



A Survey on the Environmental Attitude of Prospective Teachers

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Abstract:

As environmental issues become increasingly critical, understanding how future educators perceive and approach these challenges is essential for effective environmental education. This survey aims to assess the environmental attitudes of prospective teachers, evaluating their perceptions, beliefs, and readiness to incorporate environmental issues into their teaching practices. For this purpose the researcher has used the descriptive survey research design. In this study the population consists of the B. Ed and D. El. Ed college students studying in different colleges (Govt, Govt. Aided and Self Finance) of Paschim Medinipur and Purba Medinipur districts of West Bengal. Out of the population a sample 500 students including male (230) and female (270) were selected by following purposive sampling method for the purpose of the study. To assess the attitude towards Environment of Prospective Teachers, a standardise questionnaire was developed by the researcher with the help of her supervisor that was administered and applied uniformly to different students of above mentioned disciplines. The questionnaire consisted of two parts (i) Demographic Data Sheet, and (ii) Attitude scale of Prospective Teachers towards Environment (consists of 100 items). The researcher used both the descriptive statistics and Inferential statistics for analyzing the collected data. The study reveals that The prospective teachers have a favorable attitude towards environment and there is significant difference in the environmental attitude among prospective teachers in respect of their gender, residence and stream of study.

Keywords: *Environmental, Prospective Teachers, Disciplines, Attitudes, Awareness, Knowledge.*

Introduction:

The environment factor holds the utmost significance for the planet Earth and all its inhabitants. The term Environment plays a crucial role in our lives. The basic meaning of environment is the 'surroundings'. It is the encompassing environment of an object. We can also define it as "environment is the combination of all of physical and organic factors that act on a living being, residents, or ecological society and power its endurance and growth". It might be a physical element, referred to as physical environment or biotic environment, which encompasses the built environment.(Kim, 2003).The physical elements such as air, water, land, and atmosphere are also included in the physical environment, but are typically referred to as the natural environment. The environment where an item or thing is surrounded by people is referred to as the human environment. This is referred to as the societal environment, encompassing factors such as the spiritual atmosphere, personal connections, living situation, emotional climate, and more.

Having environmental sensitivity, awareness, knowledge, understanding, attitudes, skills, commitments, and civic actions are necessary to comprehend, protect, and enhance the environment and address its related

issues. In simple terms, environmental education aims to promote environmental literacy across all sections of society, enabling them to make informed decisions and take ethical responsibility for environmental issues. Environmental education can act as a shared factor in revitalizing education at every educational level by promoting an interdisciplinary approach between subjects and connecting education to the real-life experiences of its audience (Kağıtçıbaşı, 1988). Environmental Education (EE) promotes a problem-solving method as a valuable skill that can assist and direct its intended participants in resolving both present and future environmental issues.

Objectives:

The present study has been carried out with the following objectives-

- I. To know about the level of environmental Attitude among prospective teachers.
- II. To find out the difference of environmental Attitude among prospective teachers in respect of gender, residence and stream of study.

Hypothesis:

H01: There will be positive environmental Attitude among prospective teachers.

H02: There will be significant difference in the environmental Attitude between male and female prospective teachers.

H03: There will be significant difference in the environmental Attitude between Rural and Urban prospective teachers.

H04: There will be significant difference in the environmental Attitude between Science and Arts stream prospective teachers.

Methodology:

Method: In this study the researcher has used the descriptive survey research design.

Population and sample: In this present study the population consists of the B. Ed and D. El. Ed college students studying in different colleges (Govt, Govt. Aided and Self Finance) of PaschimMedinipur and PurbaMedinipur districts of West Bengal. Out of the population a sample 500 students including male (230) and female (270) were selected by following purposive sampling method for the purpose of the study

Tools: To assess the attitude towards Environment of Prospective Teachers, a standardize questionnaire was developed by the researcher with the help of her supervisor that was administered and applied uniformly to different students of above mentioned disciplines. The questionnaire consisted of two parts (i) Demographic Data Sheet, and (ii) Attitude scale of Prospective Teachers towards Environment (consists of 100 items).

Data Collection:

Information was gathered through the administration of surveys to the chosen participants. The data was collected one-on-one from the participants by the researcher, who also assisted them with any anomalies during the data collection process.

Statistical Techniques:

For the purpose of the study the researcher used both the descriptive statistics and Inferential statistics.

Data Analysis and Interpretation:

Table 1: Descriptive Statistics of the Environmental Attitude

Parameters	Values
N Valid	500
Missing	00
Mean	247.42
S.E. Mean	2.57
Median	246.50
Mode	256.00
StdDev	57.56
Variance	3313.60
Kurtosis	3.07
Skewness	.48
S.E. Skew	.11
Range	508.00
Minimum	78.00
Maximum	586.00

The data has a mean of 247.42 and a standard deviation of 57.56, indicating considerable variability in respect of environmental attitude. The median is close to the mean, suggesting a relatively symmetric distribution. The mode is 256.00, indicating the most common value. Positive kurtosis of 3.07 suggests a distribution with a sharp peak and heavy tails compared to a normal distribution. The slight positive skewness of 0.48 indicates a small right tail.

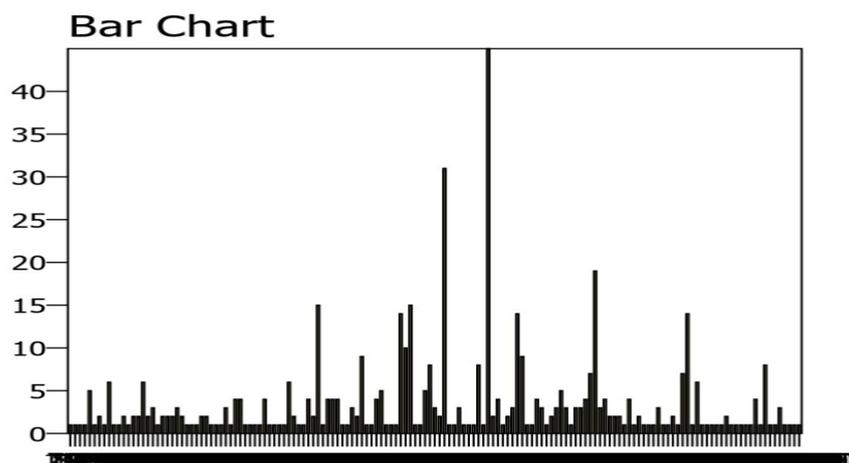


Fig. Showing Frequency Distribution of Environmental Attitude in the Bar Diagram.

Table 2: Difference in the environmental Attitude between male and female prospective teachers.

One-Sample Statistics

	N	Mean	Std. Deviation	S.E. Mean
Male	230	242.21	55.65	3.67
Female	270	251.86	58.89	3.58

One-Sample Test

	Test Value=0.5					
	t	df	Sig.(2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Male	65.87	229	.000	241.71	234.48	248.94
Female	70.14	269	.000	251.36	244.30	258.41

The t-value for Males in respect of environmental attitude is 65.87. The t-value for Females is 70.14. These t-values indicate a significant difference between the means of the two groups relative to the variability within each group in respect of environmental attitude. The degrees of freedom for the Male group are 229. The degrees of freedom for the Female group are 269. Degrees of freedom are linked to the sample size and impact the critical t-value required for significance. Both p-values are .000, which is well below the significance level of 0.05. This indicates that the differences between the Male and Female groups are statistically significant. The mean difference for Males is 241.71. The mean difference for Females is 251.36. These values represent the average difference between the scores of the two groups. For Males, the confidence interval for the mean difference is 234.48 to 248.94. For Females, the confidence interval is 244.30 to 258.41. These intervals suggest that we are 95% confident that the true mean difference lies within these ranges. The results show a statistically significant difference between the Male and Female groups in respect of environmental attitude, with p-values less than 0.05. The confidence intervals indicate that the true mean differences likely fall within the specified ranges, supporting the conclusion of a significant difference between the two groups.

Table 3: Difference in the environmental Attitude between Rural and Urban prospective teachers

One-Sample Statistics

	N	Mean	Std. Deviation	S. E. Mean
Rural	232	242.20	55.43	3.64
Urban	268	236.71	57.72	3.52

One-Sample Test

	Test Value=0.05					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Rural	66.54	231	.000	242.15	234.98	249.32
Urban	67.24	267	.000	236.66	229.73	243.59

For the Rural group in respect of Environmental Attitude, the t-value is 66.54. For the Urban group, the t-value is 67.24. These t-values represent the ratio of the difference between the sample means and the variability of the samples. The degrees of freedom for the Rural group are 231. The degrees of freedom for the Urban group are 267. Degrees of freedom relate to the sample size and impact the critical value of t. Both the Rural and Urban groups have p-values of .000, which is less than the significance level of 0.05. This indicates that the differences between the groups in respect of Environmental Attitude are statistically significant. The mean difference for the Rural group is 242.15. The mean difference for the Urban group is 236.66. These values represent the average difference between the scores of the two groups. For the Rural group, the confidence interval for the mean difference is 234.98 to 249.32. For the Urban group, the confidence interval is 229.73 to 243.59. These intervals suggest that we are 95% confident that the true mean difference lies within these ranges. Since the p-values are both less than 0.05, you can conclude that there is a statistically significant difference between the Rural and Urban groups. The confidence intervals provide a range in which the true mean difference likely falls, reinforcing the conclusion of a significant difference.

Table 4: Difference in the environmental Attitude between Science and Arts stream prospective teachers

One-Sample Statistics

	N	Mean	Std. Deviation	S.E. Mean
Science	230	242.21	55.65	3.67
Arts	270	251.86	58.89	3.58

One-Sample Test

	Test Value = 0.05					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Science	66.00	229	.000	242.16	234.93	249.39
Arts	70.27	269	.000	251.81	244.75	258.86

The t-values for Science and Arts in respect of Environmental Attitude are 66.00 and 70.27, respectively. These values represent the ratio of the difference between the sample means and the variability of the samples. The degrees of freedom for the two groups are 229 and 269. This is related to the sample size and

impacts the critical value of t . The p -values for both groups are .000, which is less than the significance level of 0.05. This indicates that the differences between the groups are statistically significant. The mean differences between the groups are 242.16 for Science and 251.81 for Arts in respect of Environmental Attitude. The confidence intervals for the mean difference are given as: Science: 234.93 to 249.39 and Arts: 244.75 to 258.86. This means we are 95% confident that the true mean difference lies within these intervals. Since the p -values are both less than 0.05, you can conclude that there is a statistically significant difference between the groups (Science and Arts) in respect of Environmental Attitude. The confidence intervals provide a range in which the true mean difference likely falls.

Findings:

- The prospective teachers have a favorable attitude towards environment.
- The findings indicate a significant statistical discrepancy in environmental attitude between the Male and Female groups.
- There is a notable disparity in environmental attitudes between the Rural and Urban groups.
- There is a notable discrepancy in Environmental Attitude between the Science and Arts groups.

Conclusion:

The survey reveals that prospective teachers generally have positive environmental attitudes and a strong commitment to sustainability. However, there are notable gaps in their preparedness to teach environmental issues effectively. Enhancing teacher preparation programs with more comprehensive environmental education components and providing ongoing support can improve the ability of future educators to address environmental challenges and promote sustainability in their classrooms.

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