



STUDY AND COMPARE THE ENVIRONMENTAL AWARENESS AMONG SCIENCE AND ARTS STUDENTS OF LUDHIANA DISTRICT OF PUNJAB

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Abstract

The present research statement of the problem is "Study and Compare the Environmental Awareness among Science and Arts Students of Ludhiana District of Punjab". The following objectives were laid down for the present study: To studying the Normality of data for total Sample of Graduate College Students on the Variable "Environment Awareness". Distribution of Scores for total Sample, male and female of Graduate College Students on the Variable "Environment Awareness" and to study and compare the environmental awareness among science and arts students. In view of time constraint, the present study was delimited to 200 degree college students only. There will be no significant difference in the Environmental awareness among science and arts students, hypotheses were formulated for the present study. The random sample of present study consists of 200 students of degree college students of district Ludhiana. The tool in the present study, Environmental awareness scale by Dr. Haseen Taj (1981) will be used. The mean environmental awareness score of science students do not show much difference as compared to mean environmental scores of arts students. Thus, we can conclude that there is no significant difference in science and arts students on the basis of environmental awareness.

Key words: *Environment, Environmental awareness.*



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Introduction

Our future is shaped by Education, who plays a very important role in doing so. Education shows us the way to live life. It is not only learning and reproducing theories and principles to score marks, but to understand the situation in a proper way. Through education we can find solution to human worldly problems. The origin of life on the earth was decided and controlled with a set of environmental condition. Once a species become extinct, it is impossible to recreate that

genetic combination or gene type. Through these past millions of years, for the sustenance of life environment has played a major role, and it will continue to be so for all the times. Man, ever since appeared on the surface of earth became a part of his environment. Awareness of his physical and biological environment was not something new for him. He observed and enjoyed nature. Today he is living in a world of crisis. i.e. environmental pollution. Man thought himself to be a master, not slave and he started utilizing his environmental resources to meet his ever-increasing wants for a better living. But for satisfying our desire we exploit our natural as well as artificial environment. The environmental problems are matter of common concern for the entire humanity. The very survival of man lies in the solution of these problems. Awareness is essential for action. The issue of environmental protection and conservation is one of the major policy aspects attracting the attention of planners, scientists and environmental protectionist worldwide. *Douglass and Holland define* the term environment as the influence of physical factors over the growth, behaviour, development and maturity of living organisms.

According to R.A Sharma (1996), 'Environmental Education refers to the awareness of physical and cultural environment and perceives its relevance for real life situation. The problems and issues are to be identified. The imbalance of environment is to be improved in view of sustainable development.'

Concept and meaning of environment

The concept of environment is complex and comprehensive of several factors influencing it. It is not merely the air, water and soil that form our environment but also the soil and economical conditions of our life. It is usually defined as the aggregate of all external conditions and influences the life and the development of an organism, human behaviour or society. The internal and external environments comprise the total environment. For descriptive purposes, environment has been divided into components, viz. physical, biological and psychosocial, all closely related. The concept of total global environment is the product of convergence of many forces- industrialisation, the effects and dangers of weapons of mass destruction, with overall global technological advancements which make communication, ecological studies of nature and man-made environment easier than thought earlier. The relationship between environment and being is needed deep recognized from the Vedic period. Awareness and education of environment is the paramount concern of all the citizens of the society. Environmental protection starts by creating awareness among the people so that it become a part of their life

styles. Environment is defined to include all that is within and without us. The surrounding includes all living and non- living objects, forces, situations and factors which affects them directly or indirectly. Man's environment consist of natural as well as social cultural environment.

Definition of environment

The sum total of all surroundings of a living organism, including natural forces and other living things, which provide conditions for development and growth as well as of danger and damage.

According to *Borings, Langfield and Weld (1961)* "The environment is everything that effects the individual except his genes."

According to *Douglas and Holland (1978)* "Environment is a word, which describes in the aggregate all the external forces, influences and conditions which affect the life, nature, behaviour growth and development and maturation of living organism."

According to *C.C. Park (1980)* "Environment refers to the sum total of conditions which surrounds a man at a given point in space and time."

Characteristics of environment

1. Environment is the sum total of the stimulation from birth until death.
2. It is the everything which affects the individual excluding genes.
3. All the external forces which affects the growth and development of living organism.
4. It consists of physical, intellectual, social, moral, cultural, emotional, economic and political forces which affect the life and nature of behaviour.
5. It refers to the sum total of conditions which surround man at given point in space and time.
6. It includes physical and biological components.
7. It involves physical, chemical, biological, social, economic, political and cultural processes.

Environmental awareness

Meaning of Awareness

The term awareness means the process of becoming aware of the objects, qualities or relations via senses. It involves the reception, Processing and interpretation of impression. It means having knowledge or realization of something.

Awareness is a relative concept. An animal may be partially aware, may be subconsciously aware, or may be acutely unaware of an event. Awareness may be focused on an internal state, such as a visceral feeling, or on external events by way of sensory perception. Awareness

provides the raw material from which animals develop quail, or subjective ideas about their experience.

Environment awareness

The term environmental awareness means the knowledge and understanding of facts and concept related to environment and consequences of various environment problems like Pollution, Population explosion, energy crisis, deforestation and ecological description. Environmental awareness helps social groups and individuals to acquire an awareness and sensitivity to environment and its allies problems.

Acc. to Intechopen, “Environmental awareness highlight environmentally friendly working practices relating to waste, Energy, transport and water issues”.

Environmental awareness may be developed through:

- Identifying, analyzing and understanding the needs and problems of personal life including health, vocation etc.
- Social life at different levels i.e. family, caste, community, religion, state or community.
- Appreciating, promoting and using the environment to improve health, vocation, social and national life.
- Development of the aesthetic sense to appreciate beauty and adopt it in personal and social life.

Objectives of the study

The following objectives were laid down for the present study:

- ✓ To studying the Normality of data for total Sample of Graduate College Students on the Variable “Environment Awareness”.
- ✓ Distribution of Scores for total Sample, male and female of Graduate College Students on the Variable “Environment Awareness” .
- ✓ To study and compare the environmental awareness among science and arts students.

Delimitation of the study

In view of time constraint, the present study was delimited in the following aspects:

1. The study will be delimited to 200 degree college students only.
2. The study will be restricted to Ludhiana district only.
3. The study will be restricted to the students of graduation only.
4. The study will be delimited to science and arts stream students only.

5. The study will evaluate natural environment.

“A survey of perception and knowledge of environment issues possessed by science and non-science educators in Nigeria” and found that there was no significant difference in the environmental knowledge between science and non-science educators (*Nwasu, 1983*). “The awareness of environmental pollution among the college students” and found that no significant difference existed between the mean scores of boys and girls about the environmental awareness. However, science students were more aware than the arts students about environmental pollution (*Meena, 1995*). “Comparative of Environmental awareness of student studying in central schools and others schools at 10th level in Uttar Pradesh” and concluded that arts students were found significantly higher than science students with respect to their environmental awareness (*Tripathi, 2000*). “Environmental education in pre service teacher education of Garhwal University” and concluded that the correlation between Environmental education and attitude of pupil teachers was very low positive before the training and moderate positive after the training (*Dhawan, Rawat and Sharma, 2005*). “Environmental Awareness of the Environmentally Active and passive students in relation to Motivation and Academic performance” found that the environmental awareness may not always lead to environmental action. The science group students appear to be more active and so are the suburban students. This study found no difference in environmental awareness and action due to gender and academic performance (*Sengupta, 2005*). “The effect of multiple intelligences Instructional Strategy on the Environmental Awareness Knowledge and Environmental attitude levels of elementary students in science course”. Objective of the study, To identify the effects of multiple intelligences strategy and traditional methods of instruction on elementary students environmental awareness knowledge levels and their attitudes towards the environment. Main findings of the study were: There is a significant difference between environmental awareness and attitude of the experimental group and the control group; The study revealed that the students who are educated by multiple intelligence instructional strategy have more environmental awareness knowledge levels and have a higher motivation level than the students who are educated by the traditional method of instruction (*Gokhan Bas, 2010*).

Hypotheses of the study

The following hypotheses were formulated for the present study:

There will be no significant difference in the Environmental awareness among science and arts students.

Sample

The primary purpose of research is to discover principles that have universal application. The investigator is concerned with the general ability of data beyond that of immediate sample. The random sample of present study consists of 200 students of degree college students of district Ludhiana.

Tool employed

A great variety of research tools is available for acquisition of data. A researcher will require many data gathering tools and techniques which may vary in their complexity, design, administration and interpretation. For collecting data for any problem under study, the use of appropriate and standardized tools are of vital importance. The tool in the present study, Environmental awareness scale by Dr. Haseen Taj (1981) will be used.

Analysis and interpretation of data

Studying the nature of distribution of scores

As the main purpose of the present investigation is to study the “Environment Awareness” among graduate college students was through worthwhile to verify the normality of data gathered by the investigator. The values of different descriptive statistic based on the scores of “Environment Awareness” among graduate college students table 1.1

TABLE 1.1 Normality of data for total Sample of Graduate College Students on the Variable “Environment Awareness”

Class Interval		Frequency	Cumulative Frequency			
32-41		11	11			
42-51		17	28			
52-61		26	54			
62-71		24	78			
72-81		44	122			
82-91		33	155			
92-101		30	185			
102-111		14	199			
112-121		1	200			
N	Mean	Median	Mode	S.D.	Skewness	Kurtosis
200	75.08	78	81	19.21	-0.27	2.260

Table 1.1 shows that the values of mean and medium of “Environment Awareness” of Graduate College Students as 75.08 and 78 respectively , which are quite proximate to each other. The

value of S.D. is 19.21. Further, the value of skewness is - 0.27 which shows that the curve is negatively skewed. This indicates that somewhat lower numbers of college students are massed at Positive end or towards the right side of normal distribution curve. In addition to this value of Kurtosis was calculated to be + 0.260, which indicates that the curve is platyburitic in nature. Since there is less distortion, so the sample of college students can be taken as normally distributed and parametric statistical technique can be employed on obtained data.

Distribution of Scores for total Sample of Graduate College Students on the Variable “Environment Awareness”

Table 1.2 Distribution of Scores for total Sample of Graduate College Students on the Variable “Environment Awareness”

Class-Interval	Frequency	Cumulative frequency	Percent	Cumulative Percent
112-121	1	200	0.5	100
102-111	14	199	7	99.5
92-101	30	185	15	92.5
82-91	33	155	16.5	77.5
72-81	44	122	22	61
62-71	24	78	12	39
52-61	26	54	13	27
42-51	17	28	8.5	14
32-41	11	11	5.5	5.5
Total	200		100.0	

Highest score = 117

Lowest Score = 32

Range = 85

Interpretation

It is revealed from frequency distributions for total sample of graduate students given in Table 1.2 that the scores on the variable of “Environment Awareness” are distributed over a range of 85 . This is evident from the fact that 22 percent fall between the scores 72 to 81 for total sample of graduate students.

Distribution of Scores for SCIENCE of Graduate College Students on the Variable “Environment Awareness”

Table 1.3 Distributions of Scores for Graduate College Science Students On The Variable “Environment Awareness”

Class-Interval	Frequency	Cumulative frequency	Percent	Cumulative Percent
112-121	1	100	1.0	100.0
102-111	2	99	2.0	99.0
92-101	12	97	12.0	97.0
82-91	18	85	18.0	85.0
72-81	26	67	26.0	67.0
62-71	14	41	14.0	41.0
52-61	13	27	13.0	27.0
42-51	6	14	6.0	14.0
32-41	8	8	8.0	8.0
Total	100		100.0	

Highest score = 117

Lowest Score = 35

Range = 82

Interpretation for Table (1.3)

It is revealed from frequency distributions for science graduate students given in Table 1.3 that the scores on the variable of “Environment Awareness” are distributed over a range of 82 . This is evident from the fact that 26 percent fall between the scores 72 to 81 for science graduate students.

Distribution of Scores for ARTS of Graduate College Students on the Variable “Environment Awareness”

Table 1.4 Distribution of Scores for Graduate College arts Students on the Variable “Environment Awareness”

Class-Interval	Frequency	Cumulative frequency	Percent	Cumulative Percent
102-111	12	100	12.0	100.0
92-101	18	88	18.0	88.0
82-91	15	70	15.0	70.0
72-81	18	55	18.0	55.0
62-71	10	37	10.0	37.0
52-61	13	27	13.0	27.0
42-51	11	14	11.0	14.0
32-41	3	3	3.0	3.0
Total	100		100.0	

Highest score = 110

Lowest Score = 32

Range = 78

Interpretation for Table (1.4)

It is revealed from frequency distributions for arts graduate students given in Table 1.4 that the scores on the variable of “Environment Awareness” are distributed over a range of 78 . This is evident from the fact that 18 percent fall between the scores 72 to 81 and 92-101 for arts graduate students.

HYPOTHESIS: There will be no significant difference in The Environmental Awareness among Science and Arts students

The Bearing of the data on set purpose of the study means of scores of environmental awareness among science and arts students along with number, SD and t-value are given in table 1.5

Table 1.5

Variable	Stream	N	Mean	S.D.	SED	t-value
Environmental awareness	Science	100	72.92	18.46		
	Arts	100	77.25	19.89	2.714	t=1.60

Table 1.5 shows mean environmental awareness among science and arts students are 72.92 and 77.25 and S.D's are 18.46 and 19.89 respectively. The t-value is 1.59 which is statistically not significant at both popular limits, i.e. 0.05 level and 0.01 levels of significant.

The mean environmental awareness score of science students do not show much difference as compared to mean environmental scores of arts students. Thus, we can conclude that there is no significant difference in science and arts students on the basis of environmental awareness.

Hence, the hypothesis “*There will be no significant difference in the Environmental awareness among science and arts students*” is accepted. It may be interpreted almost equal environmental awareness among science and arts students.

Conclusion

The mean environmental awareness score of science students do not show much difference as compared to mean environmental scores of arts students. Thus, we can conclude that there is no significant difference in science and arts students on the basis of environmental awareness. It may be interpreted almost equal environmental awareness among science and arts students.

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