

RESEARCH ARTICLE

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

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*Keywords:-*Attitude; Achievement Motivation; Peerinteraction Motivation; Achievement of B.Ed. Trainees; Geographical Environment. 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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Introduction:-

Cattell (1979) hypothesised that Environmental factors play an important role in relation to the behaviour of a person. The idea is that, response of a person in a particular situation depends upon Stimulus Elements of the Environment and the existing Personality Structure of that person. On the other hand, according to Gordon Allport (1937), "Personality is the dynamic organisation within the individual, of those psycho-physical systems that determine his unique adjustments to his environment". Thus, one can assume that the Existing Personality (which comprises of several psychological constructs) is influenced by the Physical Environment as well. If, we consider the hypotheses of Cattell and Allport simultaneously we can comment that it is possible to observe differentiable psychological constructs of two groups of persons residing in two Geographically Contrast Areas.

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 (from the adjoining areas of North Bengal and Sikkim) have been investigated. In order to make a comparison, their *Achievement* in B.Ed. Training Programme has also been considered. The *Achievement* of the Trainee Teachers has been checked separately for the Theory Papers and the Practical Papers on Teaching Practice considering Teaching Practice to be the most important component of any Teacher Education Programme.

Significance of the study lies in the possible help that may be available for planning Urbanisation through Educational Facilities which is one of the most important components through which balanced Urbanisation can be ensured. This is especially true for the areas under study which are educationally backward in comparison with the other parts of the country having higher level of Educational Development.

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Review:-

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

Trivedi (2011) assessessed 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:-

 ${}^{0}H_{1}$: The Attitudes of B.Ed. Trainees under Regular and ODL mode towards Teacher Education Programme do not differ significantly with variations in Geographical Environment.

⁰**H**₂: The Achievement motivation of B.Ed. Trainees under Regular and ODL mode do not differ significantly with variations in Geographical Environment.

⁶H₃: The Peer-interaction motivation of B.Ed. Trainees under Regular and ODL mode do not differ significantly with variations in Geographical Environment.

 ${}^{0}\mathbf{H}_{4}$: 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.

⁶**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.

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

Systematization, Analysis and Interpretation of Data:-Table no.1:-Significance of differences in the score for the Trainees of the Regular mode

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

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

to difference in	square			level of	difference	difference
Achievement	test			significance	Is there.	is there.
Motivation	t-test	0.98	300-2=	1.97 at .05	No significant	
			398	level of	difference	
				significance	Is there.	
3.(With respect	Chi-	9.65	2x1=2	9.21 at .01	There is significant	
to difference in	square			level of	difference	There is significant
Peer-interaction	test			significance		difference.
motivation	t-test	3.7	300-2=	2.59 at .01	There is significant	
			398	level of	difference	Mean for the trainees
				significance		from the Hills
						(105.97) is higher
						than that from the
						Plains (101.2).
4.(With respect	Chi-	4.27	2x1=2	5.991 at .05	No significant	No significant
to difference in	square			level of	difference	difference
Achievement in	test			significance	Is there.	is there.
Theory papers	t-test	1.63	300-2=	1.97 at .05	No significant	
			398	level of	difference	
				significance	Is there.	
5.(With respect	Chi-	4.67	2x1=2	5.991 at .05	No significant	No significant
to difference in	square			level of	difference	difference
Achievement in	test			significance	Is there.	is there.
Practical papers	t-test	1.22	300-2=	1.97 at .05	No significant	
			398	level of	difference	
				significance	Is there.	

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 counter part 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:-

- 1. Allport, G.W. (1961). Pattern and Growth in Personality. Holt, New York.
- 2. Best, J.W. and Kahn, J.V., (2007), Research in Education, Prentice-Hall of India Private Limited, New Delhi
- 3. Cattell,R.B.(1978). Personality and Learning Theory; The Structure Personality in its Environment (Vol.1). New York: Springer
- 4. Eisenkopf, G.(2008), 'Peer Effects, Motivation, and Learning', 298_eisenkopf.pdf
- 5. Nita Mitra(2016), Some Selected Psychological Constructs of B.Ed. Trainees of Different Modes of Teacher Education Programme Unpublished Ph.D. Thesis, Kalyani University, West Bengal, India
- 6. Trivedi, T.,(2011),"Assessing Secondary school Teachers' Attitude towards Teaching Profession" in *Journal of All India Association for Educational Research*, Vol. 23, Nos. 1&2
- 7. Wigfield, A., Eccles, J., Mac Iver, D., Reuman, D., & Midgley, C. (1991). Transitions at early adolescence: Changes in children's domain-specific self-perceptions and general selfesteem across the transition to junior high school. *Developmental Psychology*, 27, 552
- 8. Wigfield, A., and Eccles, J.,(2000). 'Expectancy-value Theory of Achievement Motivation' in Contemporary Educational Psychology,25,68-81. <u>http://www.ideallibrary.com</u>
- 9. Woodworth, R.S.&Garrett, H.E. (2005). *Statistics in Psychology and Education*. New Delhi. Vakils. Fether and Simons Pvt. Ltd.