

Gender-Wise Analysis on Brain Dominance and Leadership Style of the High School Teachers



Education

KEYWORDS : brain dominance, leadership style, hemispheric dominance, high school teachers

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ABSTRACT

The present study aims to examine whether there is any significant relationship between brain dominance and leadership style of high school teachers in terms of gender. In this survey study, two tools were used for collecting data, namely (i) Alert Scale of Cognitive Style which was developed and standardized by Loren D. Crane (1989) and (ii) Teachers' Leadership Style Inventory by Arul Lawrence (2012). The investigator has selected 207 teachers who were taking classes for IX and X standard from different high schools in Tenkasi Educational District as sample with the help of stratified random sampling technique. For analyzing the data, Mean, Standard Deviation, 't'-test and Pearson's Product Moment Correlation were used. The findings show that (i) there is significant difference between male and female high school teachers in their Brain Dominance, (ii) there is no significant difference between male and female high school teachers in their Leadership Style, (iii) there is significant relationship between Brain Dominance and Leadership Style of male high school teachers in the autocratic and democratic dimensions. But, there is no significant relationship between Brain Dominance and Leadership Style of high school teachers in the laissez-faire dimension, and (iv) there is no significant relationship between Brain Dominance and Leadership Style of female high school teachers in the autocratic and laissez-faire dimensions. But, there is no significant relationship between Brain Dominance and Leadership Style of high school teachers in the democratic dimension.

INTRODUCTION

The teacher is the leader of the social group in the class room situation as well as in the school life. His job is not finished with the imparting of instruction in the class. He is to develop relation with the class children and make them good social beings, outside the classroom too. Hence, he/she should maintain good relationship with pupils, the colleagues, head of the institution, parents of the children and the community. By virtue of his position the teacher has authority over his class. But authority is not identical with leadership. If the teacher is to become the leader of his class, he has to fulfill two conditions: to avoid conflict with his class, and to put into practice the principles of leadership as they apply to his class. The teacher is not any kind of leader but the intellectual and moral leader of his class (Arul Lawrence, 2012).

Brain is the organ of learning, every part of the brain controls different functions of learning. Especially the two hemispheres play different role themselves. The left hemisphere appears to be specialized for language functions of speaking, reading, writing and understanding language and for analytical functions. The right hemisphere appears to be specialized for nonverbal abilities, musical abilities and perceptual and 'spatiomanipulative' skills. The enhanced cooperation between both the hemispheres in the learning process is called Brain Dominance. Brain Dominance is also called Brain-Based Learning or Hemispheric Dominance or Cerebral Dominance (Arul Lawrence, 2012).

TITLE OF THE STUDY

Gender-wise Analysis on Brain Dominance and Leadership Style of the High School Teachers

SIGNIFICANCE OF THE STUDY

Kothari Commission (1964-66) says, the destiny of India is being shaped in its classrooms. As we have observed so far the teachers occupy a unique position and they are the heart and soul of every institution. They can reform the students in the right direction with his / her leadership behaviour. Thus the whole institution spins around the axis of teachers. Moreover, students follow the teacher as their role model. The behaviour of students is determined by that of teachers. Therefore teachers are good leaders and they play an important role in making good citizens. At the same time, there is marked difference in their leadership styles. The leadership styles of the teachers differ based on their psychology. Brain plays a major role in determining the behaviour elicited by the teachers. The different hemispheres of the brain i.e. brain dominance is responsible for the difference in teaching-learning activities in a classroom. The aim of this

study is to examine whether there is any significant relationship between brain dominance and leadership style of high school teachers in terms of gender.

OPERATIONAL DEFINITIONS

The investigator adopted the following definitions for the terms used in this title:

1. Brain Dominance: Brain dominance refers to a preference for using one hemisphere of the brain over the other hemisphere. Brain dominance refers to the extreme use of left or right or whole brain.
2. Leadership Style : Leadership style is the manner and approach of providing direction, implementing plans, and motivating people.
3. High School Teachers : High school teachers are the teachers who are handling classes for IX and X standards.

OBJECTIVES

1. To find out whether there is any significant difference between male and female high school teachers in their Brain Dominance.
2. To find out whether there is any significant difference between male and female high school teachers in their Leadership Style.
3. To find out whether there is any significant relationship between Brain Dominance and Leadership Style of male high school teachers.
4. To find out whether there is any significant relationship between Brain Dominance and Leadership Style of female high school teachers.

NULL HYPOTHESES

1. There is no significant difference between male and female high school teachers in their Brain Dominance.
2. There is no significant difference between male and female high school teachers in their Leadership Style.
3. There is no significant relationship between Brain Dominance and Leadership Style of male high school teachers.
4. There is no significant relationship between Brain Dominance and Leadership Style of female high school teachers.

METHODOLOGY

In this survey study, two tools were used for collecting data, namely (i) Alert Scale of Cognitive Style which was developed and standardized by Loren D. Crane (1989) and (ii) Teachers' Leadership Style Inventory by Arul Lawrence (2012). The investigator has selected 207 teachers who were taking classes for

IX and X standard from different high schools in Tenkasi Educational District as sample with the help of stratified random sampling technique. For analyzing the data, Mean, Standard Deviation, t-test and Pearson's Product Moment Correlation were used.

DATA ANALYSIS

Ho1: There is no significant difference between male and female high school teachers in their Brain Dominance.

Table – 1. DIFFERENCE BETWEEN MALE AND FEMALE HIGH SCHOOL TEACHERS IN THEIR BRAIN DOMINANCE

Sex	N	Mean	S.D.	Calculated 't' value	Table 't' value	Remarks at 5% level
Male	102	8.47	4.35	2.21	1.96	S
Female	105	9.86	4.65			

From the above table, it is inferred that the calculated 't' value 2.21 is greater than the table value 1.96 at 5% level of significance. Hence the Null Hypothesis is rejected.

Ho2: There is no significant difference between male and female high school teachers in their Leadership Style.

TABLE – 2. DIFFERENCE BETWEEN MALE AND FEMALE HIGH SCHOOL TEACHERS IN THEIR LEADERSHIP STYLE

Leadership Style	Male (N=102)		Female (N=105)		Calculated 't' value	Table 't' value	Remarks at 5% level
	Mean	S.D.	Mean	S.D.			
Autocratic	7.19	4.41	6.55	4.36	1.04	1.96	NS
Democratic	8.29	4.33	8.40	3.51	0.19		NS
Laissez-faire	6.52	3.20	7.05	3.94	1.06		NS

It is inferred from the above table that the calculated 't' values (1.04, 0.19, and 1.06) for autocratic, democratic and laissez-faire are lesser than the table value (1.96) at 5% level of significance. Hence the Null Hypotheses are accepted.

Ho3: There is no significant relationship between Brain Dominance and Leadership Style of male high school teachers.

TABLE – 3. RELATIONSHIP BETWEEN BRAIN DOMINANCE AND LEADERSHIP STYLE OF MALE HIGH SCHOOL TEACHERS

Leadership Style	Calculated 'γ' Value	Table 'γ' Value	Remarks at 5% level
Autocratic	0.278	0.256	S
Democratic	0.376		S
Laissez-faire	0.126		NS

It is inferred from the above table that the calculated 'γ' values (0.278, 0.376) for autocratic and democratic are greater than the table value (0.256) at 5% level of significance. Hence the Null Hypotheses are rejected. Since the calculated 'γ' values (0.126) for laissez-faire is lesser than the table value (0.256) at 5% level of significance, the Null Hypothesis is accepted.

Ho4: There is no significant relationship between Brain Dominance and Leadership Style of female high school teachers.

TABLE – 4. RELATIONSHIP BETWEEN BRAIN DOMINANCE AND LEADERSHIP STYLE OF FEMALE HIGH SCHOOL TEACHERS

Leadership Style	Calculated 'γ' Value	Table 'γ' Value	Remarks at 5% level
Autocratic	0.066	0.256	NS
Democratic	0.320		S
Laissez-faire	0.213		NS

It is inferred from the above table that the calculated 'γ' values (0.066, 0.213) for autocratic and laissez-faire are lesser than the table value (0.256) at 5% level of significance. Hence the Null Hypotheses are accepted. Since the calculated 'γ' values (0.320) for democratic is greater than the table value (0.256) at 5% level of significance, the Null Hypothesis is rejected.

FINDINGS

1. There is significant difference between male and female high school teachers in their Brain Dominance.
2. There is no significant difference between male and female high school teachers in their Leadership Style.
3. There is significant relationship between Brain Dominance and Leadership Style of male high school teachers in the autocratic and democratic dimensions. But, there is no significant relationship between Brain Dominance and Leadership Style of high school teachers in the laissez-faire dimension.
4. There is no significant relationship between Brain Dominance and Leadership Style of female high school teachers in the autocratic and laissez-faire dimensions. But, there is significant relationship between Brain Dominance and Leadership Style of high school teachers in the democratic dimension.

INTERPRETATIONS

From the above study, it is concluded that the female high school teachers are better than the male teachers in their Brain Dominance. This may be due to the fact that women in general think a lot on the pros and cons of their actions and they exercise more caution in all their activities including teaching learning behavioural approach. Their maternal tendering, responsibility, innate locus of control, attitude makes them more mature and better.

Correlation analysis result reveals that there is significant relationship between Brain Dominance and autocratic style, and Brain dominance and democratic style of leadership of male High School Teachers. This may be due to the fact that the male high school teachers would desire to prove their individuality and assertiveness and so would like to adopt autocratic and democratic style rather than leaving the students to have their own way of doing things by giving cent percent freedom.

Correlation analysis result reveals that there is significant relationship between Brain Dominance and democratic style of leadership of female High School Teachers. It may be due to the fact that the female teachers with democratic values and style of leadership would think reasonably to make a balanced approach in their academic endeavours rather than the autocratic and laissez-faire style. Further the students and parents would cooperate and welcome the teachers who are democratic in their classroom management behaviour.

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