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A STUDY ON LEVEL OF ENVIRONMENTAL AWARENESS AMONG SECONDARY SCHOOL STUDENTS IN GUNTUR DISTRICT, ANDHRA PRADESH

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ABSTRACT:

Environmental awareness is an important factor to control pollution problems that can be overcome through environmental education, this study was examine the environmental awareness in secondary school students, via random sampling method; 240 students have been selected from six different schools in Guntur district, Andhra Pradesh. The normative survey method is used to study the level of awareness in students, the Scale constructed and validated by the investigator and calculated the mean, standard deviations and test of significance. The results indicated that there is no significant level of environmental awareness among the students and it differed with gender and location of students.

Key words: Environmental awareness, secondary school, students, gender

1. INTRODUCTION:

In recent years, the global problems have increased environmental pollution by consumption of resources. Environmental Education(EE) was defined that the learning process which built the people knowledge and awareness regarding the environment and associated problems and develop the necessary skills, expertise and attitude, motivations, to make informed decisions and take responsible actions" (UNESCO, 1978). In India, in spite of the long tradition of environment friendly society, environmental issues have been received serious attention with the global context. At present environment is highly disturbed area in terms of environmental pollution, global warming, acid rain, solid waste, loss of biodiversity etc, have been increasing gradually. That is why protection of environment has now become a challenging matter in front of the contemporary civilian. Ultimately it is a question of shifting one's

mind set. If that ensue to a major segment of society we may begin to win with awareness. (Sampath & Sundaramoorthy 2014) stated that, knowledge of students in any subject can develop and change the attitudes and an activity with awareness environmental education is the potential to provide awareness (Redclift and wood gate 2013). It's very need to be bringing specific awareness campaigns which help to change the attitudes towards conservation. (Agwafo *et al.*, 2008). Therefore, the public awareness is very important to change the people's attitude and value of biodiversity and its protection (Elands *et al.*, 2007), and the people attitudes and perceptions about conservation is very important aspect for conservation (New mark *et al.*, 1993), finally the environmental awareness is the initial step for eventually important for the ability and to carry the responsible citizenship behavior (madhumala *et al.*, 2010). Environmental Education (EE) in India was generally given in environmental science at primary school, social sciences and biological Science at secondary school. The science and technology lessons are covered the environmental education related issues, so that, it becomes essential to buildup awareness regarding environmental problems to every student (Yılmaz *et al.*, 2002, Uzun and Sağlam 2007, Şahin and Gül 2009), only few member of researches from various regions are interests, to focus the environmental awareness at primary school level, although it has been implemented but not successful (Yılmaz and Andersen, 2004. Sağır *et al.*, 2008) or university level (Aydın F., Çepni O., 2010, Coşkun M., Aydın F., 2011), so that, the present study focused on the environmental awareness in secondary school students in Guntur district, and to study the level of environmental awareness regarding environmental issues.

METHODOLOGY

Based on the objective: Environmental Awareness Test – To develop a Test to find out the environmental awareness level amongst the secondary school students in Bapatla mandal, Guntur district, Andhra Pradesh. There are 210 students selected for the study awareness from 6 schools called school A (35), school B (38) and school C (32), school D (35), school E (34), school F (36), located in both rural and urban of Bapatla mandal, Guntur district. This study was carried out by conducting a survey in secondary school students of 8th class, which have been different demographic structures and different socioeconomic stages of the student families, the questionnaires prepared on their knowledge regarding awareness and environmental pollution issues, these are prepared based on their abilities and knowledge levels. It consists of two parts. First one has included the personal information, then second one have been divided into two sub sections; the first sub section is school-media relationship on environmental awareness, whereas second sub section measured the student awareness related to environmental issues and level of participation of students, there are 20 questions prepared regarding the survey. 5 questions are related to personal information. 15 questions are to understand and the importance

of school as well as media on environmental awareness.

- **Tool for measure the level of awareness scale in students.**

Environmental awareness scale was prepared and validated in students of study area, The Questionnaire are 20 items and the validated scale consists twenty statements and five responses – that are strongly agree, agree, undecided, disagree, and strongly disagree. The scoring procedure for every positive response is in descending order which is 5, 4, 3, 2, 1 respectively, the maximum scale is 100 and a minimum scale is 20 based on this, there are 3 levels which are identified that high, average and low level regarding awareness in secondary students, the high level of scoring is 76-100 and a low level scoring is 20-45 and the average level score is 46-75.

Objectives

Major objectives for the present study:-

1. To find out environmental awareness levels in students of secondary school from Bapatla mandal, Guntur district, Andhra Pradesh.
2. Evaluate the EE in language levels in students of secondary school from Bapatla mandal, Guntur district, Andhra Pradesh.
3. Study the gender level awareness regarding environment in students of secondary school from Bapatla mandal, Guntur district, Andhra Pradesh.

Study of hypothesis:

1. no significance difference in the EE among the Secondary School boys and girl is observed.
2. no significant difference in the EE in language level English and Telugu medium of high schools Students of Bapatla mandal, Guntur district.

Sample method

Random sampling method was used, the sample are 210 students from 8th standard from schools in Bapatla mandal, Guntur, Andhra Pradesh.

Statistical method

The environmental awareness level scores were calculated for the various subsamples and evaluate the means and standard deviations (Table-2).

The hypothesis was calculated with the test of 't'test (Tables 3 to 5)

RESULTS AND DISCUSSION

Sampling details are about demographic structures and student participation in the study has been mentioned in table 1. As per the data 46.66% of the students (98 students) are boys and 53.33 % of the students (112 students) are girls. which was taken the sample from

secondary schools from Bapatla mandal, Guntur district, schools called as A 35 students (51.42 % boys, 48.57 % girls), Schools B 38 students (52.63 % boys, 47.36 % Girls), School C 32 students (37.5 % boys, 62.85 % Girls), School D 35 students (37.14 % boys, 62.85 % Girls), School E 34 students (41.17 % boys, 58.82 % Girls), School F 36 students (46.36 % boys, 53.62 % Girls), figure 1), girl students are greater than the boys in the study samples.

Table: 1. Percentage of student sampling from the schools

S.N O	Gender	school A	school B	school C	school D	school E	school F	average %
1	Boys	51.42	52.63	37.5	37.14	41.17	58.33	46.36
2	Girls	48.57	47.36	62.5	62.85	58.82	41.66	53.62

The range of the scores was between, 33 to 82. The mean value observed as 57.98 and the SD was 14.36. It indicates that the EE of the students is very low to moderate level (< 50) table (1), the overall maximum score is 100 is the highest level of environmental awareness.

Table:2 minimum, Maximum, average and SD scores of the students regarding environmental awareness

	Boys	Girls	Both-Telugu	Both-English	Boys-Telugu	Boys-English	Girls-Telugu	Girls-English	Boys and Girls
Min	33	38	33	37	33	37	38	39	33
Max	82	82	81	82	80	82	81	82	82
Average	56.25	59.5	59.1	57.26	55.63	56.61	61.82	57.87	57.98
SD	13.92	14.642	13.51	14.89	13.05	14.49	13.383	15.35	14.36

Table: 3 average and SD of environmental awareness scores

Test	Sample number	average	SD	t test	level of significance
Total sample	210	61.152	9.216	1.432	0.05

The average score of 210 students are 61.15 and SD is 9.21, very low when compare with the maximum score 100.

Hypothesis 1

The variation of environmental awareness scores in both boys and girls in average and SD for environmental awareness scores indicated in table

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Table: 4 the test of significant difference

S.NO	Gender	Sample Number	Average	Standard Deviation	t test	Level of Significance
1	Boys	98	56.255	13.92	0.951	0.05
2	Girls	112	59.5	14.642		

The results (table 4) indicates that the average and SD of boys respondents are 56.25 and 13.92 respectively where as girls respondents are 59.5 and 14.642 , the obtained t -value is 0.951. Thus it indicates that the t- Values are not significant at 0.05 levels so that the Null-hypothesis is accepted. Hence, it indicates that there is no significant between boys & girls respondents, it was indicated that gender does not significantly contribute towards the environmental awareness in secondary school students, based on the average value the girl students have moderate awareness than boys regarding the environmental awareness. (Sengupta et al., 2010) in their study they found that the students girl students have more environmentally aware then boy students in Kolkotta, and similar study on environment awareness in Iran and India by Seyed et al., 2007 showed that no significant difference in both boys and girls their environmental awareness in India or Iran. (Kant and Sharma 2013), Pillai (2012) stated that boys (Mean = 29.84) are better than girls (Mean = 29.14) as regarding awareness in Cuddalore District in Tamil Nadu, Geetha Gopinath 2014 observed that girls have more awareness on the environment in Pathanamthitta District, Kerala State.

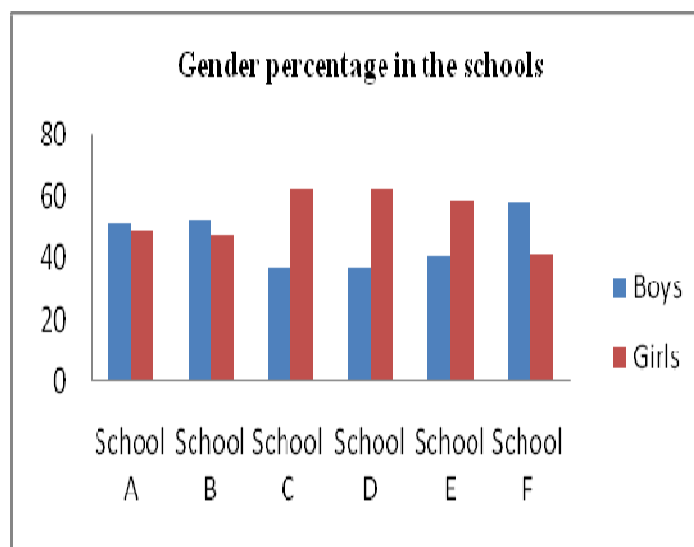


Figure: 1. Gender percentage in school wise in the study area

Hypothesis 2

(Language) medium level Comparison of the environmental awareness scores of English and Telugu in school students

Language level comparison of the average and SD of environmental awareness scores of English and Telugu medium in students (table 5).

Table: 5. language or medium level test of significant difference between the English and Telugu medium in students on their environmental awareness

S.N O	Medium	N	percentage	average	SD	t test	Level of Significance
1	Telugu	82	39%	59.109	13.517	2.182	0.05
2	English	128	61%	57.265	14.895		

in the table 5 that the observed t value is 2.182 was higher than the table value 1.96 at 0.05 level of significance it indicated that a significant difference between english and telugu medium students' on Environmental Awareness. The average score of telugu medium students (59.109) are higher than the Average score of english medium students (57.265). It is indicated that telugu medium students have a higher level of awareness regarding the environmental awareness.

Hypothesis 3

The difference in the level of environmental awareness among students of secondary schools Table 6: percentage and frequency difference in the level of awareness

S.No	Gender	N	Low	Moderate	High
1	Boys	98	35 %	42%	21%
2	Girls	112	40 %	51%	21%
3	Both	120	35.71 %	44.28 %	20 %

the above table indicated the percentage level of EA in secondary school students are 35% of the students belongs to low level, 42 % of the students belong to moderate level, 21% of the students belongs to high level of environmental awareness in boys, and 40 % of the students belongs

to low level, 51 % of the students belongs to moderate level, 21% of the students belongs to high level of environmental awareness in girls, and the total number of sampling have the environmental awareness in secondary school students are

35.71 % is low level, 44.28 % is moderate and 20 % of the students are in high level, so the hypothesis No: 3 was accepted. Sharma, (2014) observed that there was no significant on environmental awareness in male and female students. Mondal and Mete (2010) observed in West Bengal, so that, steps to improve the levels of awareness are required. (Geetha Gopinath 2014)

3.1 Findings

There is significant influence of gender level at 0.951 on the environmental awareness in school students. There is a significant influence of medium level at 2.182. There is significant influence of class of study 0.05 level in secondary school students. Dhanya and Pankajam, (2017), were stated that there is no significant difference of male and female students, and a very less difference between the scores of boys and girls in West Bengal was observed by Mondal and Mete (2010),

The t-value was statistically significant at 0.05 level, so that, the hypothesis 2 was rejected and there is a significant difference on environmental awareness in student between the group based on type of school.

From the study researchers conclude that, the urban and rural students have difference in respect of awareness. This result is supported by Mondal & Mete (2010), and the similar significant difference was recorded by Abraham & Arjunan (2005); Sarkar (2015), Banerjee et al. (2015). Researchers also found that, the boys and girl students have significant difference in awareness on environment. The present study was supported by earlier studies Shahnawaj (1990), and Anujit and Partha (2017). This paper revealed that, the boys were differed significantly from girl students. All these findings suggest to us and to the government as well to make necessary efforts to provide proper materials, library facilities, environment related books in local language for the students who are studying secondary schools, according to the Environmental Protection Act-1986 article-51 clause –A (g), it shall be the duty of citizen to protect the environment & create awareness about environmental problems and pollutions in the society.

CONCLUSION

Environmental awareness in secondary school students differed significantly in relation to pupils' gender, language. Similarly, boys and girls differed significantly in both aspects language; the findings reveal that the total number of sampling have the environmental awareness in

secondary school students 35.71 % is low level, 44.28 % is moderate and 20 % of the students are high level awareness and observed that no significant impact of environmental awareness among the students in secondary schools in the study area. The environmental awareness among the students was moderate level. So that we concluded that it is mandatory to start the awareness at basic level through educational process in school.

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