



Hemispheric Dominance And Teaching Competence – A Study Among Student Teachers in Colleges of Education.

KEYWORDS

Hemispheric Dominance, Teaching Competence, Student Teachers, Colleges of Education.

P.Shirlin

Research Scholar, Department of Education,
ManonmaniamSundaranar University, Tirunelveli – 627
012. Tamil Nadu

Dr.C.Ramesh

Assistant Professor and Head i/c, Department of
Education (DD & CE), ManonmaniamSundaranar
University, Tirunelveli – 627 012. Tamil Nadu.

ABSTRACT *The aim of this research article is to find the hemispheric dominance of student teachers and their level of teaching competence. For achieving this aim, the investigator used survey method. For data collection, the researcher used Hemispheric Dominance Inventory developed by Venkataraman (1988) and Teaching Competency Rating Scale developed and validated by Suneela (2006). The sample consists of 900 student teachers studying in Kanyakumari, Tirunelveli and Thoothukudi districts. Mean, SD, percentage analysis and ANOVA were used for analysing the data. From the findings, it is understood that majority of the student teachers have left hemispheric dominance. The student teachers with left hemispheric dominance have high level teaching competence than the integrated and right hemispheric dominated student teachers.*

INTRODUCTION

Professional training of teachers is a pre-requisite in all parts of the world. The teacher education is said to be an important investment for bringing out for the qualitative improvement in education. If an educational revolution is to be initiated, it is the teacher education, which can be taken as a starting point.

Walter S. Monroe (1941) in his 'Encyclopedia of Educational Research' says "teacher education is the total educational experiences given for the preparation of a person through an educational institute for the announced purposes such as teaching and other educational services".

HEMISPHERIC DOMINANCE AND TEACHING COMPETENCE

Hemisphericity refers to the idea that people rely on a preferred mode of cognitive processing linked to the predominant activity of either their left or right cerebral hemisphere. Individual hemisphericity was erroneously thought to be located somewhere on a gradient between right and left brain dominance with most of the people being intermediate.

A reconstituted and quantifiable definition of hemisphericity, made possible by this work. Hemisphericity is the bias in thinking orientation, behavioural style, and personality resulting from the inherent laterality of one's sole executive system within the asymmetric bilateral brain. Thus, depending upon which brain side inherently is located, one is either a left or a right brain dominated individual.

The teaching techniques in the schools can be undertaken in consonance with the students' style of learning and thinking. This approach will remove unnecessary restrictions on teaching and learning of the students, and facilitates and actualization of the concept "no limits to learning". This becomes possible only by eliminating the barriers to learning based on the hemispheric preference of the learners and providing opportunities for activating the functioning of non-dominant hemisphere. This might help the students to become more integrated learners with better processing skills in both hemispheres. The teaching

and learning procedures must be organized in such a way, that they tone up and activate the hemisphere functions of the students. Therefore, hemispheric dominance is a major constituent factor of teaching competence.

NEED AND SIGNIFICANCE OF THE STUDY

Hemispheric dominance helps the student teachers to promote not only their thinking, learning styles, interest and cordial relationship with the others but also leads them with proper guidance to handle the future generation in the classroom teaching process.

Every student teacher should have either left or right brain dominance, because they have to make the classroom more conducive enough for the better learning of the students. Similarly, the right or left hemispheric dominance of a person may have certain influence on their day-to-day transaction. Especially for the student teachers, this hemispheric dominance paves way for their performance by making their students with all ample opportunities. Hence, the investigator would like to study the dominance of hemisphericity of the student teachers and its impact on their teaching competence.

OPERATIONAL DEFINITIONS

Hemispheric Dominance

Each people have a dominant side of the brain. Individuals who are predominantly left-sided tend to be more verbal, analytical and problem solving, while individuals who are predominantly right-sided tend to be artistic, good with mathematics and more visual in nature. Hemispheric dominance refers to the extreme use of left or right or whole brain.

Operationally, it is the score obtained on the Hemispheric Dominance Inventory (Style of Learning and Thinking) developed by Venkataraman (1988).

Teaching Competence

By 'Teaching Competence', the investigator means it is the performance, ability, and the capacity of the student teacher. It is the ability of the student teachers to execute a mastery level teaching with all that they handle as part

of their profession. It refers to their performance level and skill in handling a topic to the best satisfaction of the learner.

Operationally, it is the score obtained on the Teaching Competency Rating Scale developed and validated by Suneela (2006).

Student Teachers

By this, the investigator means the students undergoing the one-year degree course in Colleges of Education affiliated to Tamil Nadu Teachers Education University, Chennai.

OBJECTIVES

1. To find the hemispheric dominance of student teachers.
2. To find the level of teaching competence of student teachers.
3. To find the level of teaching competence of student teachers with left, right and integrated hemispheric dominances.
4. To find the significance of difference among the student teachers with left, right and integrated hemisphericity in their teaching competence.
5. To find the significance of difference among the student teachers with left, right and integrated hemisphericity in their teaching competence with regard to gender.
6. To find the significance of difference among the student teachers with left, right and integrated hemisphericity in their teaching competence with regard to birth order.

METHODOLOGY IN BRIEF

Survey method was used in the present study. Samples of 900 student teachers were taken at random from the Kanyakumari, Tirunelveli and Thootukudi Districts. For data collection, the researcher used Hemispheric Dominance Inventory developed by Venkataraman (1988) and Teaching Competency Rating Scale developed and validated by Suneela (2006). Mean, SD, percentage analysis and ANOVA were used for analysing the data.

DATA ANALYSIS AND FINDINGS

1. The student teachers studying in Colleges of Education are dominant of left hemisphericity.

Table – 1: Hemispheric Dominance of Student Teachers

Variable	Left		Right		Integrated	
	N	%	N	%	N	%
Hemisphericity	531	59.00	255	28.33	114	12.67

It is inferred from the above table that 59% of student teachers have left hemisphericity, 28.33% of them have right hemisphericity and 12.67% of them have integrated hemisphericity.

2. The student teachers are having low teaching competence.

Table – 2: Level of Teaching Competence of Student Teachers

Variable	Low		Moderate		High	
	N	%	N	%	N	%
Teaching Competence	135	15.00	639	71.00	126	14.00

It is inferred from the above table that 71% of student teachers have moderate level of teaching competence.

3. The student teachers with left, right and integrated hemispheric dominance are having low teaching competence.

Table – 3: Level of Teaching Competence of Student Teachers with Left, Right and Integrated Hemispheric Dominance

Hemispheric Dominance	Teaching Competence					
	Low		Moderate		High	
	N	%	N	%	N	%
Left	77	14.50	368	69.30	86	16.20
Right	44	17.25	189	74.12	22	8.63
Integrated	14	12.28	82	71.93	18	15.79

It is inferred from the above table that 69.30% of the student teachers with left hemispheric dominance, 74.12% of the student teachers with right hemispheric dominance and 71.93% of the student teachers with integrated hemispheric dominance have moderate level of teaching competence.

4. There is no significant difference among the student teachers with left, right and integrated hemispheric dominance in their teaching competence.

Table – 4: Difference among the Student Teachers with Left, Right and Integrated Hemispheric Dominance in their Teaching Competence

Hemispheric Dominance	Mean	df	Calculated 'F' Value	Table Value	Remark
Left	35.53	2, 897	4.50	3.00	S
Right	34.37				
Integrated	35.53				

It is inferred from the above table there is significant difference among the student teachers with left, right and integrated hemispheric dominance in their teaching competence.

While comparing the mean scores of student teachers with left, right and integrated hemispheric dominance in their teaching competence, the student teachers with left hemispheric dominance (mean = 35.53) and integrated hemispheric dominance (mean = 35.53) have more teaching competence than the student teachers with right hemispheric dominance (mean = 34.37) in teaching competence.

5. There is no significant difference among the student teachers with left, right and integrated hemispheric dominance in their teaching competence with regard to gender.

Table – 5: Difference among the Student Teachers with Left, Right and Integrated Hemispheric Dominance in their Teaching Competence with regard to Gender

Gender	Hemispheric Dominance	Mean	df	Calculated 'F' Value	Table Value	Remark
Male	Left	33.50	2, 125	0.61	3.07	NS
	Right	32.61				
	Integrated	34.29				
Female	Left	35.80	2, 769	2.97	3.00	NS
	Right	34.79				
	Integrated	35.74				

It is inferred from the above table that there is no significant difference among the male and female student teachers with left, right and integrated hemispheric dominance in their teaching competence.

6. There is no significant difference among the student teachers with left, right and integrated hemispheric dominance in their teaching competence with regard to birth order.

Table – 6: Difference among the Student Teachers with Left, Right and Integrated Hemispheric Dominance in their Teaching Competence with regard to Birth Order

Birth Order	Hemispheric Dominance	Mean	df	Calculated 'F' Value	Table Value	Remark
First	Left	35.55	2, 389	3.80	3.02	S
	Right	34.01				
	Integrated	34.16				
Middle	Left	35.63	2, 250	2.93	3.04	NS
	Right	34.09				
	Integrated	36.46				
Last	Left	35.40	2, 252	1.10	3.04	NS
	Right	35.23				
	Integrated	36.68				

It is inferred from the above table that there is significant difference among the first born student teachers with left, right and integrated hemispheric dominance in their teaching competence.

While comparing the mean scores of first born student teachers with left, right and integrated hemispheric dominance in the teaching competence, the student teachers with left hemispheric dominance (mean = 35.55) have more teaching competence than those with right hemispheric dominance (mean = 34.01) and integrated hemispheric dominance (mean = 34.16) in teaching competence.

But, there is no significant difference among the middle born and last born student teachers with left, right and integrated hemispheric dominance in their teaching competence.

DISCUSSION

From the findings of the present study, it is observed that significant difference is found among the student teachers with left, right and integrated hemispheric dominance in their teaching competence. The student teachers with left and integrated hemispheric dominance have more teaching competence than the student teachers with right hemispheric dominance. Significant difference is found among

the first born student teachers with left, right and integrated hemispheric dominance in their teaching competence. The student teachers with left hemispheric dominance have more teaching competence than those with right and integrated hemispheric dominance.

This is because of the left and integrated hemispheric dominance of the student teachers may improve their verbal capability, which is a vital one for the teachers, those who generally explain the subject matter elaborately for the better understanding of their disciples. Generally, the left dominant persons are verbal in nature and they have analytical style of thinking in almost all their activities. They can analyze several things in a sequential manner and they can get success. This may improve their explanation as well as oratory skills. Hence, they have more teaching competence.

CONCLUSION

From this study, the researcher concluded that the student teachers with left hemispheric dominance have recorded a higher level teaching competence when compared with their counterparts. This implies that the student teachers should use the left dominance of their brain for the effective teaching of the subject matter to muster the innate talents of students for the overall success of the teaching learning process.

REFERENCE

1. Iaccino, J.F. (1993). *Left Brain-Right Brain Differences: Inquiries, Evidence, and New Approaches*. Hillsdale, NJ: Lawrence Erlbaum Associates Publishers. | 2. Lieberman, M.G. (1986). *Hemispheric Mode Indicator: Technical Notes*. Barrington, IL: Excel, INC. | 3. Walter S. Monroe, (1941). *Encyclopedia of Educational Research*. New York. - The Macmillan Co. | 4. Springer, S.P. & Deutsch, G. (1993). *Left Brain, Right Brain*. New York, N.Y: W.H. Freeman & Company. |