CHAPTER - III

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CHAPTER - III

METHOD AND PROCEDURE

3.1. INTRODUCTION

Research has proved to be an essential and powerful tool in leading man towards progress. According to John W. Best (1977) “Research is considered to be the more formal, systematic intensive process of carrying on the scientific method of analysis” (P. 47). In fact, the research design is the conceptual structure within which research measurement and analysis constitute the blueprint for the collection of data. Therefore, it is important to have an appropriate and complete description of the procedure followed in the study. This chapter deals with method and procedure of the present study.

3.2. METHOD ADOPTED FOR THE PRESENT STUDY

The present study aims at investigating the teaching competency of the B.Ed. students studying in Colleges of Education in Tamilnadu. The investigator has chosen the target population as the student teachers studying in Colleges of Education in Tamilnadu. Therefore, it has necessitated to collect data from a larger sample scattered over a large area with regard to teaching competency, gender difference, Learning Style and Hemisphericity. Due to this, the investigator has chosen the survey method as the suitable form of research for collecting data.

3.3. TITLE OF THE STUDY

The investigator would like to word the title of her study as follows:

ROLE OF GENDER, LEARNING STYLE AND HEMISPHERICITY IN INFLUENCING THE TEACHING COMPETENCE OF B.Ed. STUDENTS

3.4. OPERATIONAL DEFINITIONS

Gender

By this, the investigator means the male and female teacher trainees in Colleges of Education.
Learning Style

By this, the investigator means the score obtained on the Learning Style Inventory developed by David A. Kolb (1984).

Hemisphericity

By this, the investigator means the scores obtained on the Hemisphericity Inventory developed by A. Hilliard (1983).

Teaching Competence

By this, the investigator means the scores obtained on the Teaching Competence Scale adapted by the investigator (2004).

B.Ed. Students

By this, the investigator means the students undergoing the one-year Bachelor of Education degree course in colleges of education and university departments in Tamilnadu.

3.5. OBJECTIVES

PART - I

1. To find the level of Teaching Competence and its dimensions of the students doing the B.Ed. degree course in Colleges of Education and University departments in Tamilnadu.

2. To find the level of Teaching Competence and its dimensions of male and female students doing the B.Ed. degree course in Colleges of Education and University departments in Tamilnadu.

3. To find the significance of difference between the male and female B.Ed. students in their Teaching Competence and its dimensions.

4. To find the level of Teaching Competence of the students doing the B.Ed. degree course in Colleges of Education and University departments in Tamilnadu with regard to global and analytical Learning Styles.

5. To find the significance of difference between the B.Ed. students of global and analytical Learning Styles in their Teaching Competence and its dimensions.
6. To find the predictive nature of Learning Styles of B.Ed. students with regard to their Teaching Competence and its dimensions.

7. To find the level of Teaching Competence of the students doing the B.Ed. degree course in Colleges of Education and University departments in Tamilnadu with regard to left, right and integrated Hemisphericity.

8. To find the significance of difference among the B.Ed. students of left, right and integrated Hemisphericity in their Teaching Competence and its dimensions.

9. To find the predictive nature of Hemisphericity of B.Ed. students with regard to their Teaching Competence and its dimensions.

**PART – II**

**Section – A: Role of Learning Style in influencing the Teaching Competence of Male Students**

1. To find the level of Teaching Competence and its dimensions of male B.Ed. students of global and analytical Learning Styles.

2. To find the significance of difference between the male B.Ed. students of global and analytical Learning Styles in their Teaching Competence and its dimensions.

3. To find the predictive nature of Learning Styles of male B.Ed. students with regard to their Teaching Competence and its dimensions.

4. To find the level of Teaching Competence and its dimensions of male B.Ed. students of global and analytical Learning Styles) with regard to (i) different educational qualifications – UG and PG; (ii) different optional subjects – Language, Arts and Science; (iii) management of different types – Government, Aided, Self-finance and University Departments; (iv) colleges of different status – Autonomous and Non-autonomous; (v) colleges of different nature – Unisex and Co-education.

5. To find the significance of difference between the male B.Ed. students of global and analytical Learning Styles in their Teaching Competence with regard to (i) different educational qualifications – UG and PG; (ii) different optional subjects – Language, Arts and Science; (iii) management of different types – Government, Aided, Self-finance and University Departments; (iv) colleges of different status – Autonomous and Non-autonomous; (v) colleges of different nature – Unisex and Co-education.

6. To find the predictive nature of Learning Styles of male B.Ed. students of (i) different educational qualifications – UG and PG; (ii) different optional subjects – Language, Arts and Science; (iii) management of different types – Government,
Aided, Self-finance and University Departments; (iv) colleges of different status – Autonomous and Non-autonomous; (v) colleges of different nature – Unisex and Co-education, with regard to the Teaching Competence and its dimensions.

Section – B: Role of Learning Style in influencing the Teaching Competence of Female Students

1. To find the level of Teaching Competence and its dimensions of female B.Ed. students of global and analytical Learning Styles.

2. To find the significance of difference between the female B.Ed. students of global and analytical Learning Styles in their Teaching Competence and its dimensions.

3. To find the predictive nature of Learning Styles of female B.Ed. students with regard to their Teaching Competence and its dimensions.

4. To find the level of Teaching Competence and its dimensions of female B.Ed. students of global and analytical Learning Styles with regard to (i) different educational qualifications – UG and PG; (ii) different optional subjects – Language, Arts and Science; (iii) management of different types – Government, Aided, Self-finance and University Departments; (iv) colleges of different status – Autonomous and Non-autonomous; (v) colleges of different nature – Unisex and Co-education.

5. To find the significance of difference between the female B.Ed. students of global and analytical Learning Styles in their Teaching Competence with regard to (i) different educational qualifications – UG and PG; (ii) different optional subjects – Language, Arts and Science; (iii) management of different types – Government, Aided, Self-finance and University Departments; (iv) colleges of different status – Autonomous and Non-autonomous; (v) colleges of different nature – Unisex and Co-education.

6. To find the predictive nature of Learning Styles of female B.Ed. students of (i) different educational qualifications – UG and PG; (ii) different optional subjects – Language, Arts and Science; (iii) management of different types – Government, Aided, Self-finance and University Departments; (iv) colleges of different status – Autonomous and Non-autonomous; (v) colleges of different nature – Unisex and Co-education, with regard to the Teaching Competence and its dimensions.
PART – III

Section – A: Role of Hemisphericity in influencing the Teaching Competence of Male Students

1. To find the level of Teaching Competence and its dimensions of male B.Ed. students of left, right and integrated Hemisphericity.

2. To find the significance of difference among the male B.Ed. students of left, right and integrated Hemisphericity in their Teaching Competence and its dimensions.

3. To find the predictive nature of Hemisphericity of male B.Ed. students with regard to their Teaching Competence.

4. To find the level of Teaching Competence and its dimensions of male B.Ed. students of left, right and integrated Hemisphericity with regard to (i) different educational qualifications – UG and PG; (ii) different optional subjects – Language, Arts and Science; (iii) management of different types – Government, Aided, Self-finance and University Departments; (iv) colleges of different status – Autonomous and Non-autonomous; (v) colleges of different nature – Unisex and Co-education.

5. To find the significance of difference among the male B.Ed. students of left, right and integrated Hemisphericity in their Teaching Competence and its dimensions with regard to (i) different educational qualifications – UG and PG; (ii) different optional subjects – Language, Arts and Science; (iii) management of different types – Government, Aided, Self-finance and University Departments; (iv) colleges of different status – Autonomous and Non-autonomous; (v) colleges of different nature – Unisex and Co-education.

6. To find the predictive nature of Hemisphericity of male B.Ed. students with regard to (i) different educational qualifications – UG and PG; (ii) different optional subjects – Language, Arts and Science; (iii) management of different types – Government, Aided, Self-finance and University Departments; (iv) colleges of different status – Autonomous and Non-autonomous; (v) colleges of different nature – Unisex and Co-education, with regard to their Teaching Competence and its dimensions.

Section – B: Role of Hemisphericity in influencing the Teaching Competence of Female Students

1. To find the level of Teaching Competence and its dimensions of female B.Ed. students of left, right and integrated Hemisphericity.
2. To find the significance of difference among the female B.Ed. students of left, right and integrated Hemisphericity in their Teaching Competence and its dimensions.

3. To find the predictive nature of Hemisphericity of female B.Ed. students with regard to their Teaching Competence.

4. To find the level of Teaching Competence and its dimensions of female B.Ed. students of left, right and integrated Hemisphericity with regard to (i) different educational qualifications – UG and PG; (ii) different optional subjects – Language, Arts and Science; (iii) management of different types – Government, Aided, Self-finance and University Departments; (iv) colleges of different status – Autonomous and Non-autonomous; (v) colleges of different nature – Unisex and Co-education.

5. To find the significance of difference among the female B.Ed. students of left, right and integrated Hemisphericity in their Teaching Competence and its dimensions with regard to (i) different educational qualifications – UG and PG; (ii) different optional subjects – Language, Arts and Science; (iii) management of different types – Government, Aided, Self-finance and University Departments; (iv) colleges of different status – Autonomous and Non-autonomous; (v) colleges of different nature – Unisex and Co-education.

6. To find the predictive nature of Hemisphericity of female B.Ed. students with regard to (i) different educational qualifications – UG and PG; (ii) different optional subjects – Language, Arts and Science; (iii) management of different types – Government, Aided, Self-finance and University Departments; (iv) colleges of different status – Autonomous and Non-autonomous; (v) colleges of different nature – Unisex and Co-education, with regard to their Teaching Competence and its dimensions.

3.6. HYPOTHESES

PART – I

1. The students doing the B.Ed. degree course in Colleges of Education and University departments in Tamilnadu are high in their Teaching Competence and its dimensions.

2. The male and female students doing the B.Ed. degree course in Colleges of Education and university departments in Tamilnadu are high in their Teaching Competence and its dimensions.
3. There is no significant difference between the male and female B.Ed. students in their Teaching Competence and its dimensions.

4. The students doing the B.Ed. degree course in Colleges of Education and university departments in Tamilnadu with global and analytical Learning Style are high in their Teaching Competence and its dimensions.

5. There is no significant difference between the B.Ed. students of global and analytical Learning Style in their Teaching Competence and its dimensions.

6. Global and Analytical Learning Style are not significant predictors of the Teaching Competence and its dimensions of B.Ed. students.

7. The students doing the B.Ed. degree course in Colleges of Education and university departments in Tamilnadu with left, right and integrated Hemisphericity are high in their Teaching Competence and its dimensions.

8. There is no significant difference among the B.Ed. students of left, right and integrated Hemisphericity in their Teaching Competence and its dimensions.

9. Left, right and integrated Hemisphericity are not significant predictors of the Teaching Competence and its dimensions of B.Ed. students.

PART – II

Section – A: Role of Learning Style in influencing the Teaching Competence of Male Students

1. The male B.Ed. students in Colleges of Education and university departments in Tamilnadu with global and analytical Learning Style are high in Teaching Competence and its dimensions.

2. There is no significant difference between the male B.Ed. students of global and analytical Learning Style in their Teaching Competence and its dimensions.

3. Global and Analytical Learning Style are not significant predictors of the Teaching Competence and its dimensions of male B.Ed. students.

4. The male B.Ed. students with global and analytical Learning Style are high in the Teaching Competence and its dimensions with regard to (i) different educational qualifications – UG and PG; (ii) different optional subjects – Language, Arts and Science; (iii) management of different types – Government, Aided, Self-finance and University Departments; (iv) colleges of different status – Autonomous and Non-autonomous; (v) colleges of different nature – Unisex and Co-education.
5. There is no significant difference between the male B.Ed. students of global and analytical Learning Style in their Teaching Competence and its dimensions with regard to (i) different educational qualifications – UG and PG; (ii) different optional subjects – Language, Arts and Science; (iii) management of different types – Government, Aided, Self-finance and University Departments; (iv) colleges of different status – Autonomous and Non-autonomous; (v) colleges of different nature – Unisex and Co-education.

6. Global and Analytical Learning Style are not significant predictors of the Teaching Competence and its dimensions of male B.Ed. students with regard to (i) different educational qualifications – UG and PG; (ii) different optional subjects – Language, Arts and Science; (iii) management of different types – Government. Aided, Self-finance and University Departments; (iv) colleges of different status – Autonomous and Non-autonomous; (v) colleges of different nature – Unisex and Co-education.

Section – B: Role of Learning Style in influencing the Teaching Competence of Female Students

1. The female B.Ed. students in Colleges of Education and university departments in Tamilnadu with global and analytical Learning Style are high in Teaching Competence and its dimensions.

2. There is no significant difference between the female B.Ed. students of global and analytical Learning Style in their Teaching Competence and its dimensions.

3. Global and Analytical Learning Style are not significant predictors of the Teaching Competence and its dimensions of female B.Ed. students.

4. The female B.Ed. students with global and analytical Learning Style are high in the Teaching Competence and its dimensions with regard to (i) different educational qualifications – UG and PG; (ii) different optional subjects – Language, Arts and Science; (iii) management of different types – Government, Aided, Self-finance and University Departments; (iv) colleges of different status – Autonomous and Non-autonomous; (v) colleges of different nature – Unisex and Co-education.

5. There is no significant difference between the female B.Ed. students of global and analytical Learning Style in their Teaching Competence and its dimensions with regard to (i) different educational qualifications – UG and PG; (ii) different optional subjects – Language, Arts and Science; (iii) management of different types – Government, Aided, Self-finance and University Departments; (iv) colleges of
different status – Autonomous and Non-autonomous; (v) colleges of different nature – Unisex and Co-education.

6. Global and Analytical Learning Style are not significant predictors of the Teaching Competence and its dimensions of female B.Ed. students with regard to (i) different educational qualifications – UG and PG; (ii) different optional subjects – Language, Arts and Science; (iii) management of different types – Government, Aided, Self-finance and University Departments; (iv) colleges of different status – Autonomous and Non-autonomous; (v) colleges of different nature – Unisex and Co-education.

PART – III

Section – A: Role of Hemisphericity in influencing the Teaching Competence of Male Students

1. The male B.Ed. students in Colleges of Education and university departments in Tamilnadu with left, right and integrated Hemisphericity are high in Teaching Competence and its dimensions.

2. There is no significant difference among the male B.Ed. students of left, right and integrated Hemisphericity in their Teaching Competence and its dimensions.

3. Left, right and integrated Hemisphericity are not significant predictors of the Teaching Competence and its dimensions of male B.Ed. students.

4. The male B.Ed. students with left, right and integrated Hemisphericity are high in their Teaching Competence and its dimensions with regard to (i) different educational qualifications – UG and PG; (ii) different optional subjects – Language, Arts and Science; (iii) management of different types – Government, Aided, Self-finance and University Departments; (iv) colleges of different status – Autonomous and Non-autonomous; (v) colleges of different nature – Unisex and Co-education.

5. There is no significant difference among the male B.Ed. students of left, right and integrated Hemisphericity in their Teaching Competence and its dimensions with regard to (i) different educational qualifications – UG and PG; (ii) different optional subjects – Language, Arts and Science; (iii) management of different types – Government, Aided, Self-finance and University Departments; (iv) colleges of different status – Autonomous and Non-autonomous; (v) colleges of different nature – Unisex and Co-education.

6. Left, right and integrated Hemisphericity are not significant predictors of the Teaching Competence and its dimensions of male B.Ed. students with regard to
(i) different educational qualifications – UG and PG; (ii) different optional subjects – Language, Arts and Science; (iii) management of different types – Government, Aided, Self-Finance and University Departments; (iv) colleges of different status – Autonomous and Non-autonomous; (v) colleges of different nature – Unisex and Co-education.

Section – B: Role of Hemisphericity in influencing the Teaching Competence of Female Students

1. The female B.Ed. students in Colleges of Education and university departments in Tamilnadu with left, right and integrated Hemisphericity are high in Teaching Competence and its dimensions.

2. There is no significant difference among the female B.Ed. students of left, right and integrated Hemisphericity in their Teaching Competence and its dimensions.

3. Left, right and integrated Hemisphericity are not significant predictors of the Teaching Competence and its dimensions of female B.Ed. students.

4. The female B.Ed. students with left, right and integrated Hemisphericity are high in their Teaching Competence and its dimensions with regard to (i) different educational qualifications – UG and PG; (ii) different optional subjects – Language, Arts and Science; (iii) management of different types – Government, Aided, Self-Finance and University Departments; (iv) colleges of different status – Autonomous and Non-autonomous; (v) colleges of different nature – Unisex and Co-education.

5. There is no significant difference among the female B.Ed. students of left, right and integrated Hemisphericity in their Teaching Competence and its dimensions with regard to (i) different educational qualifications – UG and PG; (ii) different optional subjects – Language, Arts and Science; (iii) management of different types – Government, Aided, Self-Finance and University Departments; (iv) colleges of different status – Autonomous and Non-autonomous; (v) colleges of different nature – Unisex and Co-education.

6. Left, right and integrated Hemisphericity are not significant predictors of the Teaching Competence and its dimensions of female B.Ed. students with regard to (i) different educational qualifications – UG and PG; (ii) different optional subjects – Language, Arts and Science; (iii) management of different types – Government, Aided, Self-Finance and University Departments; (iv) colleges of different status –
Autonomous and Non-autonomous; (v) colleges of different nature – Unisex and Co-education.

3.7. POPULATION AND SAMPLE

All the teacher trainees undergoing B.Ed. degree course in 22 Colleges of Education, 2 University Departments and 1 University College in Tamil Nadu form the population of the study.

The investigator took 1025 B.Ed. students studying in different Colleges of Education and university departments in Tamilnadu, using stratified random sampling technique.

Table 3.1.
Sample chosen for the Study

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of the Institution</th>
<th>No. of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Lady Willington Institute of Advanced Studies in Education, Triplicane, Chennai</td>
<td>30</td>
</tr>
<tr>
<td>2.</td>
<td>Thiagarajar College of Preceptors, Madurai</td>
<td>30</td>
</tr>
<tr>
<td>3.</td>
<td>Department of Education, Annamalai University, Annamalai Nagar, Chidambaram</td>
<td>60</td>
</tr>
<tr>
<td>4.</td>
<td>Alagappa University College of Education, Karaikudi</td>
<td>60</td>
</tr>
<tr>
<td>5.</td>
<td>Department of Education, Avinasilingam Deemed University for Women, Coimbatore</td>
<td>50</td>
</tr>
<tr>
<td>7.</td>
<td>Institute of Advanced Studies in Education, Saidapet, Chennai</td>
<td>18</td>
</tr>
<tr>
<td>8.</td>
<td>Government College of Education for Women, Coimbatore</td>
<td>30</td>
</tr>
<tr>
<td>10.</td>
<td>Government College of Education, Orathanadu</td>
<td>30</td>
</tr>
<tr>
<td>13.</td>
<td>Annamal College of Education for Women, Thoothukudi</td>
<td>30</td>
</tr>
<tr>
<td>14.</td>
<td>Rev. John Thomas College of Education for Women, Meignanapuram</td>
<td>60</td>
</tr>
<tr>
<td>15.</td>
<td>St. Ignatius’ College of Education for Women, Tirunelveli</td>
<td>58</td>
</tr>
<tr>
<td>16.</td>
<td>St. Justin’s College of Education for Women, Madurai</td>
<td>30</td>
</tr>
<tr>
<td>S. No.</td>
<td>Name of the Institution</td>
<td>No. of Students</td>
</tr>
<tr>
<td>-------</td>
<td>-------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>17.</td>
<td>Dr. Sivanthi Adithanar College of Education, Tiruchendur</td>
<td>40</td>
</tr>
<tr>
<td>18.</td>
<td>Stella Matituna College of Education for Women, Ashoknagar, Chennai</td>
<td>30</td>
</tr>
<tr>
<td>19.</td>
<td>Meston College of Education, Royapetlah, Chennai</td>
<td>49</td>
</tr>
<tr>
<td>20.</td>
<td>V.O.C. College of Education, Thoothukudi</td>
<td>30</td>
</tr>
<tr>
<td>21.</td>
<td>Sri Sarada College of Education for Women, Salem</td>
<td>60</td>
</tr>
<tr>
<td>22.</td>
<td>Sri Ramakrishna Mission Vidyalaya College of Education, Coimbatore</td>
<td>30</td>
</tr>
<tr>
<td>23.</td>
<td>Lakshmi College of Education, Gandhigram, Dindigal</td>
<td>60</td>
</tr>
<tr>
<td>24.</td>
<td>St. Christopher's College of Education for Women, Vepery, Chennai</td>
<td>61</td>
</tr>
<tr>
<td>25.</td>
<td>N.K.T. National College of Education for Women, Triplicane, Chennai</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>1025</strong></td>
</tr>
</tbody>
</table>

### 3.8. RESEARCH TOOLS

1. Teaching Competence Scale being used in Colleges of Education in Manonmaniam Sundaranar University – adapted by the Investigator.
2. Learning Style Inventory – developed by A Hilliard (2000)
3. Hemisphericity Inventory – developed by E P Torrance (1989)

### 3.9. ESTABLISHING RELIABILITY

The reliability of the tools were established using test-retest method. All the tools including the modified Teaching Competence Scale were first administered to 30 B.Ed. students randomly selected. Then after an interval of 10 days the same tests were administered to the same set of sample. Using the two sets of scores obtained for each one of the tools, product moment correlations were computed. The obtained correlation coefficients are given in the following table.

<table>
<thead>
<tr>
<th>Tools</th>
<th>Correlation Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching Competence Scale</td>
<td>0.83</td>
</tr>
<tr>
<td>Learning Style Inventory</td>
<td>0.78</td>
</tr>
<tr>
<td>Hemisphericity Inventory</td>
<td>0.79</td>
</tr>
</tbody>
</table>
The correlation coefficients are positive and significant for all the categories. It upholds the consistency of the tool and hence the tools are taken to be reliable. The validated final form of the tools are given in the appendix.

3.10. COLLECTION OF DATA

The research tool was administered to 1025 B.Ed. students after getting prior permission from the Heads of the Colleges of Education. The investigator explained the tools to the students personally. The respondents were requested to answer all the questions and submit them promptly to the investigator. The filled-in tools were scored and the data were tabulated for analysis.

3.11. STATISTICS USED

The investigator used the following statistical techniques to test the hypotheses.

1. Percentage Analysis
2. 't' Test
3. ANOVA
4. Regression Analysis

3.12. REFERENCE