

**Examining the attitude of Graduate students towards Environment –  
From a Green Social Work Perspective**

John Milton\*, Dr R. Mangaleswaran\*\*

**Abstract**

**Background**

Sustainable Development Goals adopted by the UN General Assembly in 2015 places greater emphasis on protecting the planet. This responsibility to protect and preserve planet earth rests mostly with the students and youth. Therefore, it is felt necessary to examine whether the students, who are major stakeholders, are equipped with a positive attitude and behaviour towards the environment. Their attitude and behaviour largely determine the outcome of environment conservation initiatives across the globe. The present study is pertinent to the Graduate students from Arts and Science stream.

**Method**

Participants of the descriptive study consisted of 60 graduate students from Urumu Dhanalakshmi College, Tiruchirappalli selected through Multi-Stage Random Sampling. Data on Environmental Attitude was collected using Environment Attitude Scale (EAS) constructed by Ugulu, Mehmet Sahin and Suleyman Baslar (2013). EAS consists of four sub-scales and 35 items with responses recorded on a four-point Likert scale, options ranging from strongly agree to strongly disagree (4-Strongly agree, 1-Strongly disagree).

**Results**

The mean score observed for EAS was 101.81/140 (SD = 16.50). The results showed that 28 (46.7%) students have a low attitude towards the environment. It was also drawn that Science students (n=30) (M=108, SD=11.197) have significantly higher attitude towards environment

than Arts students ( $n=30$ ) ( $M=95.63$ ,  $SD=18.685$ ) ( $t=3.109$ ,  $p<0.05$ ). Also, there is a significant difference between domicile and EAS scores ( $t=8.248$ ,  $p<0.001$ ).

## **Conclusion**

The differences in attitude and behaviour towards the environment among the various social and demographic categories is a cause of concern that needs to be taken care of. The study suggests that Social Workers as change agents and social engineers have a bigger role in bringing environmental consciousness among the student community in line with the Green Social Work agenda.

**Keywords:** *Green Social Work, Environmental Attitude, Sustainable Development, Graduate Students.*

**ORCID iD - 0000-0001-7610-1324**

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1Junior Research Fellow, Department of Social Work, Bharathidasan University, Trichy

Email ID- johnmilton@bdu.ac.in,

2Professor & Head, Department of Social Work, Bharathidasan University, Trichy

Email ID- eeswaran@bdu.ac.in,

## **Introduction**

The welfare of the environment has become a major concern throughout the world (Van Rooyen, 1999; Marlow & Van Rooyen, 2001). The world, to some extent, has understood the adverse effects of climate change and the importance of environmental conservation. Environmental disasters and their impact on diverse social groups all across have challenged Social Work practice in modern times. The frequency and complexity of their occurrence and the substantial damage it causes to the well-being of numerous people and the environment and other living organisms is enormous (Dominelli, 2012).

Social workers have been late to participate in environmental movements. Lack of exclusive social understanding of the environment, social work profession by large has overlooked the importance of concerning for the environment. However, with the rise in attention to climate change, increased natural calamities coped with a better outlook on issues surrounding environmental justice has put the spotlight on environmental sustainability and well-being (Gray et al., 2012; Shaw, 2013). Sustainable Development Goals of the United Nation has played a vital in bringing the balance between the economy and the environment. Inclusive growth and development and green economy concepts combine the environment with social

goals such as eradicating poverty and hunger or access to education and health care, investing in alternative energy initiatives (Berutich, 2011; Gupta & Vegelin, 2016). While social workers have engaged themselves in providing humanitarian aid and other psycho-social support to victims of natural disasters, their role in conservation measures is notably scarce.

Recent engagements by social workers in environmental initiatives has given prominence and scope to separate branch of practice with the environment being its central focus. Themes such as Green Social Work, Environmental Social Work and Ecological Social Work are fast emerging indicating a paradigm shift (Gray et al., 2012).

Green Social Work deals with the impact of the faltering environmental stability upon human populations. It is a collective where the social workers and other stakeholders work together in conservation. This may include a wide range of activities including community sensitization, raising awareness among stakeholders, energy conservation, advocating the use of alternate energy etc. Among all stakeholders, the students and youth play an overwhelming role in ecological conservation. Therefore, social workers need to understand the attitude of the younger generation to equip themselves in their collective work in ecological conservation.

In this context, this articles seeks to contribute to the literature regarding social worker's perception and knowledge about the attitude of graduate students towards the environment. It is felt necessary to examine whether the students, who are major stakeholders, are equipped with a positive attitude and behaviour towards the environment. Their attitude and behaviour largely determine the outcome of environment conservation initiatives across the globe.

### **Literature Review**

In the brief survey of available literature, several socio-demographic variables have been suggested to have an impact on the environmental attitude of students. Several pieces of research have pointed out that gender has a significant effect on the outcome of environmental attitude with female students tending to have a higher positive attitude towards the environment than male students (Lepp, 2012; Ozkan, 2013; Ozsoy et al., 2011). However, there are still researches that states gender doesn't impact environmental attitude (Genc, 2015). Students from Urban areas having English medium education said to have higher environmental awareness. However, there has been disagreement on the relationship between income and environmental attitude (Tarrant et al, 1997; Uyeki & Holland, 2000; Ali & Singh 2013). Körükçü & Gülay Ogelman (2015) suggests a positive, significant relationship between the attitudes towards the environment and the social position establishing that the attitude of

students towards the environment was the precursor of their social position. Previous studies also point out a distinction between the environmental attitudes of science students and non-science students. Students with a science background have more interest, knowledge, participation, and contribution towards the environment as compared to students with a non-science background (Choudhary et al., 2020). The existing body of work on student's attitude towards the environment doesn't include the complex social, economic and cultural variables. Therefore a thorough investigation into the phenomenon must be needed more so from a Green Social Work perspective.

## **Methods**

### *Aims of the study*

The main aim of the present study is to examine the attitude of the graduate student towards the environment.

### *Objectives of the study*

- 1) To study the socio-demographic characteristic of respondents.
- 2) To examine the attitude of students towards the environment from a social work perspective.
- 3) To study the association/difference between attitude and other variables.
- 4) To suggest the necessary measure to improve the attitude of the students

### *Hypotheses*

- 1) The gender of the students significantly differs the attitude of the students towards the environment.
- 2) Stream of study of the students significantly differs the attitude of the students towards the environment.
- 3) There is a significant difference between students' domicile and students' attitude towards the environment.
- 4) The attitude of the students towards the environment significantly varies with the religion of the respondents.
- 5) The attitude of the students towards the environment significantly varies with the community of the respondents.

### *Participants*

The universe of the present study consisted of Final Year Graduate Students of Urumu Dhanalakshmi College, Tiruchirappalli. By adopting Multi-Stage Random Sampling, the researcher in the first step narrowed down to two departments, one from Arts (Department of English) and one from Science (Department of Chemistry). In the second step, sample units were selected randomly from the selected departments. The final sample size is 60 students, with an equal proportion of male and female students.

### *Instrument*

Environment Attitude Scale: The score obtained on 35 items of the Environment Attitude Scale constructed by Ugulu, Mehmet Sahin and Suleyman Baslar (2013) was used to measure the Environmental Attitude from Students. The EAS has been created to measure four specific attitudes of Environment Attitudes: Environmental Awareness, Attitude towards recovery, Attitude towards recycling and Environmental Consciousness and Behaviour. Responses for each scale item is recorded on a four-point Likert scale, options ranging from strongly agree to strongly disagree (4-Strongly agree, 1-Strongly disagree). The maximum score that can be obtained from the instrument is 140 and the minimum score is 35. The reliability of the scale was tested using IBM SPSS V20 for 35 scale items. Cronbach's Alpha ( $\alpha=0.908$ ) score was achieved indicating the reliability of data.

### *Statistical Analysis*

Both descriptive and inferential statistics were used to analyse the scores. Mean and standard deviations for the groups of each variable were computed. T-test and Analysis of Variance tests were carried out to test the hypotheses.

## **Results**

Basis frequencies of the demographic variables can be seen in Table 1. Several demographic features of the survey are in line with the previous studies conducted. The respondents are primarily between 20 to 21 years old (93.3%), equally distributed in terms of gender male (50%) and female (50%) and the stream of study (50%) science students and (50%) arts students. More than half of the respondents are second-born (53.3%) followed by third born (25%).

### **Table 1**

*Frequency distribution of the demographic variables*

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<b>Category</b>	<b>Variable</b>	<b>n</b>	<b>%</b>
<b>Age</b>	Below 20 years	2	3.3
	20 to 21 years	56	93.3
	Above 21 years	2	3.3
<b>Gender</b>	Male	30	50.0
	Female	30	50.0
<b>Stream of Study</b>	Arts	30	50.0
	Science	30	50.0
<b>Birth order</b>	First	13	21.7
	Second	32	53.3
	Third	15	25.0
<b>Religion</b>	Hindu	43	71.7
	Christian	8	13.3
	Muslim	9	15.0
<b>Community</b>	BC	32	53.3
	MBC	14	23.3
	SC	14	23.3
<b>Domicile</b>	Urban	15	25.0
	Rural	45	75.0
<b>Monthly family income</b>	Upto Rs.10000	18	30.0
	Rs.10001 to Rs.20000	23	38.3
	Rs.20001 to Rs.30000	8	13.3
	Above Rs.30000	11	18.3
<b>Participated in environment-related initiatives</b>	Yes	45	75.0
	No	15	25.0
<b>Interested in undertaking an environmental awareness campaign</b>	Yes	56	93.3
	No	4	6.7

Source: Primary Data

Almost 72 per cent of the respondents identified themselves as Hindus, while Muslims are 15 per cent. Respondents were majorly (75%) from rural households and the rest (25%) from urban. Concerning monthly family income (38.3%) respondents have income between Rs.

10001 to Rs. 20000. Some 75 per cent of the respondents have participated in environment-related initiatives.

**Table 2**

*Frequency distribution of the respondents on the Environmental Attitude Scale*

<b>Sub-Scales on Environment attitude</b>	<b>Value</b>	<b>n</b>	<b>%</b>
<b>Environmental awareness</b>	Low	29	48.3
	High	31	51.7
<b>Attitudes towards recovery</b>	Low	27	45.0
	High	33	55.0
<b>Attitudes towards recycling</b>	Low	21	35.0
	High	39	65.0
<b>Environmental consciousness and behaviour</b>	Low	20	33.3
	High	40	66.7
<b>Overall Environment attitude</b>	Low	28	46.7
	High	32	53.3

Source: Primary Data

Based on the responses received on the Environmental Attitude Scale, a score for each of the sub-dimensions are computed. High and low values are obtained using the median measurement. The results suggest an overall slightly higher attitude on all of the subscale and also on the overall Environment attitude. Environmental Consciousness and behaviour one of the subscales have a high score with 66.7 per cent exhibiting high environmentally conscious behaviour followed by attitude towards recycling (65.0%) and attitude towards recovery (55.0%). Environmental awareness has a marginally high low score (48.3%) than other dimensions. Overall Environmental Attitude suggests a 53.3 percentage of respondents have a positive environmental attitude.

### **Hypothesis 1**

**Table 3**

*The T-test between Gender of the students with regard to Environmental Attitude*

Gender	Environmental Attitude			Statistical Inference
	N	Mean	SD	
Male	30	108.50	9.02391	<b>t =3.409</b> p < 0.01
Female	30	95.1333	19.48781	<b>Significant</b>

Source: Primary Data

To know the mean difference in Environmental Attitude between male and female respondents t-ratio was calculated. The result is presented in Table 3. The independent t-ratio indicates that there is a significant mean difference between genders on Environment attitude with male students (n=30) (M=108.5, SD=9.023) having a higher mean compared to the female students (n=30) (M=95.13, SD=19.487). The difference is statistically significant (t=3.409, p<0.01). The results of the present empirical investigation have revealed a stark contrast to the already existing body of knowledge. Earlier studies have pointed out that female students are more environmentally conscious than male students (Lepp, 2012; Ozkan, 2013; Ozsoy et al., 2011). However, the results contradict with male students being more environmentally oriented.

**Hypothesis 2****Table 4***The T-test between Stream of study with regard to Environmental Attitude*

Stream of Study	Environmental Attitude			Statistical Inference
	N	Mean	SD	
Arts	30	95.6333	18.68520	<b>t =3.109</b> p < 0.05
Science	30	108.00	11.19729	<b>Significant</b>

Source: Primary Data

The independent t-test between stream of study and environmental attitude suggests Science students (n=30) (M=108, SD=11.197) are more positive towards the environment than the arts students (n=30) (M=95.63, SD=18.685). The difference was statistically significant (t=3.109, p<0.05). Hence the research hypothesis stands accepted. The research also reveals that science



students are faring better than the art students validating the earlier studies (Choudhary et al., 2020).

### Hypothesis 3

**Table 5**

*The T-test between Domicile of the respondents with regard to Environmental Attitude*

Stream of Study	Environmental Attitude			Statistical Inference
	N	Mean	SD	
Urban	15	81.0000	15.29239	<b>t =8.248</b> p < 0.001 <b>Significant</b>
Rural	45	108.76	9.66991	

Source: Primary Data

The mean difference between Urban and Rural students in respect of Environmental Attitude indicates that Rural students (n=45) (M=108.76, SD=11.197) has a higher mean in comparison with the Urban students (n=15) (M=81, SD=15.292). The results indicate that rural students have a higher positive attitude towards the environment than urban students. The mean difference is statistically significant (t=8.248, p<0.001). Also, the rural students have a higher environment attitude than urban students contradicting the earlier studies (Ali & Singh 2013).

### Hypothesis 4

**Table 6**

*One-way analysis of variance among the Religion of students and Environmental Attitude*

Religion	Environmental Attitude				Statistical Inference
	Df	SS	MS	$\bar{X}$	
Between Groups	2	7396.098	3698.049	G1=95.1395	<b>F=24.344</b> <b>P &lt; 0.01</b> <b>Significant</b>
Within Groups	57	8658.885	151.910	G2=112.25 G3=124.44	

G1= Hindu, G2= Christian, G3= Muslim

Source: Primary Data

One-way analysis of variance was performed to know the difference between the religion of the students and their environmental attitude. The analysis of variance showed that religion was significant, ( $F=24.344$ ,  $p<0.01$ ), with regard to Environmental Attitude. The analysis indicated that Students of the Muslim faith have a higher mean ( $M=124.44$ ) than the other religions.

Table 7 indicates that community has a significant variance in determining the environmental attitude. Scheduled Caste students reported having a higher mean ( $M=110.57$ ) value on environmental attitude than students of Backward and Most Backward communities. F-ratio score of 5.606 was obtained and significance is achieved at 0.05 level.

**Hypothesis 5**

**Table 7**

*One-way analysis of variance among the Community of students and Environmental Attitude*

Religion	Environmental Attitude				Statistical Inference
	Df	SS	MS	$\bar{X}$	
Between Groups	2	2639.086	1319.543	G1=95.7188	<b>F=5.606</b>
Within Groups	57	13415.897	235.367	G2=107.00 G3=110.57	<b>P &lt; 0.05</b> <b>Significant</b>

G1= BC, G2= MBC, G3= SC

Source: Primary Data

**Discussion**

Debates are emerging on the profound effect of human activity on the environment around the world. The extent of environmental damage and the anthropogenic effect of climate change has been well reported in the scientific reports (Beeton et al., 2006; Garnaut, 2011; Intergovernmental Panel on Climate Change, 2007). Environmental damage, in all of its dimensions, will have widespread and potentially devastating social impacts, especially on those who are already disadvantaged (United Nations Environment Programme, 2007).

Social workers across the globe are starting to realise their need to actively engage in environmental conservation. It can no longer focus on the human aspect of society as there is a need to concentrate more on the non-human aspects as well (Gray et al., 2012). But this engagement has to happen in tandem with other stakeholders, the people. Social workers have a tremendous role in educating and sensitizing the students and youth.

The study suggests an explicit need for environmental education among graduate students. It is specifically the role of social workers as change agents to initiate this process in building environmental consciousness and in promoting pro-environmental attitude and behaviour among the students.

Green Social Work mandates social workers to lead the revival process. Social workers may play a leading role by establishing an understanding of the interrelationship that exists between people and the environment, the integration of environmental issues into their social work practice, and advocating for vulnerable populations who are at risk of the catastrophic effect for environmental degradation and climate change (Gray et al., 2012; Jones, 2012; Shaw, 2013).

Increased commitment to ecological orientation is essential in the future for the students and social workers. This can be promoted in three ways, (1) by focusing on adding environmental content into the existing curriculum; (2) by embedding content on ecology and sustainability; and (3) or transform the curriculum to reflect a holistic environmental orientation for both graduate students and the students of social work (Jones, 2012).

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Conflict of Interest – None

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