among teachers who are fulfilling the inclusive criteria. Eventually data analyzed by using descriptive and inferential statistics.

Results

Majority of the teachers 35% belong to the age group of 31-40 years. Majority of the teachers 75% were male. Majority of teachers 57.5% were having extrovert personality type. Majority of the teachers 85% were having right hand dominant. Half of the teachers 50% were belonging to rural area and half were 50% belong to urban area. Majority of teachers 50% were having arts stream. Majority of teachers 40% were having good knowledge on internet. (Table 1)

Table 1: Frequency and percentages distribution of samples, according to their demographic characteristic

N=40

Sr. No.	Demographic variable	No of respondents in frequency	No of respondent in percentage
1.	Age in years		
	21-30	2	5%
	31-40	14	35%
	41-50	12	30%
	>50	12	30 %
2.	Gender		
	Male	30	75%
	Female	10	25%
3.	Personality type		
	Introvert	17	42.5%
	Extrovert	23	57.5%

Cont... Table 1: Frequency and percentages....

4.	Dominant hand		
	Right	34	85%
	Left	6	15%
5.	Residential area		
	Rural	20	50%
	Urban	20	50%
6.	Academic stream		
	Commerce	15	37.5%
	Arts	20	50%
	Science	5	12.5%
7.	Knowledge on internet		
	Excellent	4	10%
	Good	16	40%
	Average	14	35%
	Poor	6	15%

It was observed that among 40 participants majority of teachers 21 (52.5%) were middle brain dominant, 17 (42.5%) were Moderate left brain dominant, 1 (2.5%) was Strong left brain dominant and 1(2.5%) was Moderate right brain dominant and there were no any sample in strong right brain dominant. (Table 2)

Table 2: Distribution of the Respondents According to Cognitive Style

Cognitive style of Teachers	Frequency (N)	Percentage
Strong left brain: 0-4	1	2.5%
Moderate left brain: 5-8	17	42.5%
Middle brain: 9-13	21	52.5 %
Moderate right brain: 14-17	1	2.5%
Strong right brain: 18-21	0	0
Total	40	100%

Interpretation of tool: Anatomically, the brain is divided into two hemisphere i.e., right and left hemisphere. Each hemisphere has unique and distinct characteristics. The characteristics features of those who were falls in the scores of 0-4 and 5-8 were in the category of Strong left brain and Moderate left brain so that their dominant hemisphere is left brain. Individuals with a dominant left brain are considered relatively more intelligent than individuals with a dominant right brain. Their approach is analytical, sequential, logical, objective, and rational, as a result of which they get into details of the subject, analyze it, and come to rational conclusion. Words and language are given utmost importance by the left side of

the brain. It excels in analytical subjects such as math and science. One of the most important functions of the left brain is to form strategies using analytical and logical skills. They usually do things in a planned orderly way. They are attentive during long verbal explanations. They are also like to read but need total quite to read or study. They prefer well-structured assignment over open ended ones. They are skilled at sequencing ideas. They usually remember things that can studied scientifically.

The characteristics features of those who were falls in the scores of 14-17 and 18-21 were in the category of Strong right brain and Moderate right brain so that their dominant hemisphere is right brain. The right brain dominators alerts to novelty; tells when someone is lying or making a joke. They form mental images when reading and/or conversing. Right brainers are feel instead of reason. Important discoveries and invention are made by right brainers who have enough talent and determination to evolve through science. They foresee and predict the future, sometimes with surprising accuracy. This may sound strange, but they have ability to create their reality in favor of their prediction. Right brainers tend to dislike supervision; they want to be their own boss. If you drown them with excessive micromanagement, overwhelm them with too many policies, point your finger at them, they will quickly slam the door, regardless of their paycheck. Right brainers tend to be go with flow. They dislike control freaks, because they embrace their existence with an open mind.

The characteristics features of those who were falls in the scores of 9-13 were in category of middle brain so that they are using their brains i.e., right and left. The middle brain dominators tend to be more flexible than either the left or the right brain folks; however they often vacillate between the two hemispheres when they make decisions. They sometimes get confused because, neurologically speaking; they could do most tasks through either a left brain or a right brain method! The chi-square test was used to determine the association between socio-demographic variable like age, gender, personality type, dominant hand, residential area, academic stream, knowledge on internet and the cognitive styles of teachers.

It was found that there were no significant association between cognitive style of teacher and socio-demographic variable. Thus the hypothesis H_1 is failed to accept.

Discussion

As per the analysis, out of 40 teachers, majority of teachers 21 (52.5%) were middle brain dominant, 17 (42.5%) were Moderate left brain dominant. There is no significant relationship exist between cognitive style of teachers and their selected demographic variable.

The purpose of this study was to find out the cognitive style (dominancy of brain) of teachers. The details of research results has conveyed to the samples to create awareness about their cognitive styles (dominancy of brain) ultimately, it helps to identify their strength and weaknesses which helps to quality services to the student (teaching-learning activity).

Conflict of Interest: There is no conflict of interest is faced by the researcher in terms of financial, institutional and other relationship etc.

Funding: The entire amount spent for the research was borne by the researcher.

Ethical Clearance: To conduct research study Ethical clearance was obtained from Sumandeep Vidyapeeth institutional ethics committee (SVIEC). Number :SVIEC/ON/Nurs/BNPG18/D19002.

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