

ATTITUDE REGARDING ENVIRONMENTAL EDUCATION AND SUSTAINABLE DEVELOPMENT: A CASE STUDY OF HIGH SCHOOL TEACHERS OF DISTRICT KUPWARA

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ABSTRACT

This study provides a detailed description of the attitudes of high school teachers towards environmental education and sustainable development. The study surveyed 600 teachers in 50 different high schools of district Kupwara of Jammu and Kashmir State, India. After the statistical analysis of the collected data, it was revealed that majority of the teachers have positive attitudes regarding environmental education and sustainable development.

INTRODUCTION

Environmental education internationally gained recognition when the UN Conference on the Human Environment held in Stockholm, Sweden, in 1972, declared Environmental Education must be used as a tool to address global environmental problems. In 1977, delegates to the United Nations Intergovernmental Conference on Environmental Education in Tbilisi, Georgia, in the former USSR, developed a series of fundamental concepts which environmental education (EE) organizations and institutions have accepted as their definition of EE. A single goal statement written in Belgrade, Yugoslavia in 1975 has been adopted as a widely accepted goal statement for EE according to the North American Association for Environmental Education (NAAEE, 1996). Environmental education is a process of developing a world population that is aware of and concerned about the total environment and its associated problems, and which has the knowledge, skills, attitudes, motivations and commitment to work individually and collectively towards solutions of current problems and the prevention of new ones. (UNESCO-UNEP, 1976 in Athman and Monroe, 2000, p. 38). Environmental education has been an area of concern in all curriculum development programmes in India. The National Policy on Education, 1986(NPE) states that "Protection of the Environment" is a value which along with certain other values must form an integral part of curriculum at all stages of education. There is a paramount need to create a consciousness of the environment. It must permeate all ages and all sections of society, beginning with the child. Environmental consciousness should inform teaching in schools and colleges. This aspect will be integrated in the entire educational process. The world is now alarmed with various environmental problems such as climate change, ozone layer depletion, global warming so on. Many of these problems are the result of irresponsible environmental behaviour, which is highly influenced by the attitudes people possess (Meinhold and Malkus,

2005; Ramsey and Rickson, 1976). In other words people's decision making is guided by the values and attitudes they possess (Rennie, 2005, 2007). Environmental attitudes are therefore a big concern in significant environmental education research (e.g; Bradley, Waliczek, and Zajicek, 1999; Clarke, 1996; Lee, 2008; Ridener, 1997). Consequently promoting environmental attitudes and knowledge has been considered as an important part of environmental education as suggested in the respective international conventions and charters.

The sustainable development is defined as a course of action or development which focuses on environmental protection while using the available resources to meet the needs of the people at present without destroying or exhausting resources because they will be needed by future generations to sustain their lives (Breiting, 2000). It is therefore about bringing social, economic and environmental factors together (Gough, 2002) because none of them can be understood in isolation. It can be said that the essence of introducing sustainable development is to dissolve the artificial boundaries between the environment, economy and the society. As people needed to be educated about the environment through environmental education, it was envisaged that some form of education needs to be put in place to address the issue of sustainable development. Therefore, this resulted into the emergence of education for sustainable development from 1992 (Barraza et al., 2003). Education for sustainable development is defined by the Council for Environmental Education for National Curriculum for England and Wales as education that enables people to develop knowledge, values and skills to participate in decision-making about the way they do things individually and collectively, both at local and global levels, that will improve the quality of life now without damaging the planet for the future (CEE, 1998). The origin of education for sustainable development can be traced back to agenda 21 chapter 36, where it was stated that states should be committed to the promotion of education, public awareness and training in order to achieve socio- economic and ecological sustainability. Therefore, it can be said to be education which aims at empowering people to take responsibility for working for a sustainable future (UNESCO, 2002). The terms environmental education and education for sustainable development have given rise to debate concerning how they are defined and relate to each other. There are arguments that environmental education has evolved to become education for sustainable development (Fien, 2001; Tilbury and Cooke, 2005; Yang, Lam and Wong, 2010) and others claim that they are the same and are used interchangeably to describe the same thing. As a result, there are different perspectives about the relationship that exists between environmental education and education for sustainable development. Explaining these perspectives, Hesselink, Van Kempen and Wals (2000) and Wals and Jickling (2000) pointed out that there are four perspectives regarding the relationship between environmental education and education for sustainable development. The first perspective involves environmental education being perceived as part of education for sustainable development. The second perspective is the reverse of the first one, where education for sustainable development is considered as part of environmental education. The third perspective is where environmental education overlaps with education for sustainable development, and the fourth perspective involves perceiving education for sustainable development as a stage in the evolution of environmental education. The critical aspects in the two terms are education and environment. But in environmental education, the kind of education specified is education that will contribute to the creation of a more democratic and environmentally just world, and in education for sustainable development it is to contribute to the creation of a

more sustainable world where individuals live in the environment in a sustainable manner. The declaration of 2005 to 2014 as the Decade of Education for Sustainable Development heralds a new phase in the continuous evolution of environmental education and its subsidiary, conservation education. This initiative, for which UNESCO is the lead agency, is an international educational effort that aims to encourage changes in behaviour that will create a more sustainable future in terms of environmental integrity, economic viability and a just society for present and future generations (UNESCO, 2005).

Sustainable development is the overarching paradigm of the United Nations. The concept of sustainable development was described by 1987 Brundtland Commission Report as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. Sustainability is a paradigm for thinking about a future in which environmental, social and economic considerations are balanced in the pursuit of development and an improved quality of life. These three spheres-society, environment and economy- are intertwined. For example, a prosperous society relies on a healthy environment to provide food and resources, safe drinking water, and clean air for its citizens. The sustainability paradigm is a major change from the previous paradigm of economic development with its damaging social and environmental consequences. Until recently these consequences have been seen as inevitable and acceptable. However, we now realize that major damage or serious threats to the well-being of humans and the environment in pursuit of economic development have no place within the sustainability paradigm. (Education for Sustainable Development, Source Book, UNESCO, 2012). Sustainability is often thought of as a long- term goal (i.e., more sustainable world), while sustainable development refers to the many processes and pathways to achieve it (e.g., sustainable agriculture and forestry, sustainable production and consumption, good government, research and technology transfer, education and training, etc). All sustainable development programmes must consider the three spheres of sustainability-environment, society and economy- as well as an underlying dimension of culture. Since sustainable development addresses the local contexts of these three spheres, it will take many forms around the world (ibid, UNESCO, 2012).

The focus of the investigator in the present study was to find out the attitudes of high school teachers towards environmental education and sustainable development and to sensitize them about the various complex local environmental issues. The sample of this study consisted of 600 high school teachers of district Kupwara of Jammu and Kashmir State. The investigator developed a four point Likert type attitude scale having both and negative statements regarding the attitudes towards environmental education and sustainable development. The investigator collected the data by using descriptive type of survey method and simple random sampling procedure to select the sample (participants).

II.OBJECTIVES OF THE STUDY

The present study was designed with the following objectives :

1. To study the extent of attitude towards environmental education and sustainable development of secondary school teachers in Kupwara district of Jammu and Kashmir State.
2. To study the difference in attitude towards environmental education and sustainable development of the sub-samples based on:
 - i. Gender
 - ii. Locality
 - iii. Type of management of school
 - iv. Teaching experience
 - v. Teaching subjects
 - vi. Marital status
 - vii. Income of the teachers

III.HYPOTHESIS OF THE STUDY

Hypothesis was formulated based on the objectives to give direction to the study.

1. **H₁**: There is no significant difference between the following sub- samples of teachers with respect to environmental education.
 - (a) Male and Female
 - (b) Rural and Urban
 - (c) Government and Private
 - (d) Varying Teaching Experience
 - (e) Subject of Specialization
 - (f) Married and Unmarried
 - (g) Income of the Teachers
2. **H₂**: There is no significant difference between the following sub- samples of teachers with respect to sustainable development.
 - (a) Male and Female
 - (b) Rural and Urban
 - (c) Government and Private
 - (d) Varying Teaching Experience
 - (e) Subject of Specialization
 - (f) Married and Unmarried
 - (g) Income of the Teachers
3. **H₃**: There is no significant difference between the following sub- samples of teachers with respect to attitude towards environmental education.

- (a) Male and Female
 - (b) Rural and Urban
 - (c) Government and Private
 - (d) Varying Teaching Experience
 - (e) Subject of Specialization
 - (f) Married and Unmarried
 - (g) Income of the Teachers
4. **H₄**: There is no significant difference between the following sub- samples of teachers with respect to attitude towards sustainable development.
- (a) Male and Female
 - (b) Rural and Urban
 - (c) Government and Private
 - (d) Varying Teaching Experience
 - (e) Subject of Specialization
 - (f) Married and Unmarried
 - (g) Income of the Teachers

IV.LIMITATIONS OF THE STUDY

1. The present study was confined only to the secondary schools of Kupwara District of Jammu and Kashmir State.
2. The Sample drawn for this study was restricted only to the teachers of secondary schools of Kupwara district.
3. In the present study some selected variables like gender, locality, teaching experience, type of management of secondary schools, subject stream of teachers, marital status of teachers and income of the teachers were only taken into consideration.
4. Validity and reliability of the tools used in the present study were assumed.

V.METHODOLOGY OF THE STUDY

In the present study, the investigator used the descriptive type of survey method and simple random sampling procedure to select the sample (participants). The sample consisted of 600 high school teachers drawn from 50 different schools of district Kupwara. The instruments / tools used for the collection of data consisted of a four point Likert type attitude scale.

VI.GENERAL PROFILE OF THE STUDY

The below mentioned section will study the general profile of the collected sample i.e., 600 secondary school teachers. Figure I indicate the gender distribution of the collected sample of teachers in which 70% teachers are male and 30% teachers are female.

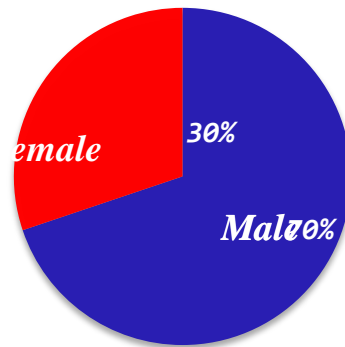


Fig: I Distribution of Teachers by Gender

According to the distribution of teachers by locality, the research findings shows that majority of the teachers (68%) are working in rural areas and only (32%) are working in urban areas of the district (Fig. II).

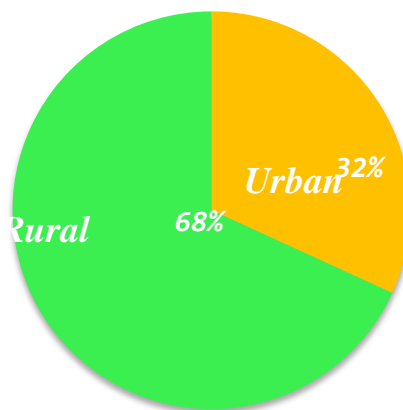


Fig: II Distribution of Teachers By Locality

Based on the teaching experience of the sampled teachers, they were categorized into five groups viz; 0-5 years, 6-10 years , 11-15 years , 16-20 years , and 21 years and above. The research findings shows that 35% teachers belong to 0-5 years of teaching experience category , 32% belong to 6-10 years , 15% belong to 11-15 years , 12% belong to 16-20 years and only 6% belong to 21 and above years of teaching experience category (Fig III).

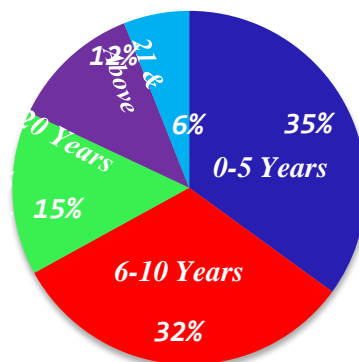


Fig: III Distribution of Teachers by Teaching Experience

According to the teaching subject of the sampled teachers, the research shows that 60% belong to Arts category and only 40% belong to Science stream (Fig IV).

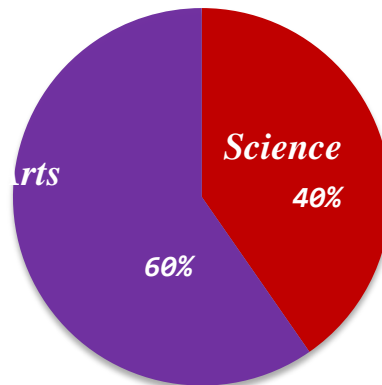


Fig: IV Distribution of Teachers by Teaching Subject

Fig: V represents the Marital Status of the sampled teachers which shows that 66% teachers are married and 34% teachers are unmarried.

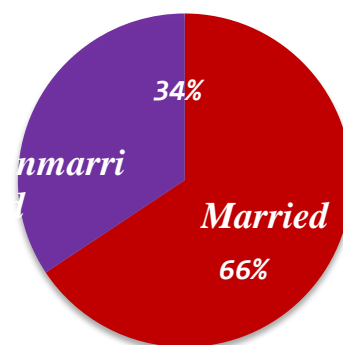


Fig: V Distribution of Teachers by Marital Status

Out of the total surveyed teachers, the type of management of the schools indicates that 52% teachers are working in private educational institutions and only 48% teachers are working in government schools.(Fig VI).

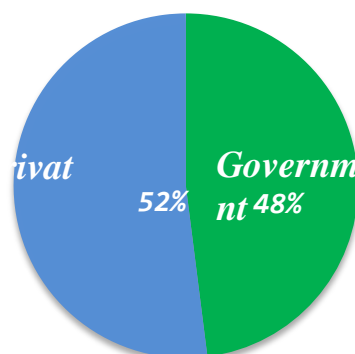


Fig: VI Distribution of Teachers by Type of Management

Based on the income of the sampled teachers, they were divided into five groups like income of the teachers less than one lakh consisting of 41%, one lakh to three lakh(12%), three lakh to five lakh (28%), five to seven lakh (14%) and seven lakh and above income teachers consisting of only 5%. (Fig: VII)

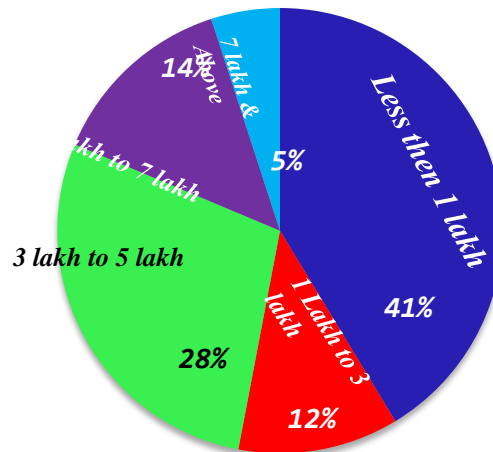


Fig: VII Distribution of Teachers by Annual Income

VII. DISCUSSION AND RESULTS

A four point Likert type attitude scale was developed by the investigator to collect the data regarding the high school teacher’s attitudes towards environmental education and sustainable development. The scale consisted of 30 statements having both positive and negative items on environmental education and sustainable development. The scale had the options of mostly, generally, to some extent and very little with scoring pattern of 4,3,2,1 if the statement was positive and 1,2,3,4 if the statement was negative. It was administered to 600 high school teachers of district Kupwara of Jammu and Kashmir State. After the statistical analysis of the collected data, the results reveal that majority of the teachers possess positive attitudes towards environmental education and sustainable development. Figure VIII shows the distribution of male teacher’s response for attitude assessment test for positive items on environmental education and sustainable development.

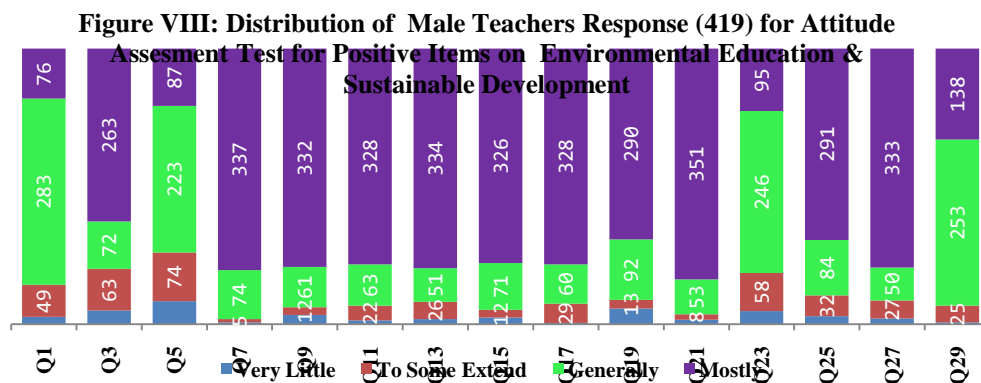


Figure VIII shows the distribution of male teachers response for attitude assessment test for negative items on environmental education and sustainable development.

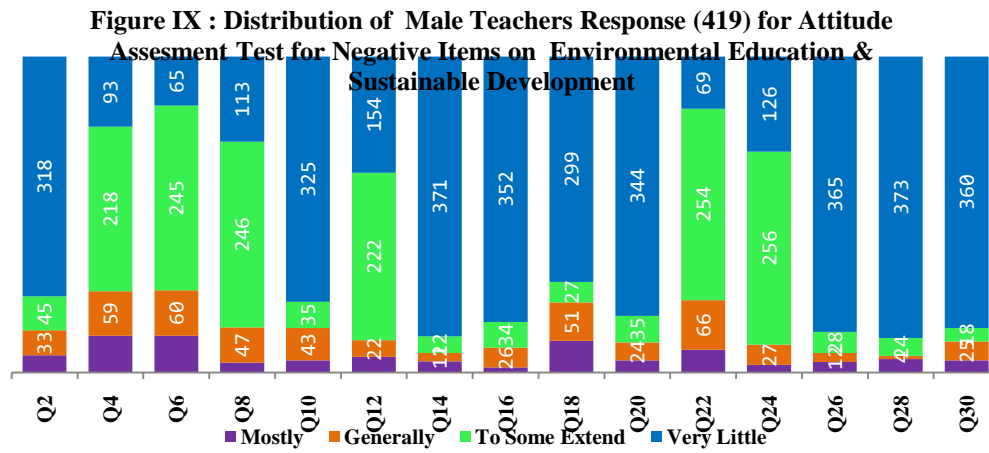


Figure IX shows the distribution of female teachers response for attitude assessment test for positive items on environmental education and sustainable development.

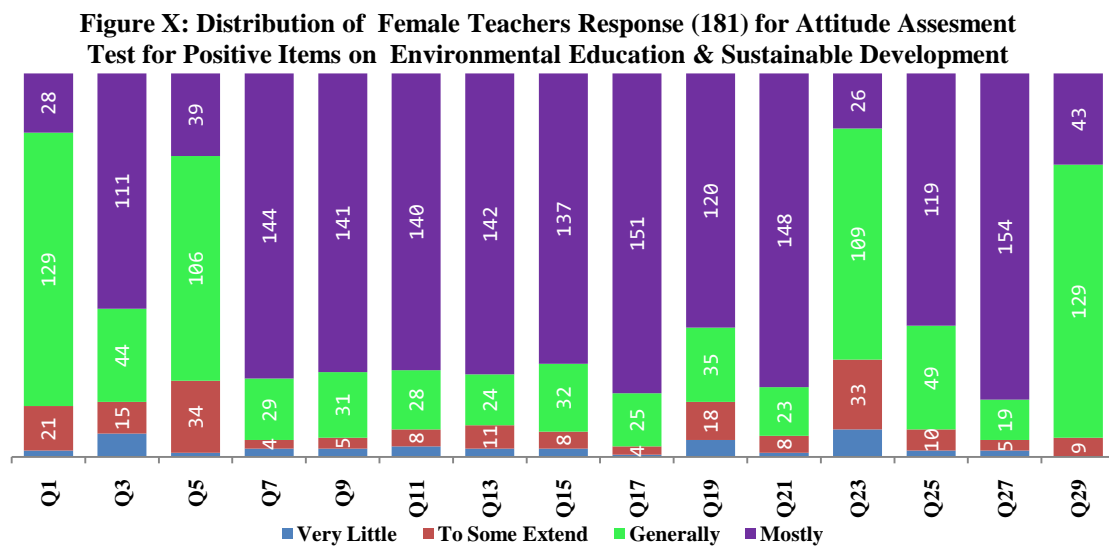
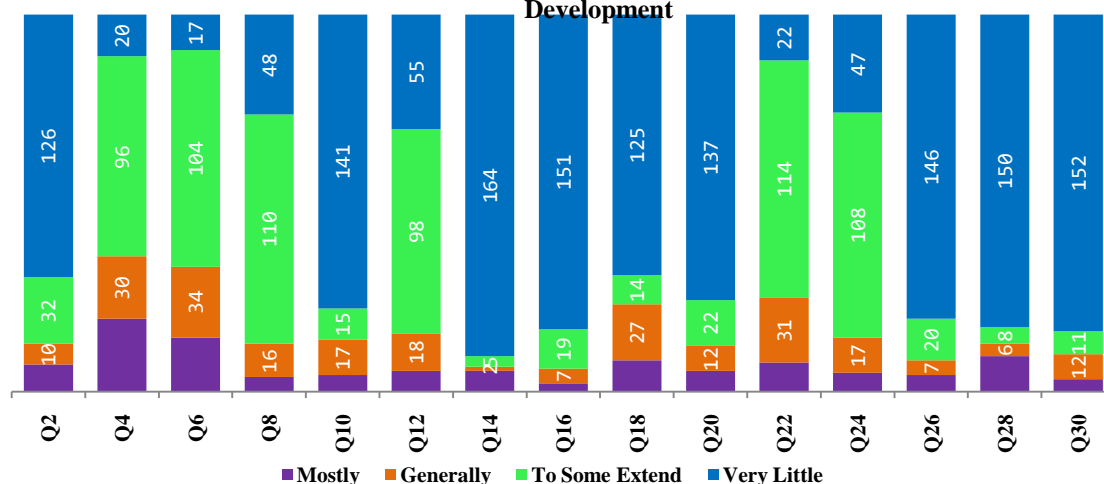


Figure X shows the distribution of female teachers response to attitude assessment test for negative items on environmental education and sustainable development.

Figure XI: Distribution of Female Teachers Response (181) for Attitude Assessment Test for Negative Items on Environmental Education & Sustainable Development



Similar analysis was done for other variables of the study like rural and urban, government and private, science and arts and married and unmarried variables. A Chi- Square Test was done on the total number of items of the attitude scale for all the variables of the study, the results of which are shown below in table 1.

Criteria	Test applied	Value	df	P.value
Gender	Pearson Chi-Square	12.5395409	3	0.00575
Locality	Pearson Chi-Square	47.50564918	3	0.00000
Type of Management	Pearson Chi-Square	11.91653563	3	0.00767
Subject	Pearson Chi-Square	6.347572623	3	0.09587
Marital Status	Pearson Chi-Square	1.927922887	3	0.58750

Table 1. Chi- Square Test

VIII.CONCLUSION

The world is now alarmed with various environmental problems, such as climate change, ozone layer depletion, global warming, and so on. Many of these problems are the result of irresponsible environmental behavior, which is highly influenced by the attitudes people possess (Meinhold and Malkus, 2005; Ramsey and Rickson, 1976). In other words people’s decision making is guided by the values and attitudes they possess (Rennie, 2005, 2007). Environmental attitudes are therefore a big concern in significant environmental education research (e.g., Bradley, Waliczek, and Zajicek, 1999; Clarke, 1996; Lee, 2008; Ridener, 1997). Consequently promoting environmental attitudes and knowledge has been considered as an important part of environmental education as suggested in the respective international conventions and charters. Sustainable development is the overarching paradigm of the United Nations. The concept of sustainable development was described by 1987 Brundtland

Commission Report as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. Sustainability is a paradigm for thinking about a future in which environmental, social and economic considerations are balanced in the pursuit of development and an improved quality of life. These three spheres-society, environment and economy- are intertwined. For example, a prosperous society relies on a healthy environment to provide food and resources, safe drinking water, and clean air for its citizens. The sustainability paradigm is a major change from the previous paradigm of economic development with its damaging social and environmental consequences. Until recently these consequences have been seen as inevitable and acceptable. However, we now realize that major damage or serious threats to the well-being of humans and the environment in pursuit of economic development have no place within the sustainability paradigm. (Education for Sustainable Development, Source Book, UNESCO, 2012). Thus the main purpose of the study was to study the attitude of secondary school teachers towards environmental education and sustainable development and how sustainable development helps in the conservation of the environment. The analysis of the collected data shows that majority of the teachers had positive attitudes towards environmental education and sustainable development.

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