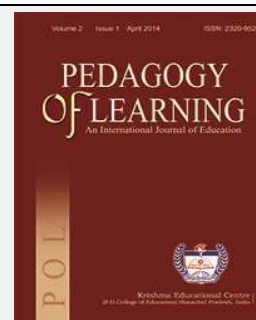


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## **Awareness and Attitude towards Environmental Protection among Senior Secondary Students of Kendriya Vidyalayas**

**Vikramjit Singh, Ph.D.**

Assistant Professor, St. Xavier's College of Education (Autonomous), Patna, India

E-mail: [singhvikramjit@hotmail.com](mailto:singhvikramjit@hotmail.com)

**Manish Kumar Prabhat**

Principal, Kendriya Vidyalaya, Madhupur, India

Corresponding Author: Vikramjit Singh

E-mail: [singhvikramjit@hotmail.com](mailto:singhvikramjit@hotmail.com)

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### **Abstract**

The environmental degradation poses a great danger to man's own survival. It should be realized, sooner than later, that conservation and improvement of the environment are vital for the survival, and well being of mankind. Natural resources of land, air and water have to be used wisely as a trust to ensure a healthy environment for the present and future generations. The present investigation is an attempt to know how much education has become successful in dealing with environmental concerns by providing suitable value systems to future citizens. The study here has tried to investigate the status of awareness of senior secondary students on environment and check their attitude too regarding environmental protection. The sample of the study were 210 KV's senior secondary students. The findings showed significant relationship between awareness on environment and attitude towards environmental protection among senior secondary students. It was also found that there were no gender or age related differences in their awareness or attitude towards environmental protection.

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**Keywords:** Environment, Environmental Protection, Environmental Awareness, K.V. Students

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## **INTRODUCTION AND RATIONALE OF THE STUDY**

Man originates from environment, leads a life in the realms of the environment and embraces death in the environment. A man gets the first cell of his / her body from parents, who are the part of their biological environment; accumulates minerals, carbohydrates, proteins, water etc. from the environment in his / her body and grows in size, height and weight. In the course of his/her life, man interacts with his/her environment. This interaction leads to many implications for the man and environment. The environmental degradation poses a great danger to man's own survival. It should be realized, sooner than later, that conservation and improvement of the environment are vital for the survival, and well being of mankind. Natural resources of land, air and water have to be used wisely as a trust to ensure a healthy environment for the present and future generations. As a result, environment demands a new definition for the human being highlighting its significance for the sole existence of man.

NCF, 2005 states that making children sensitive to the environment and the need for its protection is an important curricular concern. The emergence of new technological choices and living styles witnessed during the last century has led to environmental degradation and vast imbalances between the advantaged and the disadvantaged. It has become imperative now more than ever before to nurture and preserve the environment. Education can provide the necessary perspective on how human life can be reconciled with the crisis of the environment so that survival, growth and development remain possible. The National Policy on Education, 1986 emphasised the need to create awareness of environmental concerns by integrating it in the educational process at all stages of education and for all sections of society.

Education is an important social instrument and means, which acts as a catalyst in improvement of different aspects of life. Knowledge, awareness, skills, values and attitudes acquired through education help one to lead a desired quality of life. In order to protect and conserve the environment enabling people to lead quality life, emphasis has been given to environmental education in both formal and non-formal system of education. Environmental education is crucially needed to prepare students who would play an active role in protecting the environment through making informed decisions and taking environmental friendly behavior (UNESCO–UNEP, 1991). So it is imperative to assess how much education has been successful in imparting relevant awareness and attitude in the students towards environmental protection.

Humans are constantly engaged in such activities at individual, social, corporate and governmental levels which are detrimental to our environment. These activities have contributed to the rising of several environmental problems that may expose human health to serious threats and may also prove detrimental to the existence of other living species. Therefore, it is important that humans should have awareness of environmental problems. This is a fact that human beings need to raise awareness of environmental problems through necessary training. Not only the present ruling generation but also the children who are going to be the rulers and working class in the future should have the optimum level of awareness of environmental protection.

Environmental awareness means to understand the fragility of our environment, its sensitivity towards human interventions and the importance of its protection. Promoting environmental awareness is the only intelligent method and practice to become environment friendly person working for its betterment and to create a brighter and safer future for our children.

The education system of our country still lags behind in developing environmental concern in its students. The requirement is thus that serious initiative has to be taken so as to enhance the awareness level of our students towards environment. Teachers are role model for the students and only a competent teacher having positive attitude towards environment can inculcate this value among the students. The poor awareness level of teachers is also one of the reason behind lower level of awareness towards environment among the students (Pal, 2012). The studies on various occasion has indicated no gender related differences (Kant & Sharma,2013; Ghosh,2014)in development of environmental attitude but there are studies where it is seen that girls have higher level of awareness and concerns towards environmental problems than their counterparts (Nikhat & Shafeeq 2014; Tiwari & Anwar 2014, Gunde & Parit, 2015). The results have also indicated that science students have better attitude and awareness level towards environment and issues related to its protection in comparison to humanities and social science students (Mishra,2012; Nikhat & Shafeeq 2014; Gunde & Parit, 2015). Further the need of hour is also to make the parents aware about the environmental concerns. It has been found that the students of educated parents have shown higher performance in their level of environmental awareness(Kumari, et.al,2012).The reflections from above all studies has prompted the investigator to take up this study, decide the objectives and plan of work for the present study.

Environmentalism is an ideology that evokes the necessity and responsibility of humans to respect, protect, and preserve the natural world from its anthropogenic (caused by humans) afflictions. Environmentalism refers to concern for environment and action on behalf of environmental preservation.

An attitude refers to a settled way of thinking or feeling about something. It is a predisposition or a tendency to respond positively or negatively towards a certain idea, object, person, or situation.

For environmental protection, it is necessary that practices and procedures necessary for environmental protection (such as switching off lights when not necessary, getting vehicles regularly checked for pollution etc.) should become the part of our lives. This can happen only if the environmental awareness frames the proper attitude towards environmental protection. Much has to be done towards this so as to develop positive attitude towards environment among students. Studies has shown that the environmental attitude of students from other countries such as Iran has been found to be quite higher (62.70%) than its counterparts among Indian students (43.20%) (Shobeiri, 2007).

Every citizen has the solemn duty to protect the environment. Environmental degradation and climate change have become a problem of the whole world. So this has become a hot discussion at every forum wherever the politicians, world leaders, environmentalists, scientists and enlightened citizens meet. Environment cannot be put under

boundaries. All of us in the world share the same environment. That is why whether we as individual or as a nation contributed in enhancing this problem or not, this has become immaterial today. We all have to be the part of solution to the problems related to environment. This is not only the compulsion but an inevitable necessity. Environmental problems have emerged as a threat to human civilization in the modern age of development and rapid urbanization. In want of sustainable development, the human civilization will be annihilated. Since the United Nations Conference on Human Environment at Stockholm in 1972, environmentalists have taken up environmental protection in a serious manner. Their aim is not only to make the present generation to stand for the environment, but also to train the future citizens to have high level of awareness towards environmental protection and positive attitude towards the environmental protection.

Education too has responded amicably in this regard. The present investigation is an attempt to know how much education has become successful in dealing with environmental concerns by providing suitable value systems to future citizens. The study here has tried to investigate the status of awareness of senior secondary students on environment and check their attitude too regarding environmental protection.

### **OBJECTIVES OF THE STUDY**

- 1) To study the difference in level of awareness towards environmental protection among senior secondary students of KVs on the basis of gender.
- 2) To study the difference in level of awareness towards environmental protection among senior secondary students of KVs on the basis of age (below 17 years and 17 years & above).
- 3) To study the difference in attitude towards environmental protection among senior secondary students of KVs on the basis of gender.
- 4) To study the difference in attitude towards environmental protection among senior secondary students of KVs on the basis of age (below 17 years and 17 years & above).
- 5) To study the relation between level of awareness and attitude towards environmental protection among senior secondary students of KVs.

### **HYPOTHESES OF THE STUDY**

H<sub>0</sub><sub>1</sub>: There is no significant difference in level of awareness towards environmental protection among senior secondary students of KVs on the basis of gender.

H<sub>0</sub><sub>2</sub>: There is no significant difference in level of awareness towards environmental protection among senior secondary students of KVs on the basis of age.

H<sub>0</sub><sub>3</sub>: There is no significant difference in attitude towards environmental protection among senior secondary students of KVs on the basis of gender.

H0<sub>4</sub>: There is no significant difference in attitude towards environmental protection among senior secondary students of KVs on the basis of age.

H0<sub>5</sub>: There is no significant relation between level of awareness and attitude towards environmental protection among senior secondary students of KVs.

## **METHODOLOGY OF THE STUDY**

Since in the present study, the investigator is concerned with finding out the statuses of awareness and attitudes of senior secondary students towards environmental protection so the “Descriptive Research” was considered to be the best suited for present study.

### ***Sample of the Study***

The sample for the study was selected randomly among students of three Kendriya Vidyalayas from Patna, namely, Kendriya Vidyalaya Kankarbagh (KVK) – 24 students; KV Bailey Road (First Shift) – 59; KV Bailey Road (Second Shift) – 127 students; thus total number of students taken as sample being 210.

### ***Tools and Techniques used for data collection***

The tools used for the study were as follows:-

- 1) Environment Awareness Ability Measure (EAAM) constructed by Dr. Praveen Kumar Jha in 1998.
- 2) The Taj Environmental Attitude Scale (TEAS) developed by Dr. Haseen Taj in 2001 (Bangalore University).

### ***Procedure of the data collection***

Each school was visited by the investigator. At each instance, 20 – 25 students were randomly selected without collecting prior information about their backgrounds with the approval of the concerned authorities. The tools were administered without disturbing the time table of the concerned schools. After the self introduction a little elaboration was made in respect of purpose of the study by the investigator. Then details were given about the tools to be administered. They were asked to record their spontaneous and accurate responses as per their own perceptions. They were further advised not to discuss with their friends before answering any item of any tool. Then each student was supplied the photocopied tools one EAAM and one TEAS. Each group of students took about 45 minutes to one hour to complete responding to both the tools.

## **RESULTS**

The collected data were analysed further for testing the framed hypotheses. The finding thus obtained has been presented below.

**H01: There is no significant difference in level of awareness towards environmental protection among senior secondary students of KVs on the basis of gender.**

For testing the above hypothesis t-test has been performed and the findings were as follows.

**Table: 1: EAAM: Gender wise calculation of Mean, SD, t**

Groups	N	Mean	SD	Mean Difference	df	t	Sig.
Girls	114	41.508	5.365	0.998	208	1.29	0.198
Boys	96	40.510	5.830				

The above table depicts that the calculated value of t with 208 d.f. is 1.29 which is lower than the table value of t at 0.01(2.601) and 0.05 (1.972) levels which means that hypothesis is accepted. Thus there is no significant difference in level of awareness towards environmental protection among senior secondary students of KVs on the basis of gender i.e. there is no significant difference in level of E.A. among girls and boys students.

**H02: There is no significant difference in level of awareness towards environmental protection among senior secondary students of KVs on the basis of age (below 17 years and 17 years & above).**

For testing the above hypothesis t-test analysis has been presented in the following table

**Table: 2: EAAM: Age wise calculation of Mean, SD and t**

Groups	N	Mean	SD	Mean Difference	df	t	Sig.
Below 17 Years	154	41.156	5.376	0.388	208	0.44	0.658
17 Years and Above	56	40.768	6.188				

The above table depicts that the calculated value of t with 208 d.f. is 0.44 which is lower than the table value of t at 0.01(2.601) and 0.05 (1.972) levels which means that hypothesis is accepted. Thus there is no significant difference in level of awareness towards environmental protection among senior secondary students of KVs on the basis of age (below 17 years and 17 years & above).

**H03: There is no significant difference in attitude towards environmental protection among senior secondary students of KVs on the basis of gender.**

For testing the above hypothesis t-test has been performed and the findings were as follows.

**Table: 3: TEAS: Gender wise calculation of Mean, SD and t**

Groups	N	Mean	SD	Mean Difference	df	t	Sig.
Girls	114	182.552	16.827	2.896	208	1.21	0.227
Boys	96	179.656	17.706				

The above table depicts that the calculated value of t with 208 d.f. is 1.21 which is lower than the table value of t at 0.01(2.601) and 0.05 (1.972) levels which means that hypothesis is accepted. Thus there is no significant difference in attitude towards environmental protection among senior secondary students of KVs on the basis of gender.

**H04: There is no significant difference in attitude towards environmental protection among senior secondary students of KVs on the basis of age (below 17 years and 17 years & above).**

To study the above hypothesis t-test has been done and the results has been tabulated as follows.

**Table: 4: TEAS: Age wise calculation of Mean, SD and t**

Groups	N	Mean	SD	Mean Difference	df	t	Sig.
Below 17 Years	154	180.604	17.486	2.342	208	0.87	0.386
17 Years and Above	56	182.946	16.629				

The above table depicts that the calculated value of t with 208 df is 0.87 which is lower than the table value of t at 0.01(2.601) and 0.05 (1.972) levels which means that hypothesis is accepted. Thus there is no significant difference in attitude towards environmental protection among senior secondary students of KVs on the basis of age (below 17 years and 17 years & above).



**H05: There is no significant relation between level of awareness and attitude towards environmental protection among senior secondary students of KVs.**

Correlation between EAAM Scores and TEAS scores has been calculated and shown under table 5.

**Table 5: Correlation between EAAM and TEAS**

Correlations			
		EAAM	TEAS
EAAM	Pearson Correlation	1	0.666
	Sig. (2-tailed)		0.00001
	N	210	210
TEAS	Pearson Correlation	0.666	1
	Sig. (2-tailed)	0.00001	
	N	210	210

The calculated r value has  $P < 0.00001$ . Thus the result is significant at 0.01 level and thus the relationship is “strong”. Hence the framed hypothesis is rejected and there is strong relation between level of awareness and attitude towards environmental protection among senior secondary students of KVs.

**DISCUSSION AND CONCLUSION**

Education is a great boon in the hands of mankind in kindling awareness and shaping attitude in its future generation. Education is found to be very much successful in performing its duties. This has been vindicated by the result of the present study where majority of senior secondary students of KVs at Patna have been found to have high level of awareness and attitude towards environmental protection. Yet, a lot more can be done.

- 1) It is suggested that environmental education should be made compulsory for all levels of education.
- 2) Environmental education should be thought not through multidisciplinary approach. It should be developed as a separate discipline for betterment of the environment of the world.
- 3) The curricular techniques and procedures can be further enhanced, modified and multi-faceted to induce high level of awareness and attitude among the students towards environmental protection irrespective of gender, age and socio-economic condition of the students.
- 4) Education has to serve as a tool and medium for change of social norms, values, attitudes etc. Besides, it has to serve for uplift of economic statuses of people. Education appears to be the only way to solve the environmental crises.
- 5) The present study puts an implication on the curricular transactions and teaching learning methodology to adopt such processes and techniques which may be



conducive in developing the same set of values, attitude, and aptitude irrespective of the family background of the students. The curricular transactions must serve for nullifying and mitigating the adverse impacts, if any, due to limitations and constraints on the part of family backgrounds of the students. This is essential for success of any educational enterprise, whether carried out in a formal or informal setting. Otherwise extraneous factors for the system of education will keep on taking their toll on the level of achievement of the system of education.

It is also expected to cause a furor in the students' minds through their participation in the present study towards environmental protection and thereby to attract their attention to the on-going discussions, debates, meetings throughout the world regarding the environmental protection. They will be aware of the environmental issues more and understand the importance of environment for life in a better way. The present study is expected to help the participating students to design a framework of significance of environment in their minds and to increase their decision making ability on different aspects of environment. It is also imperative that the present study will help the students to develop a view point towards environmental issues. The present study aims at developing sufficient courage in the students to take a tough stand for environmental protection, if required.

The present investigation may further guide the Kendriya Vidyalaya Sangathan whether to modify or design certain components of in-service programmes to equip the teachers with necessary skills to instill the required level of awareness and attitude towards environmental protection among the students up to a standard.

The study presented here can give educationists an insight into the efficacy and effectiveness of the ongoing curriculum of Kendriya Vidyalayas in Patna as regards to Environmental Education. The present study may provide a broader outlook to the educationists based on a practical view point to modify the curriculum and teacher education programmes. Kendriya Vidyalayas are considered the leading institutions in the educational sector in India. By being under direct control of MHRD, GOI these institutions have larger scope of furthering the interests of common people with the collaboration of different national and international organization and agencies for a better future for the coming generations. The curriculum followed by these institutions are generally path breaking and role model for other institutions. So the curriculum of these institutions must be up to date with respect to present demands, needs and issues of concurrent society at the national level and beyond borders at large.

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