

Relation between Environmental Awareness and Scientific Attitude

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Abstract:- This study has conducted the survey type of research in Jaunpur district at secondary level. In which population was taken from U.P. board running schools class 10th only. Sample size has been selected 300 through random technique in which half-half(50-50)% based on locality and sexes. For data collection standardized tools have been taken from market (Rupa psychology center) Varanasi in which Environmental Awareness Ability Measure (EAAM) was developed by Jha. P.K. (2005) and scientific attitude scale was developed by Greval. A.(1990). C R Value was computed for analysis and found the results that more Environmental awareness correlates with high scientific attitude.

Keywords:- Environmental awareness, Scientific attitude, Population, Standard errors, Randomization.

Date of Submission: 05-07-2017

Date of acceptance: 15-07-2017

I. BACKGROUND OF THE STUDY

Environment has become the concern of all the scientists, academicians, intellectuals, policy makers and government all over the World. Widespread and systematic concern for environmental issues has grown the world over particularly after the 1960s, as a fall out of hazardous effects of the developmental activities initiated the world over a number of environmental problems erupted in critical sectors like climatic changes, depletion of forests, pollution, shortage of water etc. These particularly threatened human health, energy resources, soil productivity, rains and water resources. In fact the nature, its forces and equilibrium all put together were disturbed, which posed an imminent danger to earth's life sustaining systems.

Today the world is facing rather passing through many crises but the most dangerous crisis is that of gross and constantly increasing pollution of environment. Ironically and probably unknowingly, it is human beings themselves who are responsible for degrading, destroying and polluting environment. The future generations will have to reap the crop of unplanned and insensitive approach that has irreparably damaged the relationship and harmony of human beings with nature. The ill effects are evident and future potentialities of destruction are immense

The UN world conference on the Environment in Stochhom(1972), the earth summit held in Rio de Janeiro(1992), the Global Forum(1992) show that environment is on agenda of the international community. The environmental movement has focused attention on the quality of the air we breathe and water we drink, how new dam construction harms wildlife and how strip mining devastates the landscape and causes floods. Today human race stands at crossroads in choosing the options it has in the areas of environment and development. The industrial countries having enjoyed more than their of development, have achieved descend standard of living. This has given to the biosphere, pollution and ecodegradation, as a result of affluence and underlying greed. It has now become clear that such pattern of development, life styles and quality of life are unsustainable. On the otherhand, the developing countries struggling to attain the minimum level of sustenance. No doubt, they also have contributed to the ecodegradation and pollution, but this is essentially need and poverty based issue. Thus, both overdevelopment in the industrialized world and underdevelopment in the developing countries polute and ecodegrade the environment; former out of greed and luxury, and the latter for the existence . The developing countries need abundant material growth to fulfill the basic need of their people, but they can not afford to repeat the mistakes of industrial countries. Decades ago, when environment was not a buzz word, Mahatma Gandhi said, "the earth provides enough to satisfy everyman's needs, but not everymsn's greed." This is the statement profound social, economic, cultural and ethical ramifications.

The educational system in Ancient India was quiet rich in its understanding and appreciation of environmental studies. Further more, non-violence towards both animate and inanimate components of biosphere has been ingrained as a guiding principle in the Indian psyche. Therefore, awareness and education of environment is the paramount concern of all the citizens of society. For the sustainable future of our planet, we should shift towards the nation "Think globally, Act locally" (Steel 1996). Environment protection starts by creating an awareness among the people so that it becomes part of their lifestyle. The key to achieve this goal

lies in environmental education and its related programmes. The objective of environmental education includes awareness, knowledge, attitudes, skills and participation of people in protecting the environment.

Rationale of the study:- The environment which sustains life is in peril at present. Human activities are responsible for this. Rapid industrialization, further advancement in science and technology and the abuse of this advancement in an arbitrary way as well as the fast growth of urbanization have posed danger to man himself. Man's life, in terms of quality and sustainability, is dependent on the interrelationships among the natural environment, social environment and technological environment. As proposed by the sociologist William Ogburn, a change in any one of the environments will lead to changes in every other part of the total complex. These changes will have a tremendous impact on the life of human being. The most threatening aspect is the uncertainty prevailing about the fate of our future generations.

Generally people are indifferent to their environment. Newton's third law states, "Every action has an equal and opposite reaction." This also applies to man's relationship with nature as it relates to application of force on inanimate objects. While man sought domination over nature in five thousand years of recorded history, he has begun to realize that his welfare and his every existence are deeply intertwined with the natural cycles and systems.

The main obstacle in protecting the environment in India today is that there is lack of scientific knowledge and the will to act. In such a position society needs to be convinced of the importance of environment and we have to realize the fact that the way we live, will determine our future. Therefore, the awareness regarding the environment and proper awareness towards the worsening of the environmental condition of the world is imperative.

After review of related literature, it was felt that environmental awareness and its relation to scientific attitudes is not well covered area. It was also realized that cognitive and attitudinal developments may affect each other. It was thought that these two variables i.e. environmental awareness and scientific attitude, may be correlated so they may be important from education point of view for improving environmental awareness. Therefore it is imperative to study the environmental awareness and its relationship with scientific attitude.

Reviews:-The present problem attracted the investigator realizing the importance and value of environmental awareness which essentially concerned with existence of human being and other living beings residing on blue planet. To explore the relation of the present problem in which Moyer (1977), Brown(1979) and Read(2000) studied in UK public awareness of environment. Josef Maria(2007) studied the role of secondary school geography curriculum in imparting the environmental education in Kenya Barr(2007) carried a case study of house hold waste management as a factor influencing environmental awareness in U.K. Gellisen J.(2007) , Karpic C.P.(2008), Spark(2008) as predicted rural and urban participants differed significantly along the measured variables. Sharma(1997), Rani(1997), Maurya(2009), Yadav(2011) and Singh. N. K. (2015) had studied an environmental awareness as teaching course of environmental education as degradation of environment on project work. Sampath(2004) surveyed the environmental knowledge and attitude of preservice teacher trainees who were doing diploma in teacher education and found that their knowledge of environmental concepts was not remarkable. Udai Jain and Janak Pandey(2008), Singh R.P.(2010) , Maurya (2012) and Sushma and Janak Pandey(2008), Singh R.P. (2010), Maurya(2012) and Sushma(2016) studied the scientific attitude do not differ based on the religion.

II. METHODOLOGY

This is a descriptive survey type study conducted on high school U.P. Board class-10th students from Jaunpur district with size of 300 sample selected through randomly based on sexes and locality for measuring the environment awareness and scientific attitude tools has been used standardized readymade EAAM was developed by Jha,P.K. (2005) which is reliability 0.71 and validity 0.83 respectively whereas science attitude scale (SAS) was developed by Crewal, A.(1990) with 0.765 reliability coefficient and highly significant χ^2 value 6.62 for data analysis C.R. Value and coefficient of correlation were computed.

Objectives of the study:-Present study has been determined the following objectives-"To study the relationship between the environmental awareness and scientific attitude.

Hypothesis of the study:- For achieving the objective there is one null hypothesis was formulated-

1-There is no significant relationship between Environmental awareness and scientific attitude based on sexes and locality.

Analysis and Interpretation:- Present study analysis based on sexes and localities are tabulated in following way:-

Table-1

S.N.	No. of Students	Sum total of environmental awareness score(Σx)	Sum total of scientific attitude score(Σy)	Σx^2	Σy^2	Σxy	Correlation
1	204	7227	263911	10731	575183	383906	+0.40

After the analysis of correlation between environmental awareness and scientific attitude of boys student , it is evident from the table 5 , that the total number of students was 204 , the sum total of environmental awareness score($\sum x$) was 7227 , the $\sum x^2$ value was 263911, the sum total of scientific attitude score ($\sum y$) was found 10731, $\sum y^2$ was 575183, $\sum xy$ was 383906 and correlation was found +0.40, which was low positive correlation so it can be said that there exist a low positive correlation between environmental awareness and scientific attitude of high school boys students.

Table-2

S.N.	No. of Students	Sum total of environmental awareness score($\sum x$)	Sum total of scientific attitude score($\sum y$)	$\sum x^2$	$\sum y^2$	$\sum xy$	Correlation
1	96	3251	4757	113887	240101	161883	+0.13

After the analysis of correlation between environmental awareness and scientific attitude of boys student , it is evident from the table 6 , that the total number of students was 96 , the sum total of environmental awareness score($\sum x$) was 3251 , the $\sum x^2$ value was 113887, the sum total of scientific attitude score ($\sum y$) was found 4757, $\sum y^2$ was 240101, $\sum xy$ was 161883 and correlation was found +0.13, which was very low positive correlation. So the null hypothesis i.e., “ there is no relationship between environmental awareness and scientific attitude of high school girls students”, was accepted.

Table-3

S.N.	No. of Students	Sum total of environmental awareness score($\sum x$)	Sum total of scientific attitude score($\sum y$)	$\sum x^2$	$\sum y^2$	$\sum xy$	Correlation
1	153	5325	8020	191821	428380	281668	+0.35

After the analysis of correlation between environmental awareness and scientific attitude of boys student , it is evident from the table 7 , that the total number of students was 153 , the sum total of environmental awareness score($\sum x$) was 5325 , the $\sum x^2$ value was 191821, the sum total of scientific attitude score ($\sum y$) was found 8020, $\sum y^2$ was 428380, $\sum xy$ was 281668 and correlation was found +0.35, which was low positive correlation. So the null hypothesis i.e. , “ There is no relationship between environmental awareness and scientific attitude of high school rural students” was rejected and it can be said that there is low positive correlation.

Table-4

S.N.	No. of Students	Sum total of environmental awareness score($\sum x$)	Sum total of scientific attitude score($\sum y$)	$\sum x^2$	$\sum y^2$	$\sum xy$	Correlation
1	147	5153	7468	185977	386964	264121	+0.36

After the analysis of correlation between environmental awareness and scientific attitude of boys student , it is evident from the table 8 , that the total number of students was 147 , the sum total of environmental awareness score($\sum x$) was 5153 , the $\sum x^2$ value was 185977, the sum total of scientific attitude score ($\sum y$) was found 7468, $\sum y^2$ was 386964, $\sum xy$ was 264121 and correlation was found +0.36, which was low positive correlation so the null hypothesis, “ There is no relationship between environmental awareness and scientific attitude of high school urban students”, was rejected.

III. CONCLUSION

Researcher has been concluded based on above analysis that sex and locality cause no role play in environmental awareness according to results they are not differ significantly. On scientific attitude boys are higher than girls where as localities rural students had more attitude in scientifically than their counterfants . Coefficient of correlation between environmental awareness and scientific attitude is positive shows both groups. It is clear that environment is positively related with scientific attitude . For environmental awareness all stage of schooling is exist as separate discipline. Present study would be mile stone for future to aware the ability to adopt nature and save our earth and environment. This study will help to develop the concept of environmental education that’s importance in classes of science at secondary school to adopt the performancive activities such as project work, practicals, field visit and quiz competition etc.

REFERENCE

- [1] Ambast, R.S.(1990) : Environment and Pollution: An Ecological Approach. Student Friends and Company, Varanasi, First Edition, p.4.
- [2] Bhattacharya, G.C. (1997, March): Environmental awareness among higher secondary students of science and Non science stream; School Science,35,(1), pp.24-32.
- [3] Dewey,J.(1993) How we think. D.C. Health and Company, Boston, p.3.
- [4] Golwalker, S.(1978) : A study of scientific attitudes of higher secondary schools students offering different options. Unpublished M.Ed. dissertation. Udaipur University.
- [5] Hinds. J. and Sparks,P.(2008) : Engaging with the natural environment : The role of an affective connection and identity. Journal of Environmental Psychology, Vol.28, pp. 109-120
- [6] Singh, P.N.(1988): Construction and standardization of the test of scientific attitudes. Ph.D. Thesis in Education, B.H.U. , Varanasi.
- [7] UNESCO 1971-80 New Trends in Integrated science teaching, % Vols, UNESCO, Paris.
- [8] Vernon P E 1979 Intelligence: Heredity and Environment Freeman, san Fransisco, California.
- [9] Zigler E F, Valentine J(eds.) 1979 Project head start: A Legacy of the war on Poverty. Macmillan, New York.

International Journal of Humanities and Social Science Invention (IJHSSI) is UGC approved Journal with Sl. No. 4593, Journal no. 47449.

Dr. Narendra Kumar Singh. "Relation between Environmental Awareness and Scientific Attitude." International Journal of Humanities and Social Science Invention (IJHSSI) 6.7 (2017): 54-57.