

Investigations on Relationship between Awareness about Environmental Education and Academic Achievement of the B.Ed. Trainees in Tamilnadu

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ABSTRACT

The present study aims to measure that the relationship between awareness about environmental education and Academic achievement of the B.Ed. trainees in relation to their certain selected variables carried by the investigator. The investigator develop the tool about Environmental education consists of 75 multiple-choice items. The content validity was well established by the investigator with the help of a group of experts in the field. The investigator used Guttman split-half technique for establishing reliability of the awareness tool. The study proves that there is a significant low positive correlation between awareness and academic achievement of B.Ed. trainees. This may due to the fact that the level of awareness depends largely on the academic achievement of the trainees. The study reveals that there is significant low positive correlation between awareness and academic achievement of the male and female trainees, urban and rural trainees, government college trainees and trainees who are not studying environmental education.

Key words: Investigation, awareness, academic achievement, Environmental education, B.Ed. trainees.

INTRODUCTION

The most hazardous event of the 21st century is rapid degradation of environmental quality. The population explosion creates situations like more people needing more food, more energy and more things of daily use, such as housing, clothing and automobiles. As a result, we use more water resources, fertilizers and pesticides for more production and in turn, increase the level of air pollution, water pollution besides disturbing the ecological balance in the

ecosystem. All these conditions cause diseases and deaths in many species of animals, birds and human beings. Similarly, the indiscriminate use of renewable and non-renewable physical resources leads to severe difficulties.

Lack of environmental awareness about preservation and conservation of environment effectively add fuel to fire. All these are greatly responsible for rapid degradation of the environmental quality at grass root level. If a similar situation

continues in the near future, the entire human civilization will face disastrous situations in various spheres. At this juncture, the only alternative is to create environmental awareness among the people in respect of protection, preservation, conservation of environment and also for the mitigation of environmental degradation. Further the environmental awareness moves people towards environmental protection and improvement. All these possible only through environmental education.

Need and Importance

As Environmental education is intertwined with man's life, it should include environment in its natural totality. In this connection Environmental education should not be viewed as one or more subjects added to the existing heavy curriculum. It should be integrated with the curricular programs, for all the learners, whatever be their age group and level by learning. The National Policy on Education (1986) has also emphasized the importance of Environmental education, and laid down that it is very important to create environmental awareness in all people's right from a child to an old person and should spread in all the sections of the society.

Teacher plays an important role in providing environmental awareness and developing a positive attitude towards environment among his students. Teachers would find it as an urgent need to educate about the environment and be able to convince the students and society about the urgency of environmental protection. Only if they themselves are adequately aware of it and have a positive attitude towards environment. The teacher should tell students, the fundamental duties of Indian citizens with regard to environment, as incorporated in Part IV-A of the Indian Constitution "to protect and improve the natural environment including forests, lakes,

rivers and wildlife, and to have compassion for living creatures.

Environmental awareness

The terms Environmental education and Environmental awareness are used interchangeably for the same meaning but there is significant distance in these two terms. The study of physical and biosciences, geography, agriculture provides the environmental awareness. But the awareness does not help in developing skills and attitude for improving environment. There from, it is essential to understand the concepts of environmental awareness and differentiate it with educational environment.

Academic achievement

Dictionary of Education (Carter 1959) defines academic achievement as "the knowledge attained or skills developed in the school subjects, usually determined by test scores or by marks assigned by teachers or both".

According to Dictionary of Psychology (Chaplin, 1965) "academic achievement is specified level of attainment or proficiency in academic work as evaluated by the teachers by standardized tests or by a combination of both".

According to Elizabeth B. Harlock (1989), the term academic achievement is nothing but scholastic achievement or educational attainment, which refers to the gains got by the pupils as a result of education in educational institution. The academic achievement level of the students is judged by the marks that the students have scored in different tests and examination.

Statement of the problem

The present study aims to measure the relationship between awareness about Environmental education and Academic achievement of the B.Ed. trainees in relation to their certain selected variables like, gender, locality, subject, type of college, region, and educational qualification.

Objectives

- To find out there is any significant relationship between awareness and academic achievement of the trainees.
- To find out there is any significant relationship between awareness and achievement of the male trainees.
- To find out there is any significant relationship between awareness and achievement of the female trainees.
- To find out there is any significant relationship between awareness and achievement of the arts trainees.
- To find out there is any significant relationship between awareness and achievement of the science trainees.
- To find out there is any significant relationship between awareness and achievement of the urban trainees.
- To find out there is any significant relationship between awareness and achievement of the rural trainees.
- To find out there is any significant relationship between awareness and achievement of the government college trainees.
- To find out there is any significant relationship between awareness and achievement of the aided college trainees.
- To find out there is any significant relationship between awareness and achievement of the self finance college trainees.
- To find out there is any significant relationship between awareness and achievement of the trainees towards who are studying environmental education.
- To find out there is any significant relationship between awareness and achievement of the trainees who are not studying environmental education.

Hypotheses

- There is no significant relationship between awareness and academic achievement of the trainees.
- There is no significant relationship between awareness and academic achievement of the male trainees.
- There is no significant relationship between awareness and academic achievement of the female trainees.
- There is no significant relationship between awareness and academic achievement of the arts trainees.
- There is no significant relationship between awareness and academic achievement of the science trainees.
- There is no significant relationship between awareness and achievement of the urban trainees.
- There is no significant relationship between awareness and academic achievement of the rural trainees.
- There is no significant relationship between awareness and academic achievement of the government college trainees.
- There is no significant relationship between awareness and academic achievement of the aided college trainees.
- There is no significant relationship between awareness and academic achievement of the self finance college trainees.
- There is no significant relationship between awareness and academic achievement of the trainees towards who are studying environmental education.
- There is no significant relationship between awareness and academic achievement of the trainees who are not studying environmental education.

METHODOLOGY

Population and Sampling

A population may be defined as any identifiable and well specified group of individuals. A sample is a small proportion of a population selected for observation and analysis. The investigator selected B.Ed., trainees because they are studying an elective course on environmental education. The population comprises of trainees of

B.Ed. studying in Tamilnadu. From the population 1035 units were selected as samples using purposive sampling technique. The randomly select samples were stratified on the basis of certain selected variables like, gender, locality, subject, type of college, region, educational qualification, trainees who studied environmental science, trainees who are studying environmental education.

Distribution of Sampling

S.No.	Variables	Types	Sample	Percent	Total Percent	Total Sample
1.	Gender	Male	425	41.1	100	1035
		Female	610	58.9		
2.	Subject	Arts	447	47.2	100	1035
		Science	588	56.8		
3.	Educational qualification	UG	751	72.6	100	1035
		PG	252	24.3		
		M.Phil.	32	3.1		
4.	College location	Urban	515	49.8	100	1035
		Rural	520	50.2		
5.	Trainees locality	Urban	338	32.7	100	1035
		Rural	697	67.3		
6.	Environmental science	Studied	778	75.2	100	1035
		Not studied	257	24.8		
7.	Environmental education	Studying	331	32.0	100	1035
		Not studying	704	68.0		
8.	Type of College	Government	104	10.04	100	1035
		aided	103	9.95		
		Self finance	828	80.01		
9.	Region	North	205	19.8	100	1035
		South	209	20.2		
		West	207	20.0		
		East	208	20.1		
		Central	206	19.9		

Instrumentation

The Awareness of Environmental education tool consists of 75 multiple-choice items. The multiple-choice item consists of two parts, (i) the stem which contains the problem, (ii) a list of suggested answers (responses or options). The incorrect responses are often called foils or distracters. The stem may be stated as a direct question or incomplete statement. From the list of responses provided, the trainee selects the one that is correct or best, these items were grouped under five headings like physical, chemical, biological, sociological and geological.

Establishing Content Validity and Reliability

The content validity was well established by the investigator with the help of a group of experts in the field. Depending upon the modifications suggested by the Panel of experts, the items in the tools were modified and enhanced.

The investigator used Guttman split-half technique for establishing reliability of the awareness tool. The tools have been administered to 100 B.Ed. trainees. Their responses were collected and stored by the investigator. The correlation coefficient was found to be 0.73 for awareness scale.

RESULT AND DISCUSSION

Correlation between awareness and academic achievement of the B.Ed. trainees

S.No.	Trainees	N	df	'r' value	Level of significance
1.	entire	1035	1033	.220	Significant at 0.01 level
2.	Male	425	423	.221	Significant at 0.01 level
3.	Female	610	608	.240	Significant at 0.05 level
4.	Arts	447	445	-.107	Significant at 0.01 level
5.	Science	588	586	.149	Significant at 0.01 level
6.	Urban	338	336	.233	Significant at 0.01 level
7.	Rural	697	695	.203	Significant at 0.01 level
8.	Government	104	102	.221	Significant at 0.01 level
9.	Aided	103	101	.063	Significant at 0.05 level
10.	Self-Finance	828	826	.156	Significant at 0.01 level
11.	Studying E.E.	331	329	.124	Significant at 0.01 level
12.	Not studying E.E.	704	702	.265	Significant at 0.01 level

The calculated 'r' value .220 is more than the table value (0.081) at 0.01 level of significance. Hence it is inferred that there is a significant relationship between awareness and academic achievement of trainees. The awareness has low positive relationship with academic achievement of entire trainees.

The calculated 'r' value .221 is more than the table value (0.081) at 0.01 level of significance. Hence it is inferred that there is a significant relationship between awareness and academic achievement of male trainees.

The awareness has low positive relationship with academic achievement of male trainees. The calculated 'r' value .240 is more than the table value (0.081) at 0.01 level of significance. Hence it is inferred that there is a significant relationship between awareness and academic achievement of female trainees. The awareness has low positive relationship with academic achievement of female trainees.

The calculated 'r' value -.107 is more than the table value (0.081) at 0.01 level of significance. Hence it is inferred that there is a significant relationship between awareness and academic achievement of arts trainees. The awareness has negligible negative relationship with academic achievement of arts trainees.

The calculated 'r' value .149 is more than the table value (0.081) at 0.01 level of significance. Hence it is inferred that there is a significant relationship between awareness and academic achievement of science trainees. The awareness has negligible positive relationship with academic achievement of science trainees.

The calculated 'r' value .233 is more than the table value (0.081) at 0.01 level of significance. Hence it is inferred that there is a significant relationship between awareness and academic achievement of urban trainees. The awareness has low positive relationship with academic achievement of urban trainees.

The calculated 'r' value .203 is more than the table value (0.081) at 0.01 level of significance. Hence it is inferred that there is a significant relationship between awareness and academic achievement of rural trainees. The awareness has low positive relationship with academic achievement of rural trainees.

The calculated 'r' value .221 is more than the table value (0.081) at 0.01 level of significance. Hence it is inferred that there is a significant relationship between awareness and academic achievement of government college trainees. The awareness has low positive relationship with academic achievement of government college trainees.

The calculated 'r' value .063 is more than the table value (0.062) at 0.05 level of significance. Hence it is inferred that there is a significant relationship between awareness and academic achievement of aided college trainees. The awareness has negligible positive relationship with academic achievement of aided college trainees.

The calculated 'r' value .156 is more than the table value (0.081) at 0.01 level of significance. Hence it is inferred that there is a significant relationship between awareness and academic achievement of self finance college trainees. The awareness has negligible positive relationship with academic achievement of self finance college trainees.

The calculated 'r' value .124 is more than the table value (0.081) at 0.01 level of significance. Hence it is inferred that there is a significant relationship between awareness and academic achievement of trainees who are studying environmental education. The awareness has negligible positive relationship with academic achievement of trainees who are studying environmental education.

The calculated 'r' value .265 is more than the table value (0.081) at 0.01 level of significance. Hence it is inferred that there is a significant relationship between awareness and academic achievement of trainees who are not studying environmental education. The awareness has low positive relationship with academic achievement of trainees who are not studying environmental education.

Findings and discussion

The 'r' value reveals that there is a significant low positive correlation between awareness and academic achievement of B.Ed. trainees. This may be due to the fact that the level of awareness depends largely on the academic achievement of the trainees. The study reveals that there is significant low positive correlation between awareness and academic achievement of the male and

female trainees, urban and rural trainees, government college trainees and trainees who are not studying environmental education. The study reveals that there is significant negligible positive correlation between awareness and academic achievement of the science trainees, aided and self-finance college trainees, trainees who are studying environmental education. The study reveals that there is significant negligible negative correlation between awareness and academic achievement of the arts trainees.

CONCLUSIONS

From the present study following conclusions were drawn. The study proves that there is a significant low positive correlation between awareness and academic achievement of B.Ed. trainees. This may be due to the fact that the level of awareness depends largely on the academic achievement of the trainees. The study reveals that there is significant low positive correlation between awareness and academic achievement of the male and female trainees, urban and rural trainees, government college trainees and trainees who are not studying environmental education.

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