AN INVESTIGATION INTO VARIATIONS OF SOME PSYCHOLOGICAL CONSTRUCTS OF B.ED. TRAINEES WITH GEOGRAPHICAL ENVIRONMENT.

Nita Mitra.

Geographical environment influences the psychological constructs of a person. In this paper the variations in the Psychological Constructs of B.Ed. Trainees (Regular and ODL mode), namely Attitude, Achievement Motivation and Peer-interaction Motivation with the contrast Geographical Environments of the Plains and the Hills have been investigated. In order to make a comparison, their achievement in B.Ed. Training Programme has also been considered. It has been found that the Trainees of the Hills had a higher level of Attitude towards Teacher Education Programme and Peer-interaction Motivation in comparison with their counter part from the Plains. However, no significant difference was identifiable with respect to other psychological construct, namely Achievement Motivation. Nor, there was any significant difference between the Trainees of the Plains and the Hills with respect to their Achievement in the Training Programme.

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Review:-
Examples of the relevant references are presented here for locating the research work in the proper perspective.

Trivedi (2011) assessed Secondary School Teachers’ Attitude towards Teaching Profession. They observed that, “Effective and productive learning on the part of pupils can be achieved only by teachers with desirable attitudes.” Wigfield and Eccles (2000) addressed three major longitudinal studies. The first one was a longitudinal study focused on gender differences in achievement, beliefs and values about Mathematics and English. The second was a study of how the transition from elementary to junior high school influenced children’s beliefs and values about different academic subjects, sports, and social activities (see Eccles et al., 1989; Wigfield et al., 1991).

Gerald Eisenkopf in an excellent paper (2008) explained how with data from an experiment he could strengthen the claim for the existence of peer effects in a learning process. The study offered an insight into the mechanisms of peer interaction. The results established beyond any doubt that a peer has a motivational effect even before the actual cooperation takes place. It has also been reported that some of the “better” students improve the performance of their partner but they induce lower motivation.

However, no such study could be identified in the area of the psychological constructs for B.Ed. Trainees and their variations with Geographical Environment. This was the motivation for the present work. This was a part of the Ph.D. thesis (unpublished; Mitra, 2016) prepared by the author.

Research Design and Methodology:-

Objectives:
1. To study the Attitude of B.Ed. Trainees towards Teacher Education Programme under Regular and ODL mode in a college located in the Plains and another located in the Hills.
2. To study the Achievement Motivation of B.Ed. Trainees under Regular and ODL mode in a college located in the Plains and another located in the Hills.
3. To study the Peer-interaction motivation of B.Ed. Trainees under Regular and ODL mode in a college located in the Plains and another located in the Hills.
4. To examine the Achievement of B.Ed. Trainees under Regular and ODL mode in University/College Examinations of Theory Papers in a college located in the Plains and another located in the Hills.
5. To examine the Achievement of B.Ed. Trainees under Regular and ODL mode in University/College Examinations in Practical Papers on Teaching Practice in a college located in the Plains and another located in the Hills.

Hypotheses:-

$H_1$: The Attitudes of B.Ed. Trainees under Regular and ODL mode towards Teacher Education Programme do not differ significantly with variations in Geographical Environment.

$H_2$: The Achievement motivation of B.Ed. Trainees under Regular and ODL mode do not differ significantly with variations in Geographical Environment.

$H_3$: The Peer-interaction motivation of B.Ed. Trainees under Regular and ODL mode do not differ significantly with variations in Geographical Environment.

$H_4$: The achievement scores in University/College Examination in Theory papers of B.Ed. Trainees under Regular and ODL mode do not differ significantly with variations in Geographical Environment.

$H_5$: The achievement scores in Practical paper on Teaching Practice in University / College Examination of B.Ed. Trainees under Regular and ODL mode do not differ significantly with variations in Geographical Environment.

Delimitations:-
The study was confined to the Trainees of Regular and ODL mode from the adjoining areas of North Bengal and Sikkim. Also, the study was confined to the time-period from 2013 to 2015.

Method:-
As the method of study it is a combination of two approaches, namely, Descriptive Survey (Best and Kahn, 2007).
Population and Sample:-
Population of the study comprises of the trainees (Regular mode and ODL mode) from the adjoining areas of North Bengal and Sikkim.

The trainees (Regular mode and ODL mode) studying at a college from the Plains (located in the Darjeeling District) and another from the Hills (located in Sikkim) for three academic years have been chosen as the sample. In each year the number of trainees was hundred both for Regular and ODL.

Thus, in this study there were 300 trainees of Regular mode from the Plains (located in the Darjeeling District) and 300 trainees of Regular mode from the Hills (located in the Sikkim).

Similarly, there were 300 trainees of ODL mode from the Plains (located in the Darjeeling District) and 300 trainees of ODL mode from the Hills (located in the Sikkim).

Variables Measured and the Corresponding Tools and Techniques:-

In relation to the parameters which are basically Psychological Constructs:
1. The parameter Attitude was measured in terms of ‘Attitude score’.
2. The parameter Achievement Motivation was measured in terms of ‘Achievement motivation score’.
3. The parameter Peer-interaction Motivation was measured in terms of ‘Peer-interaction motivation score’.
4. In each of the above three cases an opinionnaire (having thirty items for each category) has been developed by the investigator using the Likert scale. The tools were submitted to a panel of experts to ensure validity and reliability of the scale. After necessary reformulation the opinionnaires were accepted as a valid one. A valid scale is always reliable.

In relation to the parameter, Achievement:-
The parameter Achievement was measured in terms of ‘Achievement score’ in University Examination.

Data Collection Procedure:-
In relation to the parameters which are basically Psychological Constructs:
1. The opinionnaire was distributed among the trainees of Regular and ODL mode.
2. The trainees were requested to fill in the opinionnaire sheet with a rating in appropriate manner (mentioned in the opinionnaire itself). The rated opinions have been quantified (in an ordinal scale) following the method used in the Likert scale.
3. Likert’s summative procedure for the numerical weights assigned against individual opinions have been adopted.

With respect to the variable ‘Achievement score’ (Regular mode):-
1. Numerical representation of Achievement scores of the theory papers were directly available from the mark sheets, office records and Website (in case of ODL mode).
2. Also, the numerical representation of Achievement scores of the teaching practical papers were directly available from the mark sheets, office records and Website (in case of ODL mode).

Statistical Techniques to be Used for the Analysis (Woodworth and Garret,2005):-
Descriptive statistics:-Mean, Standard Deviation.

Inferential statistics:-The Chi-square test and t-test were used for drawing the conclusions. F-test was used for ensuring initial homogeneity.
**Systematization, Analysis and Interpretation of Data:**

**Table no.1:** Significance of differences in the score for the Trainees of the Regular mode

<table>
<thead>
<tr>
<th>Objective Number</th>
<th>Test</th>
<th>Calculated Value</th>
<th>df</th>
<th>Table Value</th>
<th>Result with respect to a particular test</th>
<th>Final Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.(With respect to difference in Attitude)</td>
<td>Chi-square test</td>
<td>10.43</td>
<td>2x1=2</td>
<td>9.21 at .01 level of significance</td>
<td>There is significant difference</td>
<td>Mean for the trainees from the Hills(108.23) is higher than that from the Plains (100.97).</td>
</tr>
<tr>
<td>2.</td>
<td>t-test</td>
<td>5.07</td>
<td>300-2=398</td>
<td>2.59 at .01 level of significance</td>
<td>There is significant difference</td>
<td></td>
</tr>
<tr>
<td>2.(With respect to difference in Achievement Motivation)</td>
<td>Chi-square test</td>
<td>1.53</td>
<td>2x1=2</td>
<td>5.991 at .05 level of significance</td>
<td>No significant difference Is there.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>t-test</td>
<td>1.64</td>
<td>300-2=398</td>
<td>1.97 at .05 level of significance</td>
<td>No significant difference Is there.</td>
<td></td>
</tr>
<tr>
<td>3.(With respect to difference in Peer-interaction motivation)</td>
<td>Chi-square test</td>
<td>13.49</td>
<td>2x1=2</td>
<td>9.21 at .01 level of significance</td>
<td>There is significant difference</td>
<td>Mean for the trainees from the Hills (110.29) is higher than that from the Plains (101.97).</td>
</tr>
<tr>
<td>4.</td>
<td>t-test</td>
<td>5.89</td>
<td>300-2=398</td>
<td>2.59 at .01 level of significance</td>
<td>There is significant difference</td>
<td></td>
</tr>
<tr>
<td>4.(With respect to difference in Achievement in Theory papers)</td>
<td>Chi-square test</td>
<td>4.05</td>
<td>2x1=2</td>
<td>5.991 at .05 level of significance</td>
<td>No significant difference Is there.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>t-test</td>
<td>1.32</td>
<td>300-2=398</td>
<td>1.97 at .05 level of significance</td>
<td>No significant difference Is there.</td>
<td></td>
</tr>
<tr>
<td>5.(With respect to difference in Achievement in Practical papers)</td>
<td>Chi-square test</td>
<td>3.87</td>
<td>2x1=2</td>
<td>5.991 at .05 level of significance</td>
<td>No significant difference Is there.</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>t-test</td>
<td>1.28</td>
<td>300-2=398</td>
<td>1.97 at .05 level of significance</td>
<td>No significant difference Is there.</td>
<td></td>
</tr>
</tbody>
</table>

**Table no. 2:** Significance of differences in the score for the Trainees of the ODL mode

<table>
<thead>
<tr>
<th>Objective Number</th>
<th>Test</th>
<th>Calculated Value</th>
<th>df</th>
<th>Table Value</th>
<th>Result with respect to a particular test</th>
<th>Final Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.(With respect to difference in Attitude)</td>
<td>Chi-square test</td>
<td>11.12</td>
<td>2x1=2</td>
<td>9.21 at .01 level of significance</td>
<td>There is significant difference</td>
<td>Mean for the trainees from the Hills (109.12) is higher than that from the Plains (102.21).</td>
</tr>
<tr>
<td>2.</td>
<td>t-test</td>
<td>4.89</td>
<td>300-2=398</td>
<td>2.59 at .01 level of significance</td>
<td>There is significant difference</td>
<td></td>
</tr>
<tr>
<td>2.(With respect to difference in Achievement in Practical papers)</td>
<td>Chi-</td>
<td>3.03</td>
<td>2x1=2</td>
<td>5.991 at .05</td>
<td>No significant</td>
<td>No significant</td>
</tr>
</tbody>
</table>
### Table 1

<table>
<thead>
<tr>
<th>To difference in Achievement Motivation</th>
<th>Square Test</th>
<th>Level of Significance</th>
<th>Difference Is There</th>
<th>Difference Is There</th>
</tr>
</thead>
<tbody>
<tr>
<td>t-test</td>
<td>0.98</td>
<td>300-2=398</td>
<td>1.97 at .05 level of significance</td>
<td>No significant difference Is there.</td>
</tr>
<tr>
<td>t-test</td>
<td>3.7</td>
<td>300-2=398</td>
<td>2.59 at .01 level of significance</td>
<td>There is significant difference</td>
</tr>
<tr>
<td>Chi-square test</td>
<td>9.65</td>
<td>2x1=2</td>
<td>9.21 at .01 level of significance</td>
<td>There is significant difference</td>
</tr>
<tr>
<td>Chi-square test</td>
<td>4.27</td>
<td>2x1=2</td>
<td>5.991 at .05 level of significance</td>
<td>No significant difference Is there.</td>
</tr>
<tr>
<td>Chi-square test</td>
<td>4.67</td>
<td>2x1=2</td>
<td>5.991 at .05 level of significance</td>
<td>No significant difference Is there.</td>
</tr>
</tbody>
</table>

### Conclusion:

It has been found that the Trainees of the Hills had a higher level of *Attitude* towards Teacher Education Programme and *Peer-interaction Motivation* in comparison with their counterpart from the Plains. However, no significant difference was identifiable with respect to the psychological construct *Achievement Motivation*. Nor, there was any significant difference between the Trainees of the Plains and the Hills with respect to their *Achievement in the Training Programme* (Theory and Practical). Thus, one can safely speculate that the ODL mode of Teacher Education can be a substitute for the regular mode in the hilly regions where the regular mode cannot be implemented so easily.

### References: