



RESEARCH ARTICLE

ENVIRONMENTAL AWARENESS, ATTITUDE AND PARTICIPATION AMONG SECONDARY SCHOOL STUDENTS IN MOGADISHU-SOMALIA

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ARTICLE DETAILS

Article History:

Received 04 May 2021
Accepted 08 June 2021
Available online 17 June 2021

ABSTRACT

Environmental degradation poses a major threat to the existence of humanity today both in rural and urban settlements. In such a scenario, the importance and need for environmental education as a tool for environmental management and conservation cannot be overemphasized. To raise environmental literacy level among Somalians, Environmental Education is taught using both interdisciplinary and multi-disciplinary approaches. The aim of this study was to establish the level of awareness, attitude and participation of secondary school students in environmental activities in these two different settlements. The study involved a sample of 200 and secondary school students randomly selected from secondary schools in Mogadishu Divisions. Data was primarily collected using researcher developed questionnaires. Analysis of the data was done by first coding them in SPSS version 2016. The study has achieved its objective by drawing a comparison between students in different sections of an urban divide. It was also found out that there is need to refocus the approach of EE in order to ensure that it does not only make learners aware but also create a sense of personal responsibility which is fundamental in ensuring sustainable environmental behavior. The findings of the study may be used by authorities in making priorities in terms of environmental education for various settlements in urban set up. It will also help in tailoring EE approach to make it relevant and responsive to the immediate concerns and responsibilities of students and the entire community by environmental concern.

KEYWORDS

Awareness, Attitude, Participation, Environment Education.

1. INTRODUCTION

At the dawn of the 21st century, a powerful and complex web of interactions has contributed to unprecedented global trends in environmental degradation (UNESCO, 2012). These include rapid globalization, urbanization, poverty, unsustainable consumption patterns and population growth. They have served to compound the effects and intensity of the global environmental problems. Global climate change, depletion of the ozone layer, desertification, deforestation, loss of the planet's biological diversity, trans-boundary movements of hazardous wastes and chemicals are all environmental problems that touch every nation and adversely affect the lives and health of their populations (UNEP, 2012). Environmental awareness implies information and understanding of the environment, its creatures and simultaneously to solve the related environmental problems.

In recent days environmental awareness is very important issue. Lack of awareness towards environment will lead to destruction of the earth and living beings. Some researchers emphasized the importance of environmental awareness to individuals about ecology and ecological balance and to combine the knowledge with values leading to action. The level of global environmental challenges is now beyond serious scientific dispute. In cognizance of the role of an informed and educated citizenry in

making appropriate environmental decisions and adopting behavioral approach in addressing environmental challenges, the concept of Environmental Education (EE) was born (Crompton and Kasser, 2009). The importance of Environmental Education (EE) is recognized and emphasized as one of the most effective ways, if not the only way, to meet the complicated problems of the environment.

The call for EE is therefore a call for local, regional and global action in response to the biophysical and social problems of the abused environments of the whole world. It is a call to educational system that fosters or encourages the development of environmentally literate citizens who share concern for the environment in which they live and in which future generations will also have to live (Crompton and Kasser, 2009). Studies generally tend to examine students' environment attitudes in relation to environmental knowledge, interest, behavior as well as socio-economic variables have been carried out all around the world in developed as well as developing countries (Huang and Yore, 2003; Makki et al., 2003; Negev et al., 2008). Lavonen and Meisalo examined the Finnish students' environmental attitudes across gender. They found overall positive attitude towards environment across gender.

In a comparative study they reported that both Canadian and Taiwanese 5th grade students held positive behaviour and attitudes towards the

Quick Response Code



Access this article online

Website:
www.educationsustainability.com

DOI:
10.26480/ss.02.2021.50.53

environment. Moreover, they expressed a high emotional disposition toward the environment and high concern about environmental problems and issues as well as a moderate level of environmental knowledge. EE finds its formal root in the United Nations Conference on the Human Environment in Stockholm of 1972. This conference recommended establishment of an International Environmental Education Programme (UNEP, 1972). IEEP was launched in 1975. It recommended the primary categories of environmental education curriculum goals and objectives comprising of environmental awareness, attitudes, skills and participation, which comprise the subject of this study (UNESCO, 1999).

The United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro in 1992 reiterated, in Agenda 21, that through EE, school children are obliged to participate actively in guarding the quality of the environment. This is because they comprise half of the world population and are highly vulnerable to the effects of environmental degradation now and in the future (United Nations, 1994). Moreover, secondary school students are usually receptive and strongly motivated and are capable of understanding the implications of environmental destruction and of trying to take preventive action. However, for school children to meaningfully participate in environmental conservation activities, they require knowledge and skills gained through EE. These qualities are personal thought, feeling and action which develop in the students through an educational process that creates awareness, develops attitude and builds capacity and willingness to take action as an individual and as a group (Toili, 2007).

In Somalia, whereas EE has existed in secondary schools since 1985, concern has been raised to the effect that students do not adequately participate in protecting and enhancing environmental quality because of lack of awareness and appropriate attitude. In 1989, for example, the Minister for Environment and Natural Resources voiced his concern for the lack of practical conservation principles in the students' daily activities (Kenya Times, 1989). Most researches done in Somalia and other parts of the world has focused on EE and its outcomes in the environment rather than putting into perspective the level of achievement of EE goals by evaluating the level of awareness, attitude and participation among students (Sutti, 1991; Gagliardi and Alfhtan, 1994; Lindhe et al., 1993).

2. STATEMENT PROBLEM

As efforts to intensify EE in schools through multidisciplinary approach have continued to increase over the years, a varied feedback has been received regarding students' level of awareness, attitudes and participation in environmental activities. According to the findings of the study done by Sarkar in Bangladesh, it was noted that students in urban centers are more environmentally informed compared to those in rural areas (Sarkar and Ara, 2007). While rural-urban differences in Kenyan household characteristics are still a significant determinant of differences in school participation patterns based on past researches, there is now a growing urban-urban divide following rapid urbanization (Woodgate, 2012). This trend has led to the emergence of settlements with different characteristics from those of earlier phases of urbanization used in previous studies to model rural versus urban student level of awareness, attitudes and participation. This calls into question the notion that urban settlements in Africa are always advantaged. Represent different divides of Mogadishu schools. One of the most enduring physical manifestations of social exclusion in African cities is the proliferation of slums and informal settlements.

People living in these settlements experience the most deplorable living and environmental conditions. They are also excluded from participating in the economic social, political and cultural spheres of the city. Consequently, slum dwellers—many who are poor in the first place—are made poorer by the various forms of exclusion that they face. On the other side of the town is the more formal urban divides (UN Habitat, 2010). As a result of socioeconomic, cultural and biophysical difference between the different urban settlements, it is no longer obvious that all urban students are advantaged as postulated by studies that modeled rural versus urban comparison. This necessitates the need to establish the relationship across

these divides in an urban set up. This is essential in establishing the special and unique characteristics and features of various divides in order to determine how best to use EE to address environmental problems in different divides. This study thus looks at the level of environmental awareness, attitude and participation among secondary school students in Mogadishu Somalia. The main objective of this study is to determine the environmental Awareness, Attitude and Participation among Secondary School students in Mogadishu-Somalia.

3. METHODOLOGY

A descriptive cross-sectional study was conducted to assess environmental Awareness, Attitude and Participation among Secondary School students in Mogadishu-Somalia. The study was carried out from Aug 2018 to Dec 2018. The total sample size for the study was 200 participants who were available and willing to participate in this study. A semi-structured questionnaire and face-to-face was used for this study and it was divided into four sections: sociodemographic section, Level of Environmental Awareness, Level of environmental attitudes and Level of participation of students. The questionnaire included a range of close-ended questions as well as some open questions. All the data collected were coded numerically and entered into the SPSS version 22.0 software (IBM, New York, United States) program for the analysis. Descriptive statistical analysis was used to calculate the frequencies and percentages. The descriptive analysis of data was presented as tables and graph format. Informed written consent was obtained from the participants, as well as from the district authority, and confidentiality of the participant's information was maintained properly where the participant had the choice to refuse and withdraw from the interview.

4. RESULTS

Variables	Categories	Frequencies	Percentage%
Gender responders	Male	145	72.5
	Female	55	27.5
	Total	200	100.0
Grade level	9	33	16.5
	10	35	17.5
	11	53	26.5
	12	79	39.5
	Total	200	100.0

Table 1 shows that majority of respondent of gender 72.5% were male, while 25.5% were female, the majority of respondent of grade level 39.5% were grade 12 where 26.5 were grade 11, while 17.5% were grade 10, where 16.5% were grade 9

Variables	Categories	Frequencies	Percentage%
role of their conservation	Yes	86	43.0
	No	114	57.0
	Total	200	100.0
Sewage system	Yes	105	52.5
	No	95	47.5
	Total	200	100.0
Waste	Yes	176	88.0
	No	24	12.0
	Total	200	100.0
Deforestation	Yes	103	51.5
	No	97	48.5
	Total	200	100.0

Table 2 indicates the majority of respondents of 137(91.3%) said yes, while 13(8.7%) said no, mostly they know waste. The majority of the respondent's role their conservation 86 (43.0%) were said yes, while 114(57.0%) were said no. The majority of respondents of 105(52.5%) said yes, while 95(47.5%) said no, mostly they know sewage. the majority of respondents of 176(88.0%) said yes, while 24(12.0%) said no, mostly they know waste. The majority of respondents of 103(51.5%) said yes, while 97(48.5%) said no, mostly they know deforestation.

Table 3: level of environmental attitudes

Variables	Categories	Frequencies	Percentage%
Plants and animal have as much right as human to exist	strongly disagree	66	33.0
	Agree	30	15.0
	not sure	17	8.5
	strongly disagree	34	17.0
	Disagree	53	26.5
	Total	200	100.0
Protecting the environment	strongly agree	79	39.5
	Agree	40	20.0
	not sure	18	9.0
	strongly disagree	25	12.5
	Disagree	38	19.0
	Total	200	100.0
Important for the future generation	strongly agree	88	44.0
	Agree	55	27.5
	not sure	3	1.5
	strongly disagree	22	11.0
	Disagree	32	16.0
	Total	200	100.0
Responsibility of every citizens	strongly agree	73	36.5
	Agree	55	27.5
	not sure	4	2.0
	strongly disagree	25	12.5
	Disagree	43	21.5
	Total	200	100.0

Table 3 shows that among the respondents 66 (33%) strongly agree that they plants and animals have much a right as human exist, 30(15.0%) were agree, 17(8.5%) were not sure, 34(17.0%) were strongly disagree while 53(26.5%) were disagree. Among the respondents 79(39.5%) were strongly agree that protecting the environment, 40(20.0%) were agree, 18(9.0%) were not sure, 25(12.5%) were strongly disagree while only 38(19.0%) were disagree. Among the respondents 88(44.0%) were strongly agree that important for the future generation, 55(27.5%) were agree, 3(1.5%) were not sure, 22(11.0%) were disagree while only 32(16.0%) were disagree. Among the respondents 73 (36.5%) were strongly agree that responsibility every citizens, 55(27.5%) were agree, 4(2.0%) were not sure, 25(12.5%) were strongly disagree while only 43(21.5%) were disagree.

Table 4: Level of participation of students

Variables	Categories	Frequencies	Percentage%
i pick litter whenever i find them in the school compound	Never	29	14.5
	some time	77	38.5
	Always	94	47.0
	Total	200	100.0
After meals, i dispose of leftovers in the toilet	Never	103	51.5
	some time	66	33.0
	Always	31	15.5
	Total	200	100.0
watching television programs with environmental messages	Never	57	28.5
	some time	102	51.0
	Always	41	20.5
	Total	200	100.0

Table 4 Among the respondents 29(14.5.0%) were never I pick litter whenever I find them in the school compound wait, 77(38.5%) were sometime, while only 94(47.0%) were always. Among the respondents 103(51.5.0%) were never that after meals of leftovers in the toilet, 66(33.0%) were sometime, while only 31(15.5%) were always. Among the respondents 57(28.5.0%) were never I don't for authority to pick litter that watching television programs with environmental message, 102(51.0%) were sometime, while only 41(20.5%) were always.

5. DISCUSSION

This research was conducted at Mogadishu secondary schools. The results found that environment education students had high level of knowledge, awareness and attitudes but the level of environmental practices was low. These research findings were similar to the opinion found by Azizan which says that "students had a good awareness about environmental problems but yet had no changed in practice". This was also supported who stated that "the awareness towards environmental issues and awareness about the need to maintain the environment had increased among the society, but the level of individual involvement in the activities of environmental protection still at low level". Female students who demonstrated lower level of attitude as compared to male was corresponding with the results of previous studies (Anderson et al., 2007; Ewert and Baker 2001; Mainieri 1997; Olofsson and Ohman 2006; Tikka et al., 2000). Students of professional disciplines had a lower level of environmental knowledge as compared to students from other disciplines.

A group researchers considered students who had technology background believed that technologies were capable to solve environmental problems (Tikka et al., 2000; Gigliotti, 1992). Pure Science students had the highest awareness as compared to students from other disciplines. This was because the science students were more interrelated to the environment (Xin Ma and Bateson 1999). Direct contact with the environment would create awareness towards the environment. Research findings showed there was a significant relation between knowledge, Awareness and attitudes with the practices of the environment. This showed that the infusion of the knowledge, awareness and attitudes elements were important in changing the student's behavior towards environmental practices. However, stated that the prediction of behavior in terms of environmental practices was a complex task and influenced by many other factors (Cottrell and Graefe, 1997).

6. CONCLUSION

The first objective was to find out the level of environmental awareness among students in Mogadishu-Somalia. It can be argued that the level of awareness of secondary school students in different divides of an urban set ups is least or not affected by the location at all. It is thus clear indication that secondary school students in urban set up are exposed to the same curriculum and as a result the coverage and eventual level of environmental awareness has a relationship despite the difference in the location of the schools in an urban set up. The second objective of the study was to find out the relationship of the environmental attitudes of secondary school students in Mogadishu-Somalia. The study found out that on a general note the attitude of students towards the environment positive.

From the responses obtained from the study, it was noted that majority of the students exhibited a positive attitude. The attitude towards sustainable development indicated that majority of the students will prefer not only development but also environmental conservation. The third objective of this study was to determine and compare the level of participation in environmental activities of secondary school students in Mogadishu-Somalia n. regarding waste management, the study found out that majority of the students use dust bins and pick litter. It was however noted that most of the student will pick litter on supervision by authority of prefects or teachers. Furthermore, the study found out that majority of the students did not participate in reuse and recycling as a method of waste management, Tree planting and clean up initiatives are common in urban set ups.

REFERENCES

- Boyle, T., 2004. University Students 'Behaviors Pertaining to Sustainability: A Structural Equation Model with Sustainability-related Attributes. *International Journal of Environmental & Science Education*, 7 (3), Pp. 459-478
- Crompton, T., and Kasser, T. 2009. *Meeting Environmental Challenges: The Role of Human Identity*. WWF, United Kingdom, Pp. 23.

- DiEnno, M., and Hilton, S., 2005. High School Students' Knowledge, Attitudes and Levels of Enjoyment of an Environmental Education Unit on No- Native Plants. *The Journal of Environmental Education*, 37 (1), Pp. 13-25.
- Kelley-Laine, K., 1991. The Environment at School. *Kenya Times*, Monday 19th August, Pp. 21.
- Lee, E.B., 2008. Environmental Attitudes and Information Sources Among African American College Students. *The Journal of Environmental Education*, 40 (1), Pp. 29-42.
- Sarkar, M., 2011. Secondary Students' Environmental Attitudes: The case of Environmental Education in Bangladesh. *International Journal of Academic Research in Business and Social Sciences*, 1, P p . 2222-6990.
- Sutti, T., 1991. Italy: The Water Analysis Project (WAP): An Alternative Model for Environmental Study|| In: OECD, *Environment, Schools and Active Learning*, Paris: Organization for Economic Cooperation and Development
- Toili, W.W., 2007. Secondary School Students' Participation in Environmental Action: Coercion or Dynamism? *Eurasia Journal of Mathematics, Science & Technology Education*, 3 (1), Pp. 51-69.
- UNEP, 2012. 21 Issues for the 21st Century: Result of the UNEP Foresight Process on Emerging Environmental Issues. United Nations Environment Programme (UNEP), Nairobi, Kenya.
- UNESCO. 1999. *Environmental Education and Training in Egypt*, UNESCO, Bangkok.
- UNESCO. 2012. *Education Policy Matters*. UNESCO, Bangkok.
- UN-HABITAT, 2010. *State of the World's Cities 2010/2011: Bridging the Urban Divide*, Earthscan, London
- UNEP, (1972). *Stockholm Declaration on the Human Environment*. United Nations Conference on Environment and Development, Stockholm, Sweden, 1972. New York: United Nations Environment Programme
- United Nations. 1987. *Report of the World Commission on Environment and Development*, General Assembly Resolution 42/187, Pp. 11-14.
- Woodgate, G., 2010. Introduction. In *The International Handbook of Environmental Sociology*, 2nd edn, Redclift MR, Woodgate GR (eds). Elgar: Cheltenham, Pp. 1-8.

