

The Role of Attitude in Environmental Awareness of Under Graduate Students

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ABSTRACT

Environmental education has been viewed as an important way to educate students about environmental issues beginning from pre-school to higher education. This study is a part of this field- namely, undergraduate environmental education. The purpose of the study is to explore undergraduate students' attitudes towards environment at the end of the course "Environment, Human, and Society". In direction of this basic aim, environmental attitudes of university students were examined according to the gender and faculty type factors. As a result of the study, it could be concluded that undergraduate students had positive attitudes toward the environment as regard to their gender and faculty types. It was emphasized that female students were more sensitive toward environment than male students. At the end, some advices were given in relation with environmental researches.

The study was conducted to explore the Environmental Awareness and Environmental Attitude Aamong gender (boys and girls). The study was conducted in N.M.V. Lalitpur (U.P.). The data were collected from 100 students. The data was divided into two groups on the basis of Environmental Awareness and Environmental Attitude. Each of the two group consisted of an equal number of boys and girls respondents. A standardized Environmental Awareness Ability Measure (EAAM) by Dr. Praveen Kumar Jha and Attitude Scale by Dr. N.S. Chauhan and Dr. L. Singh were used to collect data. Data were analyzed by using analysis of variance (ANOVA). The main conclusion is that, boys have more Attitude than girls but there are significant difference found in boy and girls Attitude. And girls have more than boys Environmental awareness. There found no significant difference found in Boys and girls Environmental awareness.

Keywords: Environmental Awareness, Environmental Attitude and Gender (Boys & girls).

INTRODUCTION

Attitude and Environmental awareness

Environment is defined as a surrounding or growth of an individual. Environmental Awareness is concern towards environment or environmental problem. The environmental issues are not solved or not take care of the coming generations may find earth worth not living. The needs of the person become one. Environmental attitude a learned predisposition to respond consistently favorable or unfavorable manner with respect to the environment (Uitto, 2004). Environmental degradation is the decline of land productivity and forest cover due to human and environmental factor.

Environmental Awareness: Environmental Awareness is concern towards environment or environmental problems. In other word it is defined as "an idea holding a general impression or consciousness about something without having to know much about it."(Roberta, 2009).

Environmental Attitude: Environmental Attitude a learned predisposition to respond consistently favorable or unfavorable manner with respect to the environment" (Uitto, 2004).

Areas of Attitude

- **Social Change-** social change refers to an alteration in the social order of a society. Social change may include changes in nature, social institutions, social behaviors, or social relations.

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- **Social Distance-** Social distance describes the distance between different groups of society and is opposed to location distance.
- **Liberalism-** The concept of liberalism suggests a particular account of the development of liberal thought. It suggests that liberalism was at one point in time an influential political ideology, but that it at some point lost some of its significance, only to revive itself in more recent times in a new form.
- **Nationalism-** "Nationalism is in itself neither good nor bad, as little as capitalism, socialism or imperialism is." But several authors distinguish between two kinds of nationalism, which in fact are "good" and "bad".
- **Social Revolution-** This can partially be ascribed to the fact that nothing is so contrary to existing interest and prejudices as this concept, and partially to the fact that few things are so ambiguous.
- **Untouchability-** Untouchability is a direct product of the caste system. It is not merely the inability to touch a human being of a certain caste or sub-caste.

Kalpna Thakur (2012) conducted a study on Environmental awareness among senior secondary school students of Chandigarh. The study was conducted on the sample of 200 senior secondary students from four schools of Chandigarh and data was collected through descriptive survey method. The major findings were 1. Students of government and private schools exhibited comparable environmental awareness. 2. Science students exhibited very high degree of environmental awareness than students opting for humanities. 3. Male science students exhibited higher degree of environmental awareness than female science students but overall no significant difference was found between male and female students. From a more global perspective, gender differences in environmental attitude at higher education level have converged on females that are more sensitive toward environmental issues. For example, Fernandez- Manzanal et al. (2007) revealed that female students have higher scores than male students on the attitudes scale, especially in the factors of the need for conservation and environmentally favorable behavior.

The differences between males and females' attitudes were elaborated in the meta analysis study by Zelezny, Chua, and Aldrich (2000). In their study, the consistent result of woman who "reports stronger environmental Attitudes and behaviors than man" were supported by cross age and across Countries studies. In the same line for Turkish context, Tuncer et al., (2005b) obtained girls being more aware of environmental problems and individual responsibilities as well as having more positive attitudes than boys. The consistent attitude differences between boys and girls also have been supported by across country studies (Zelezny et al., 2000). Also, girls seem to be socially responsible and make a significant contribution to environmental protection (Jenkins and Pell, 2006; Zelezny et al., 2000). For future implications, environmental education activities or courses at any level of education system would be adjusted to account for boys' and girls' different interests.

MAIN OBJECTIVE

By acknowledging the existing gaps in published literature gives a clear picture that note worthy contribution has been made in this area. Thus the modern study makes an attempt to explore Attitude and Environmental Awareness of boys and girls.

The problem has been created to measure the subject's Attitude and Environmental Awareness of boy and girls. In this research we want to study that what are the differences in between boys and girls **Attitude and Environmental Awareness**. In study we want to find how attitude play a role to make Environmental Awareness with gender. In this way we find that environmental attitude at higher education level have converged on females that are more sensitive toward environmental issues. This dissertation study not only Attitude and Environmental Awareness but also gender involve it.

HYPOTHESIS

- H.1-** There will be significant differences in between boys' and girls' Attitude.
- H.2-** There will be significant differences in between boys' and girls' social change.
- H.3-** There will be significant differences in between boys' and girls' social Distance.
- H.4-** There will be significant differences in between boys' and girls' Liberalism.

H.5- There will be significant differences in between boys' and girls' Nationalism.

H.6- There will be significant differences in between boys' and girls' Social Revolution.

H.7- There will be significant differences in between boys' and girls' Untouchability.

H.8- There will be significant differences in between boys and girls Environmental awareness.

METHOD

Type of Research and Design

The present study is an exploratory research. It is regarded exploratory as it attempts to examine the level attitude and environmental awareness among boys and girls.

The survey research method used in this study. Survey research study on Attitude and Environmental Awareness by studying sample chosen from college's boys and girls.

Types of Variables

There are one IV Gender (boys and girls) and two DV Attitude and Environmental Awareness.

Sample

The sample consisted 100 undergraduate college students of N.M.V. Lalitpur (U.P.), Shree Deepchand Chaudhary College, M.S.D. college Lalitpur (U.P.). The sample was divided into two groups on the basis of boys and girls respondents. Each of these two groups consisted of 50 respondents.

Criteria of Sample Selection

Only those young respondents were included in the samples who were studying in under graduation of 16-23 years unmarried having an urban residence and without any major diagnosed chronic physical or mental illness.

Instructions

To make the subject acquainted with testing paper of emotional intelligence and intelligence quotient and asking for right response that they feel in their daily life style.

In **Environment Awareness Ability Measure test** paper, as you can see it is a test booklet and an answered sheet. This question is related our daily life, which you experience in your daily life. In test paper, the question are related Emotional Intelligence. It has two answer were **Yes** or **No**, you give right answer which is suitable with you. There is not any one answer were right or wrong.

In **Attitude Scale** test paper, as you see it includes six distinct areas, each distinct area has 25 questions. You give limited time of 24 minute for 60 questions. It has logical question.

Procedure

For recording subject's responses on **Environment Awareness Ability Measure (E.A.A.M.)** they were given **Attitude Scale** it has six categories and it has 150 questions 25 in each categories.

Data Collection

For collecting the data testing were conducted. A verbal consent was taken from the subjects after informing them the purpose of the study. They were assured that the information they provide will be kept confidential and used only for research purpose. Thus the sample of male and female respondents aged between 16-23 was selected. They were then handed over a copy of the questionnaire to respond. They were helped if they had any difficulty regarding understanding or responding to the questionnaire items. Respondents were requested to respond honestly and to answer all the items. After they had completed the questionnaire they were thanked and the complete questionnaires were collected.

Analytic Strategy

One way analysis of variance ANOVA statistical techniques used to test the significant differences in Attitude and Environmental Awareness in between boys and girls.

Statistical Analysis of Data

The data obtained through simple random sampling was compiled and tabulated variable wise. This data exploration has been performed through data sampling, data editing, data coding, and

classification. The present study applied the ANOVA for the analysis, using SPSS software. The results of this ANOVA test included mean value, standard deviation, number, F value, and df. Final conclusions were drawn and were also compared with the significant value at .05 level of confidence at 95 degree of freedom. Corresponding to each table, various figures have been drawn in Excel for the graphical representations of result and relationships between variable as well as their significance.

RESULT

Result is divided in to two parts 1 descriptive analysis which presents the mean and SD differences of Attitude and Environmental Awareness in between boys and girls. And part 2 ANOVA shows the differences of Attitude and Environmental Awareness in between boys and girls. A one way analysis of variance F test is a statistical technique used to test the significance of the difference between means of number of different group.

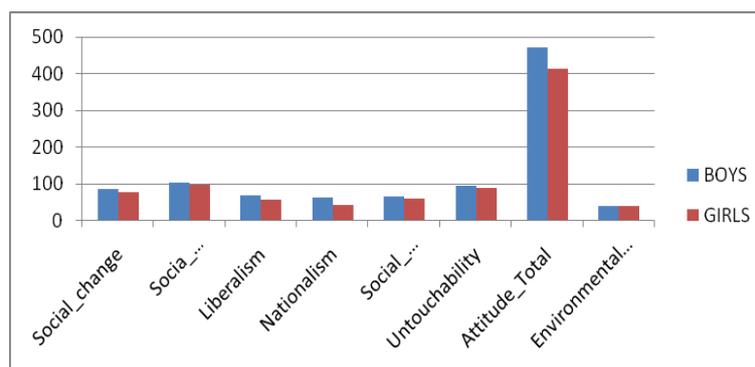
Part 1

Descriptive Analysis

Table No.1 and Graph No.1 shows the Means and SD of gender on both types, table has Means and SD based on number of subjects. The table shows the mean value of Attitude and Environmental Awareness with reference to gender. This table presents the contest in which the difference between Attitude and Environmental Awareness.

TableNo.1. Mean of Attitude and Environmental Awareness in between boys and girls

GENDER		BOYS	GRLS	TOTAL
Social change	Mean	84.6798	75.4538	80.0668
	S.D.	20.65530	23.14297	22.31040
	N	50	50	100
Social Distance	Mean	101.5650	95.8182	98.6916
	S.D.	19.01883	24.40344	21.95739
	N	50	50	100
Liberalism	Mean	65.4964	55.4498	60.4731
	S.D.	25.99639	18.77699	23.11901
	N	50	50	100
Nationalism	Mean	59.6392	41.3216	50.4804
	S.D.	26.61125	22.12995	26.03128
	N	50	50	100
Social Revolution	Mean	64.3722	57.3362	60.8542
	S.D.	23.42803	21.96915	22.8702
	N	50	50	100
Untouchability	Mean	94.1548	87.3400	90.7474
	S.D.	23.26474	32.20635	28.1603
	N	50	50	100
Attitude Total	Mean	469.9540	412.7214	441.3377
	S.D.	94.88974	86.92640	94.99293
	N	50	50	100
Environmental Awareness	Mean	37.8200	39.2000	38.5100
	S.D.	8.32917	5.02646	6.87918
	N	50	50	100



GraphNo.1. Attitude and Environmental Awareness in gender

In Social change boys Mean 84.6798 is greater than girls Mean 75.4538. In Social Distance boys Mean 101.5650 is greater than girls Mean 95.8182. In Liberalism boys Mean 65.4964 is greater than girls Mean 55.44. In Nationalism boys Mean 59.6392 is greater than girls Mean 41.3216. In Social Revolution boys Mean 64.3722 is greater than girls Mean 57.3362. In Untouch ability boys Mean 94.1548 is greater than girls Mean 87.3400. In Attitude boys Mean 469.9540 is greater than girls Mean 412.7214. In Environmental Awareness boys Mean 37.8200 is greater than girls Mean 39.2000.

In total mean of boys' Attitude is greater than girls' Attitude ($B=469.9540 > G=412.7214$) the mean of girls' Environmental Awareness is greater than boys' Environmental Awareness ($G=39.2000 > B=37.8200$). The mean of Attitude is greater than Environmental awareness ($Attitude=441.3377 > Environmental\ Awareness=38.5100$).

Part2

ANOVA

TableNo.2. ANOVA Table of Attitude and Environmental Awareness in Gender

	Sum of Squares	Df	Mean Square	F	Sig
Social_change					
* Gender					
Between Groups	2127.97	1	2127.977	4.423	.038
Within Groups	47149.68	98	481.119		
Total (Combined)	49277.66	99			
Socia_Distance					
* Gender					
Between Groups	825.64	1	825.643	1.725	.192
Within Groups Total	46904.94	98	478.622		
(Combined)	47730.58	99			
Liberalism					
* Gender					
Between Groups	2523.354	1	2523.354	4.907	.029
Within Groups Total	50391.002	98	514.194		
(Combined)	52914.357	99			
Nationalism					
* Gender					
Between Groups	8388.362	1	8388.362	14.005	.000
Within Groups Total	58696.76	98	598.947		
(Combined)	67085.126	99			
Social_Revolution					
*Gender					
Between Groups	8388.362	1	1237.632	2.400	.125
Within Groups Total	58696.76	98	515.758		
(Combined)	67085.126	99			
Untouchability					
* Gender					
Between Groups	1161.037	1	1161.037	1.471	.228
Within Groups Total	77346.384	98	789.29		
(Combined)	78507.421	99			
Attitude_Total					
* Gender					
Between Groups	81889.263	1	81889.263	9.890	.002
Within Groups Total	811452.83	98	8280.131		
(Combined)	893342.09	99			
Environmental_awareness * Gender					
Between Groups	47.610	1	47.610	1.006	.318
Within Groups Total	4637.380	98	47.320		
(Combined)	4684.990	99			

The mean of boys and girls on Social change (mean $B=84.6798$ and $G=75.4538$). The interaction effect between boys and girls is found significant ($F=.038$). This suggests that boys have more social change than girls. The mean of boys and girls on Social Distance (mean $B=101.5650$ and

G=95.8182). The interaction effect between boys and girls is not found significant ($F=.192$). This suggests that boys have more social Distance than girls. The mean of boys and girls on Liberalism (mean B= 65.4964 and G=55.4498). The interaction effect between boys and girls is found significant ($F=.029$). This suggests that boys have more Liberalism than girls. The mean of boys and girls on Nationalism (mean B=59.6392 and G=41.3216). The interaction effect between boys and girls is found significant ($F=.000$). This suggests that boys have more social change than girls. The mean of boys and girls on Social Revolution (mean B= 64.3722 and G=57.3362). The interaction effect between boys and girls is found significant ($F=.125$). This suggests that boys have more social Revolution than girls. The mean of boys and girls on Untouchability (mean B=94.1548 and G=87.3400). The interaction effect between boys and girls is not found significant ($F=.228$). This suggests that boys have more Untouchability than girls.

Total shows, the main effect of gender on Attitude are significant and Environmental awareness are not significant. On the basis of gender, there are not significant difference in Attitude and Environmental Awareness. The mean of boys and girls on Attitude (mean B=469.9540 and G=412.7214). The interaction effect between boys and girls is found significant ($F=9.890$). This suggests that boys have more attitude than girls. The mean of boys and girls on Environmental Awareness (mean B=37.8200 and G=39.2000). The interaction effect between boys and girls is not found significant ($F=1.006$). This suggests that girls have more Environmental awareness than boys.

DISCUSSION

The present study was designed to center Environmental Awareness and Environmental Attitude by effect of gender. Study made an attempt to identify the gender (boys and girls).

Data collected from the U.G. student's subjects has to respond on **Attitude Scale** and **EAAM**. A total of 100 students constituted the sample of the present study. The sample was divided into two groups on the basis of gender: boys and girls. The two variables of gender resulted in One Way ANOVA. Each of these two groups consisted of 50 respondents. This design enables exploration of effects of gender on attitude and environmental awareness. In the present study effect of gender were found on attitude and environmental awareness. There are significant difference is found in Attitude and Environmental Awareness is not significant difference on the basis of gender.

H.1- There will be significant differences in between boys and girls Attitude.

The mean score of boys is higher than girls' Attitude. Thus boys have more Attitude than girls but there are significant difference found in boy and girls Attitude. Thus, we can say that on the basis of gender, boys and girls have difference Attitude level. Boy's attitude is higher about environmental knowledge, skills and value. Boys learned predisposition to respond consistently favorable or unfavorable manner with respect to the environment.

The attitude test is related to the human behavior. It measures both 'potentials' and 'hazards' related to the programme of 'social mobilization'. Out of the six areas, measured by the scale, those of nationalism, liberalism, social change, social revolutionism are potential referents and those of 'social distance' and 'untouchability' speak for 'hazards'. The present scale was developed by Dr. N.S. Chauhan 1985. There are six sub-parts of this Attitude Scale that measure the human behaviour such as: Social Change, Social Distance, Liberalism, Nationalism, Social Revolutionism and Untouchability. The test contains 150 questions. Every sub-part of Attitude has got 25 questions each.

H.2- There will be significant differences in between boys and girls social change.

The mean score of boys is higher than girls' Social change. Thus boys have more Social change than girls but there are significant difference found in boys and girls Social change. Thus, we can say that on the basis of gender, boys and girls have difference social level. Boys are good in social change because they want to do different. They follow the social norms, relationships, institutions and social behavior. So we can say boys have rich attitude comparatively girls.

H.3- There will be significant differences in between boys and girls social Distance.

The mean score of boys is higher than girls Social Distance. Thus boys have more Social Distance than girls. There found no significant difference found in boys and girls Social Distance. Thus, we can say that on the basis of gender, boys have more Social Distance than girls. Boys have social distance because they are not interesting take part in social work. They make their group or club and involve in it.

H.4- There will be significant differences in between boys and girls Liberalism.

The mean score of boys is higher than girls Liberalism. Thus boys have more Liberalism than girls. There found significant difference found in Boys and girls Liberalism. Thus, we can say that on the basis of gender, boys have more Liberalism than girls.

H.5- There will be significant differences in between boys and girls Nationalism.

The mean score of boys is higher than girls in Nationalism. Thus boys have more Nationalism than girls. Here we found significant difference in between Boys and girls Nationalism. Thus, we can say that on the basis of gender, boys have more Nationalism than girls. Boys are more devoted for their nationality. Boys always ready for country welfare so here we can talk about boys nationalism better than girls.

H.6- There will be significant differences in between boys and girls Social Revolution.

The mean score of boys is higher than girls Social Revolution. Thus boys have more than girls Social Revolution. There found no significant difference found in Boys and girls Social Revolution. Thus, we can say that on the basis of gender, boys have more Social Revolution than girls. Boys are always ready up their voice for society. Boys try to change society and make new rules, norms and identity.

H.7- There will be significant differences in between boys and girls Untouchability.

The mean score of boys is higher than girls Untouchability. Thus boys have more than girls Untouchability. There found no significant difference found in Boys and girls Untouchability. Thus, we can say that on the basis of gender, boys have more Untouchability than girls. Boys make believe in cast system. They believe in devidation on basis of human cast and religions.

H.8- There will be significant differences in between boys and girls Environmental awareness.

The mean score of boys is higher than girl's Environmental awareness. Thus girls have more than boys Environmental awareness. There found no significant difference found in Boys and girls Environmental awareness. Thus, we can say that on the basis of gender, girls have more Environmental awareness than boys. Girls are more aware about environment. They know social activities and take part in social works. So they are awareness of environment.

CONCLUSION

"Environmental attitudes provide a good understanding of the set of beliefs, interests, or rules that influence environmentalism or pro-environmental action" (Fernandez-Manzanal et al. 2007). This presumes that if schools inculcate in children positive values and attitudes towards environmental conservation they would take an active role in conserving the environment and its resources and hence preserve them for the future generation.

On the basis of present study it can be concluded that girls have more Environmental Awareness in EAAM and less Attitude in Attitude scale. The boys are more Attitudes in Attitude scale and less Environmental Awareness. The girls and boys do differ significantly in Attitude scale and its three areas social change, liberalism, nationalism, but not significant difference in EAAM and social distance, social revolution or untochability. The study also concluded that college students are found significantly with gender attitude scale. EAAM in gender is not significant.

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