

SUSTAINABILITY CONSCIOUSNESS AMONG ADOLESCENT STUDENTS: A COMPARATIVE STUDY BASED ON CERTAIN DEMOGRAPHIC VARIABLES

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Abstract

Sustainability consciousness denotes an inclusive concept that is characterized by awareness and knowledge about environmental issues, attitudes that are favourable for safeguarding the natural and physical environment, and the manifestation of pro-environmental and eco-friendly behaviour. Now it becomes a prerequisite for the realization of the cherished sustainable development goals. The present study enquires about the sustainability consciousness of adolescent students and the demographic factors including gender and locale that affect sustainability consciousness. Adolescent students (N = 200) from the Mayurbhanj district of Odisha were randomly selected for this study and were assessed for their sustainability consciousness by employing a questionnaire. The results indicate locale and tribal-non-tribal (cultural) disparities in sustainability consciousness and point to the need for efficient environmental education for the students from lower classes of schooling itself.

Keywords: *Sustainability Consciousness, Adolescent Students, Demographic Variables, Environmental Education, Tribal and non-Tribal*

Introduction

Sustainable development refers to a developmental pattern that ensures the preservation of biotic and abiotic components of the planet earth for coming generations at the same time utilizing the natural resources cautiously and based on equity principles. Sustainable development cannot be accomplished by scientific solutions, administrative guidelines or economic mechanisms alone. What is needed is a joint effort for protecting the planet earth from forthcoming catastrophes. Environmental issues and challenges should be considered as the most significant subject of discussion for all as each one is responsible for the destruction of our nature, at least to a certain extent, and each one has to bear the ill-effects of environmental degradation. People need to transform their ways of thought and actions. This necessitates quality education for sustainable development at all stages and contexts.

The term sustainable development gained its popularity, followed by the publication of Our Common Future in 1987 by the World Commission for Environment and Development (WCED). According to WCED (1987), sustainable development is the development that meets the needs of present, without compromising ability of future generations to see their needs (cited in Dhaliwal et al., 2000). In 1992, the Rio Earth Summit accentuated the necessity to take action in all fields where human activities make bearings on the natural environment. The sustainable development world summit in Johannesburg held in 2002 has made notable efforts to propagate 'education for sustainability.'

Realizing education as a device to attain sustainability, the United Nations launched the 'Decade of Education for Sustainable Development (DESD)' in 2005. The purpose of this proclamation was to incorporate the elements of sustainable development into all realms of education for creating a sustainable future through attitudinal changes in learners and subsequently for fostering pro-environmentalism. Environmental integrity, economic viability and just society for present and future generations were the guiding principles for DESD. A major objective of the UN DESD was to ensure quality teaching and learning for Education for Sustainable Development (Sharma, 2018). At the end of the special decade, the UNESCO World Conference on Education for Sustainable Development (ESD) in 2014 announced Aichi-Nagoya Declaration on Education for Sustainable Development. It invited governments 'to strengthen the integration of ESD into education, training, and sustainable development policies' with UNESCO as the central agency. As a follow-up to the DESD, UNESCO introduced the Global Action Programme (GAP) for ESD to step up action on ESD worldwide. It was proposed to refurbish the educational process so that every person has the chance to attain the values, skills and awareness that allow them to contribute to sustainable development. In August 2015, 193 countries agreed on 17 sustainable development goals (Sharma, 2018), which need immediate actions by all countries - developed as well as developing. Presently, the annual High-level Political Forum on Sustainable Development functions as the central UN body for the fruition of the sustainable development goals.

In India, the establishment of the National Council of Environmental Planning and Coordination after the Conference on Human Environment held in Stockholm in 1972 can be considered as the first step in accepting the policy of development integrated with the environment. Consequently, the Department of Environment was established, which became a full-fledged Ministry. The need for environmental education was highlighted in the National Policy on Education (1986); "there is a vital need to create a

consciousness of the environment. It must permeate all ages and sections of society, beginning with the child. Environmental consciousness should inform teaching in schools and colleges. This aspect will be integrated with the entire educational process.” Accordingly, environmental education became a major concern in the curriculum development programmes of NCERT (Sharma, 2018), and now environmental education has been an integral part of the formal education system in India.

Sustainability Consciousness

Sustainability consciousness is comparatively a new term related to the utilization of natural resources in tune with sustainable development. Sustainability consciousness can be perceived as a quality characterized by knowledge, perspective, and activities that contribute to the realization of sustainable development goals. Sustainability consciousness involves three domains - knowingness or knowledge of environmental situations and issues and what is to be done for sustainable development, the attitude one holds about the environmental issues, and what behaviour one exhibit to bring about sustainable development. “The concept of sustainability consciousness unifies the content in the environmental, social and economic dimensions and the psychological constructs of knowingness, attitudes and behaviours relating to such issues” (Berglund et al., 2020). Knowingness is related to the awareness of the theoretical aspects of sustainable development, while attitudes express values and beliefs one possesses and determine his/her reaction to a situation. The third component, behaviour, connotes the actions of individuals for the realization of sustainable development goals. Thus sustainability consciousness can be considered as an inclusive concept that encircles individuals' cognitive, affective, and psychomotor dimensions. These three aspects of sustainability consciousness are equally important in manifesting behaviour that leads to sustainable development. A person possessing sustainability consciousness to a great extent directs his actions and behaviour so as to minimize harm to the environment and to protect nature for future generations. Their thoughts and actions will be based on equality of gender, economic and social realms.

Review of Literature

Imparting education for sustainable development (ESD) need not be fruitful in many situations. The ESD certification of schools has limited effects on students' sustainability consciousness (Olson, 2018). Thulassiraj et al. (2018) argued that the implementation of environmental education at the school level happens at the knowledge level only, and it does not reflect in action.

The success of education for sustainable development in India has been studied by various scholars in its knowing, attitudinal, and behaviour realms. The results of these studies show no unanimity. Ushashri and Tiwari (2021), in a study conducted among college students in Karnataka, found that about 40% of the students were not adequately knowledgeable about environmental issues, and almost half of them held a negative attitude towards the protection of the environment. Environmental awareness has a constructive effect on environmental attitudes (Saikumari, 2017; Aral, 2017). However, possession of environmental awareness does not necessarily develop pro-environmentalism. Sarma and Sharma (2021) reported discrepancies in environmental awareness of student groups having equivalent levels of environmental attitude. Danielraja (2019) observed a lack of environmental awareness among higher secondary school students. Similarly, Chinnathai and Selvan (2018) found that higher secondary students lack adequate perception regarding environmental problems. A moderate level of eco-friendly behaviour was found among higher secondary school students (Ponnammal & Alexander, 2019). According to Anwar and Ningsih (2017), the sustainability consciousness of middle school students was not adequate. In certain studies (Sahidullah, 2020; Bhartiya, 2017; Padmanabhan et al., 2017; Ponmozhi & Krishna kumari, 2017), the respondents illustrate an adequate level of environmental awareness. The review of studies indicates a fair position of respondents in the knowingness level, but at the action level, this knowledge is not reflected adequately.

Significance of the Study

One of the most alarming phenomena faced by mankind is the degradation of our natural and physical environment caused by inexcusable and ruthless human interference in nature which may cause severe consequences even to the existence of mankind. World nations realizing the fact, advocate for the conservation of the natural environment, and consequently, sustainable development became a strategy believed to be a remedy for making harmony between the two controversial necessities of mankind - development and environmental protection. United Nations suggested seventeen sustainable development goals in 2015. For the achievement of such golden goals, individuals are also responsible like nations.

Adolescents, at their important phase of development, are in a state of flux where they are confused regarding innumerable issues related to their personal, emotional, and social spheres. It is a period where one stands for values and forms attitudes. Adolescence is the most appropriate time in the life of a human being to build a desirable

stance regarding social issues, and, hence they should be made aware of the existing issues in society. Their thoughts and actions should be in tune with modern conceptions regarding sustainable development. Their actions in different realms should be led by the goals of sustainable development. One should think twice before performing an act on what would be the repercussions of his/her action in nature. In schools, environmental education is offered to students from their elementary classes. The fruition of such attempts is supposed to be manifested in their awareness, attitudes, and behaviour related to environmental issues. Previous research studies done in this area did not provide conclusive results regarding the environmental concern of students necessitating further studies.

Statement of the Problem

The study examines the level of sustainability consciousness among adolescent learners and is entitled “Sustainability Consciousness among Adolescent Learners: A Comparative Study Based on Certain Demographic Variables.”

Objectives of the Study

The objectives of the present study are:

1. To study the level of sustainability consciousness among adolescent students
2. To find out whether there is a significant difference between the level of sustainability consciousness of male students and that of female students
3. To find out whether there is a significant difference between the level of sustainability consciousness of rural students and that of urban students
4. To find out whether there is a significant difference between the level of sustainability consciousness of tribal students and that of non-tribal students

Methodology in Brief

To conduct this research, the investigator adopted a survey design. Students in the age range of 13-17 years (belong to secondary and higher secondary stages) in the Mayurbhanj district of Odisha constitute the population. A randomly sampled 200 adolescent students from four institutions (two rural schools and two urban schools) was selected to conduct the study. In order to obtain data regarding the sustainability consciousness of students, the Sustainability Consciousness Scale standardized by Berglund et al. (2019) with slight modifications was utilized. The data obtained were studied with the help of descriptive and inferential statistics such as mean, standard deviation, and t-test.

Data Analysis and Discussion

1. Sustainability Consciousness among Adolescent Students

For assessing sustainability consciousness, a Likert type scale constructed by Berglund et al. (2019) with slight modifications was employed. The 27 items in the form of statements in the scale were equally divided into three domains - sustainability knowingness (9 items), attitude (9 items), and behaviour (9 items). A subject has five choices to respond to each item - Strongly Agree, Agree, Uncertain, Disagree, and Strongly Disagree - to indicate his/her position regarding the statement. Table 1 portrays descriptive statistics of the scores attained by the adolescent students (N = 200) who participated in the study.

Table 1: Descriptive Statistics of the Total and Domain-wise Sustainability Consciousness Scores of Adolescent Students (N = 200)

Sl. No.	Dimension	M	SD
1	Sustainability Knowingness	28.77	5.74
2	Sustainability Attitudes	26.35	5.48
3	Sustainability Behaviour	24.40	5.91
Total		79.53	17.92

The analysis reveals that the adolescent students of Mayurbhanj district possess a medium level of sustainability consciousness as the mean score (M = 79.53; SD = 17.92) is close to 81, the mid-score of the scale (27×3). The dimension wise statistics reveals that the students are better in their knowingness as the mean (28.77) just exceeds 27, the middle score of the subscale; however, for both the other two dimensions, the students obtained lower mean scores than the mid-score of the respective subscales indicating low levels of sustainability attitude and behaviour.

2. Comparison of Sustainability Consciousness Based on Gender

The sustainability consciousness of male and female students was compared using an independent sample t-test was conducted. Details are shown in table 2.

Table 2: Details of the Independent Sample t-Test for the Comparison of Sustainability Consciousness of Adolescent students Based on Gender

Category	N	M	SD	t
Female	96	81.3	218.62	1.481
Male	104	77.56	17.30	(p = .1404)

Table 2 shows that there is no substantial difference between the sustainability consciousness of male students and that of female students, $t = 1.481$, $p = .01404$. The difference in means (3.76) seen is not relevant. The result indicates that the gender of students is not a factor that influences the sustainability consciousness of adolescent students.

3. Comparison of Sustainability Consciousness Based on Locality of Residence

The sustainability consciousness of the sub samples of students from rural areas and urban areas were compared employing a t-test, the details of which are presented in table 3.

Table 3 : Details of the t-Test for the Comparison of Sustainability consciousness of Adolescent Students Based on Locality of Residence

Category	N	M	SD	T
Urban	100	82.64	18.23	2.452
Rural	100	76.42	17.64	($p = .0151$)

Table 3 shows that there is a difference in the mean sustainability consciousness scores of rural and urban students (6.22), and the difference is significant (at .05 level), $t = 2.452$, $p = .0151$. It may be inferred that the urban students ($M = 82.64$, $SD = 18.23$) possess high degree of sustainability consciousness when compared to rural students ($M = 76.42$, $SD = 17.64$). The result indicates that the locality of residents of students is a factor that influences their sustainability consciousness.

4. Comparison of Sustainability Consciousness of Tribal Students and Non-tribal Students

The sustainability consciousness scores obtained by tribal students and non-tribal students were subjected to an independent sample t-test. The particulars of the analysis are given in table 4.

Table 4 : Details of the t-Test for the Comparison of Sustainability consciousness of Tribal and Non-tribal Students

Category	N	M	SD	t
Tribal	68	74.69	17.45	2.727
Non- Tribal	132	82.02	18.29	($p = .007$)

From table 4, it is seen that there is a difference in the mean sustainability consciousness scores of tribal and non-tribal adolescent students (7.33). The result of t-test shows that the difference is significant at .01 level, $t = 2.727$, $p = .0070$ indicating that non-tribal students ($M = 82.02$, $SD = 18.29$) possess more sustainability consciousness than tribal students ($M = 74.69$, $SD = 17.45$). The result suggests that cultural factors may influence the sustainability consciousness of adolescent students.

Conclusion

The findings of the study realize that the adolescent students of the Mayurbhanj district possess an inadequate level of sustainability consciousness in general. The findings are in agreement with those reported in similar previous studies (Anwar & Ningsih, 2017; Danielraja, 2019; Ushashri & Tiwari, 2021). Students of both genders possess the same level of sustainability consciousness. But, locale and cultural differences are obvious in the level of sustainability consciousness; urban students show more sustainability consciousness than rural students, and non-tribal students possess sustainability consciousness to a greater extent than their tribal counterparts.

The results of the study conducted indicates the need of implementing programmes to inculcate sustainability awareness, favourable attitudes, and pro-environmentalism among adolescent students, especially among rural and tribal categories. As Thulassiraj et al. (2018) commented, the awareness of students regarding sustainability does not reveal in practical realms. Hence strategies for motivating children and adolescents to march for protecting our nature should be adopted and practised. Necessary precautions towards environmental degeneration are to be taken by all people and nations; otherwise, mankind will witness the collapse of this beautiful world in the near future.

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