

Environmental Awareness and Sustainable Practices Among Tribal and Non-Tribal Secondary School Students of Sundargarh District

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Abstract

Environmental awareness is of significant importance in developing sustainable behaviour in children. The present study aims to investigate the level of environmental awareness and practice in tribal and non-tribal secondary school students. Descriptive Survey research is employed for the present study. A sample of 120 secondary school students, consisting of 60 tribal and 60 non-tribal students, was selected from government high schools in Sundargarh district of Odisha. Random sampling techniques were employed for the present study. An environmental awareness scale, based on Praveen Kumar Jha's (1998) work, and open-ended questionnaires were employed for the present research. Descriptive statistical analysis, including mean and standard deviation, was employed for the present research. The Mann-Whitney U test was employed for the present research due to the non-normal distribution of the data. The results revealed that the tribal students demonstrated a slightly higher mean score in environmental awareness compared to the non-tribal students. However, the results were not significant. Both groups strongly agreed on the importance of environmental protection. However, they demonstrated only moderate confidence in the influence of individual actions on environmental sustainability. Tribal students demonstrated slightly higher involvement in activities such as tree planting and water conservation, while non-tribal students demonstrated higher involvement in activities such as community cleaning and the use of public transportation. The study emphasizes the need to strengthen environmental education programmes in schools to encourage students to adopt environmentally sustainable practices. It also emphasizes the potential benefits of culturally responsive environmental education strategies in promoting environmental awareness and behaviour among different types of students.

Keywords: Environmental Awareness, Environmental Practices, Sustainability, Secondary students.

INTRODUCTION

Environmental awareness is an essential aspect of modern education, which refers to the understanding, knowledge, and sensitivity of individuals towards environmental issues and their protection. In today's world, environmental problems such as pollution, deforestation, loss of biodiversity, and climate change are increasing at an alarming rate. These issues not only affect the natural environment but also pose serious challenges to human survival and sustainable development. Therefore, it has become necessary to develop environmental awareness among individuals, especially students, who are the future citizens of the nation (Stevenson et al., 2013; Tilbury, 2004). Education plays a significant role in creating environmental awareness and promoting responsible behaviour

towards the environment. Through environmental education, students can develop knowledge about environmental problems, positive attitudes towards conservation, and skills to take appropriate actions. It also helps in developing values and a sense of responsibility for protecting natural resources and maintaining ecological balance. In this context, schools act as an important platform for shaping students' environmental understanding and behaviour (Hungerford & Volk, 1990; Eagles & Demare, 1999; Altin, 2014).

However, it has been observed that having knowledge about environmental issues does not always lead to environmentally responsible behaviour. There often exists a gap between awareness and practice, which highlights the need for effective environmental education strategies (Kollmuss & Agyeman, 2002; Hassan, 2010; Gupta et al., 2018). Environmental awareness among students may vary due to several factors such as gender, locality, socio-economic background, and educational exposure (Sharma et al., 2015; Bhat & Husain, 2017; Kumar et al., 2020). In recent years, several studies conducted in different regions have shown that students generally possess a moderate level of environmental awareness, but it is not always sufficient to bring about behavioural change (Cetin, 2010; Gok, 2021; Abed & Sarsour, 2011). Regional and comparative studies also indicate differences in awareness levels among students from different backgrounds and locations (Ahammad & Parvin, 2019; Panigrahi, 2016; Soren & Acharya, 2022). Therefore, there is a growing need to strengthen environmental education and encourage students to adopt sustainable practices in their daily lives (Anilan, 2014; Hasiloglu et al., 2011).

THEORETICAL PERSPECTIVES

The theoretical framework of the present study is based on ideas from environmental psychology, sociology, education and sustainability studies. These theories help in understanding how people develop awareness about the environment and what factors influence their views and behaviour. The following are considered for this study.

i. Environmental Psychology

- a. **Place Attachment Theory:** This theory states that individuals develop an emotional connection with their environment, which influences their behaviour and attitudes towards environmental conservation (Altman & Low, 1992; Scannell & Gifford, 2010).
- b. **Value-Belief-Norm (VBN) Theory:** According to this theory, personal values, beliefs about environmental consequences, and the perception of norms influence pro-environmental behaviour (Stern et al., 1999; Stern, 2000).

ii. Educational Framework

- a. **Environmental Education Theory:** This theory highlights the role of education in developing knowledge, skills, and positive attitudes for environmental protection. Formal education, awareness programmes, and community activities are important for building responsible behaviour towards the environment (Hungerford & Volk, 1990; Tilbury, 2004).
- b. **Experiential Learning Theory:** Proposed by David Kolb's, this theory emphasizes that real-life experience and active participation help individuals learn better; learning through direct experience makes environmental issues more meaningful and increases awareness (Kolb, 1984).

iii. Sociological Framework

- a. **Social Learning Theory:** Developed by Albert Bandura, this theory explains that individuals learn new behaviours by observing others and through social interaction. Students often adopt environmental practices when they see such behaviour in family, friends, or society (Bandura, 1977).
- b. **Cultural Theory:** This theory focuses on the role of culture in shaping people's thoughts and actions. Cultural background influences how individuals view and respond to environmental issues, and it also helps

in understanding differences between groups, such as tribal and non-tribal students (Douglas & Wildavsky, 1982).

iv. Policy Framework

National Environmental Policy Act (NEPA): This policy states that all emphasizes that all government departments should think about the environmental effects of their actions before starting any major project. It aims to ensure that development and protection of the environment go hand in hand, so that awareness and responsibility for the environment increase at the national level (United States Congress, 1969).

1.2 CONCEPTUAL FRAMEWORK

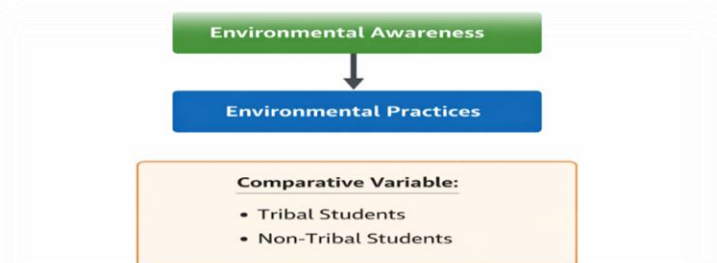


Fig.1. Schematic diagram of the study on evaluating the awareness and practices of secondary school students (tribal and non-tribal)

REVIEW OF THE RELATED LITERATURE

Environmental awareness refers to the knowledge, understanding, and concern individuals possess regarding environmental issues and the need for environmental protection. In recent decades, environmental education has gained significant importance as a means of promoting awareness among students and encouraging responsible environmental behaviour. Several researchers have investigated the level of environmental awareness among school students and the factors influencing it.

Environmental Awareness

Environmental awareness among students has become an important area of study in the field of education and environmental studies. Several studies have found out that students generally have a moderate level of environmental awareness. It varies according to some of the important demographic and educational factors. It has been established from the studies that various factors like gender, location, socioeconomic status, and school type play an important role in determining the level of environmental awareness among the students (Chauhan et al., 2008; Sharma et al., 2015; Kumar et al., 2020). Various studies conducted in different countries have also found out that the level of environmental awareness varies according to the exposure of the students to environmental education.

Environmental education has been identified as a major factor in enhancing students' awareness, knowledge, and attitudes towards environmental issues. It helps students to understand environmental problems and develop a sense of responsibility towards environmental protection (Hungerford & Volk, 1990; Tilbury, 2004; Eagles & Demare, 1999). Recent global initiatives, such as UNESCO's (2024) greening curriculum guidance, emphasize the crucial role of embedding climate action and sustainability into school teaching and learning to strengthen students' environmental consciousness. Comparative studies further highlight differences in environmental awareness among diverse groups, such as tribal and non-tribal students, indicating the role of cultural and social context in shaping awareness levels (Bhat & Husain, 2017; Soren & Acharya, 2022). Moreover, studies also suggest that environmental awareness is influenced by students' educational experiences, access to information, and exposure to environmental activities and programmes (Cetin, 2010; Gok, 2021; Dhanya & Pankajam, 2017;

Panigrahi, 2016). In the Indian context, Goel et al. (2023) explored student perceptions of environmental education, highlighting how educational exposures shape learners' environmental understanding. Overall, the findings of these studies indicate that although students possess a basic understanding of environmental issues, there is a continuous need to strengthen environmental education to improve their level of awareness and sensitivity.

Environmental Practices

In addition to awareness, environmental practices among students have also been widely examined. Research consistently shows that awareness alone is not sufficient to ensure environmentally responsible behaviour. There exists a significant gap between what students know about environmental issues and how they act in their daily lives (Kollmuss & Agyeman, 2002; Hassan, 2010). Although students may have knowledge about issues such as pollution, conservation, and sustainable use of resources, this knowledge is not always reflected in their behaviour and practices (Gupta et al., 2018; Patel et al., 2021). In a comprehensive systematic literature review, Liu and Green (2024) synthesized the key factors influencing children's pro-environmental behaviour, underscoring the complex psychological and contextual drivers of youth action.

Environmental practices are influenced by multiple factors, including school environment, peer influence, family background, and opportunities for active participation in environmental activities. Bhattarai et al. (2024) systematically reviewed the determinants of adolescents' pro-sustainable behaviour, confirming that personal, social, and institutional factors jointly influence sustainable daily choices. Studies indicate that students who are actively involved in environmental programmes, awareness campaigns, and community-based activities tend to demonstrate better environmental practices (Singh et al., 2017; Hasiloglu et al., 2011; Hasiloglu, 2011). Experiential learning and practical engagement play a crucial role in translating awareness into action. Research also shows that participation in activities such as tree plantation, cleanliness drives, and environmental clubs can significantly improve students' environmental behaviour (Gopal & Lawas, 2023; Sivamoorthy et al., 2013). Therefore, it is important to focus not only on developing awareness but also on encouraging active participation and behavioural change among students to promote sustainable environmental practices.

RATIONALE OF THE STUDY

Sustainable development is founded on environmental awareness and responsible environmental practices. Secondary school is an important stage for developing knowledge, values, and responsible behavior concerning the environment. However, students' environmental awareness and practices may differ depending on their social, cultural and educational backgrounds. Sundargarh district of Odisha with its diverse tribal and non-tribal population, provides a relevant context for the study of these differences. While tribal communities may possess traditional ecological knowledge, it is not safe to assume that tribal students are necessarily more environmentally conscious than non-tribal students. Hence, there is a need for an empirical comparison to understand the similarities and differences between the two groups. Also, being environmentally conscious does not always lead to responsible environmental behaviour. Hence, the present study aims to study the level of environmental awareness, to compare the environmental awareness of tribal and non-tribal secondary school students and to study their environmental practices in Sundargarh district. The findings could help in informing context-sensitive environmental education programs in schools.

OBJECTIVES OF THE STUDY

The present study has the following objectives-

1. To study the level of environmental awareness among tribal and non-tribal secondary school students.
2. To compare the environmental awareness of tribal and non-tribal secondary school students.
3. To study the environmental practices followed by tribal and non-tribal secondary school students.

HYPOTHESIS OF THE STUDY

(H₀): There is no significant difference in environmental awareness between tribal and non-tribal secondary school students.

METHODOLOGY

Research Design

The present study adopted a descriptive survey research design to examine the level of environmental awareness and environmental practices among tribal and non-tribal secondary school students. The descriptive survey method was considered appropriate as it helps in collecting information about the existing conditions and analysing the differences between groups. The study aimed to identify the level of environmental awareness and environmental practices and to compare these variables among tribal and non-tribal students.

Population and Sample

The study consisted of all secondary school students studying in government secondary schools of Sundargarh District, Odisha. The population included both tribal and non-tribal students studying at the secondary level. 120 secondary school students were selected as the sample for the present study. The sample included 60 tribal students and 60 non-tribal students studying in different secondary schools of Sundargarh district. The random sampling technique was used to select the schools as well as the respondents. The students were selected proportionately from different schools to ensure proper representation of both tribal and non-tribal groups.

Research Instruments

In this study, two standardized tools were used to collect the required data.

1. **Environmental Awareness Scale**
2. **Environmental Practices Scale**

The Environmental Awareness Scale was used to measure students' knowledge, understanding and sensitivity towards environmental issues such as pollution, conservation of natural resources and environmental protection. The Environmental Practices Scale was used to measure students' environmental behaviour and practices such as saving water, maintaining cleanliness, avoiding plastic use, and participating in environmental activities. Both tools were based on a 5-point Likert scale with response categories such as Strongly Agree (5), Agree (4), Neutral (3), Disagree (2) and Strongly Disagree (1). The reliability and validity of the tools were ensured before the administration of the instruments.

Procedure of Data Collection

The researchers administered the scale to a sample of 120 students. For the collection of data, permission was obtained from the headmaster of the selected secondary schools. The investigator personally visited the schools and administered the questionnaires to the selected students. The purpose of the study was explained to the students before the administration of the tools. The respondents were requested to give honest and unbiased responses. After the completion of the questionnaires, the responses were collected and evaluated according to the established scoring procedure.

Statistical Techniques

The collected data were examined using descriptive and inferential statistical techniques.

The following statistical methods were used:

- Mean
- Standard Deviation
- Mann-Whitney U Test

The Mann-Whitney U test was used to compare environmental awareness between tribal and non-tribal students as the data did not follow a normal distribution. Responses obtained from the open-ended questionnaire were analysed using Thematic analysis techniques to identify common environmental practices and perceptions among students.

RESULTS AND DISCUSSION

Analysis and Interpretation of the Data

i. Awareness level among tribal and non-tribal

In the present study, Environmental awareness was measured to assess the level among Tribal and Non-Tribal students. The awareness level was determined based on the cut-off scores used for classification of the total awareness scores into low, moderate and high levels, and results are given below in Table 1.

Table 1. Mean Awareness score

Category	Mean
Tribal	21.71
Non-tribal	20.5

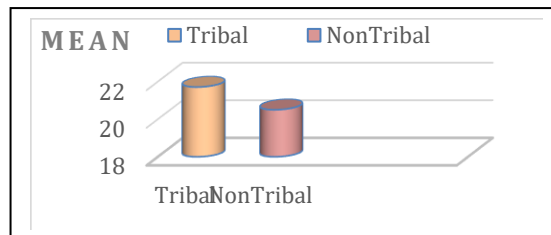


Fig.2. The mean awareness score of tribal students (21.72) and non-tribal students (20.5).

From Table 1, the results revealed that the tribal students' mean score is 21.71 and non-tribal students' mean score is 20.5. The mean awareness score indicated that Tribal students have a higher level of environmental awareness as compared to Non-tribal students based on cut-off scores.

ii. The Significant Difference in Environmental Awareness

The data collected from 120 secondary students were analysed using descriptive statistic like; Mean, Standard deviation (SD), skewness, kurtosis, and the Shapiro-Wilk test for normality.

Table 2. Descriptive statistics of Awareness Score

Descriptives	A
N	120
Mean	21.1
Standard deviation	3.20
Skewness	-0.941
Std. error skewness	0.221
Kurtosis	0.595
Std. error kurtosis	0.438
Shapiro-Wilk W	0.913
Shapiro-Wilk p	< .001

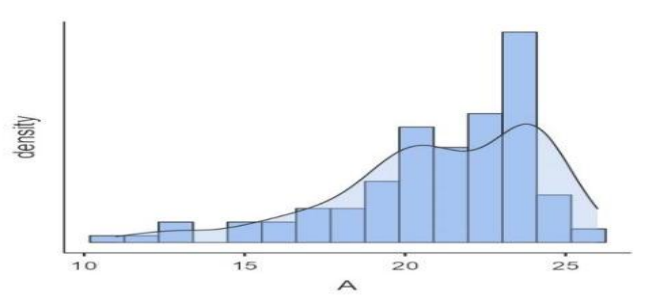


Fig.3. Histogram Showing Distribution of environmental awareness score

The skewness value is -0.941 (SE = 0.221), indicating a moderate negative skew, suggesting that the data distribution is slightly left-skewed. The kurtosis value is 0.595 (SE = 0.438), which shows a slightly positive kurtosis, indicating that the data distribution is slightly more peaked than the normal distribution. The results of the Shapiro-Wilk test ($W = 0.913$, $p < 0.001$) indicate that the data significantly deviates from normality, confirming that the distribution is not normal. Given this non-normal distribution, non-parametric tests such as the Mann-Whitney U test are more appropriate for comparing environmental awareness between tribal and non-tribal students. This approach ensures the validity of the statistical analysis by accommodating the non-normality of the data.

Table 3. Mann-Whitney U test

Independent Samples T-Test			
		Statistic	p
B	Mann-Whitney U	1545	0.176

Note. $H_a: \mu_1 \neq \mu_2$

The results of the Mann-Whitney U test show that there is no significant difference in environmental awareness between tribal and non-tribal students ($U = 1545$, $p = 0.176$). The p-value of 0.176 is greater than the common alpha level of 0.05, suggesting that any observed difference in environmental awareness scores between the two groups is not statistically significant. Therefore, we fail to reject the null hypothesis that the environmental awareness of tribal and non-tribal students is equal. This result suggests that there is no strong evidence to support the claim that the environmental awareness levels differ between these groups.

iii. The Environmental practices among Tribal and Non-tribal students

Mean scores were analysed to ascertain the Environmental Practices among Tribal and Non-tribal students.

Table 4. Mean score of Environmental practices among Tribal and Non-tribal students

Sr.no	Statements	Non-tribal Mean			Tribal Mean		
		Score	Mean		Score	Mean	
1.	How important do you think it is to protect the environment?	300	5	Strongly Agree	300	5	Strongly Agree
2.	Do you believe that your actions can have a positive impact on the environment?	218	3.63	moderate	228	3.8	Moderate

From the above table, it shows a strong agreement on the importance of protecting the environment, with both non-tribal and tribal groups scoring a mean of 5, indicating "strongly agree." However, when it comes to the belief that individual actions can positively impact the environment, both groups show a moderate agreement, with mean scores of 3.63 (non-tribal) and 3.8 (tribal). This indicates a consensus on the significance of environmental protection, but a somewhat more cautious or moderate belief in the effectiveness of individual actions. This could reflect a recognition of systemic issues and the need for collective action or larger policy changes to effectively address environmental challenges.

Table 5. Mean score of Environmental Behaviour among Tribal and Non-tribal students

Sl. no	Statements	Non-tribal Mean	Verbal description	Tribal Mean	Verbal description
3.	How often do you recycle	2.96	Sometimes	3.25	sometime
4.	How often do you use public transportation or walk instead of driving	3	Sometime	2.73	Sometimes
5.	Do you regularly use reusable bags, bottles, or containers	3.01	Sometimes	3.15	Sometimes
6.	How often do you turn off lights when leaving a room	3.88	Sometimes	3.88	Often
7.	How often do you conserve water by turning off the tap while brushing your teeth	3.3	Sometimes	3.7	Sometimes
8.	I plant trees to save the environment	3.3	Sometimes	3.56	Often

9.	How frequently do you buy new products instead of reusing or repairing existing ones	3.36	Sometimes	3.4	Sometimes
10.	How often do you throw away food instead of composting or finding another use for it	3.01	Sometimes	3.08	Sometimes
11.	How frequently do you discard old clothes and textiles instead of donating or recycling them	2.7	Some times	2.65	Some times

(Mean: **1-1.49 Never, 1.50-2.49 Rarely, 2.50-3.49 Sometimes, 3.50-4.49 Often, 4.50-5.00 Always**)

The table compares the environmental behaviours of nontribal and tribal groups based on their mean scores and frequency descriptions. Both groups exhibit similar behaviours with slight variations. Tribal respondents tend to recycle more often (mean score 3.25) compared to nontribal respondents (mean score 2.96). Non-tribal individuals are slightly more likely to use public transportation or walk (mean score 3) than tribal individuals (mean score 2.73). Both groups equally use reusable bags, bottles, or containers "sometimes." Tribal respondents conserve water and plant trees more frequently, with mean scores of 3.7 and 3.56, respectively, compared to non-tribal scores of 3.3. Both groups often turn off lights when leaving a room, scoring equally high (mean score 3.88). They also exhibit similar tendencies to buy new products instead of reusing, and to throw away food instead of composting, with scores around 3. Both groups discard old clothes and textiles "sometimes," with mean scores slightly below 3. Overall, the tribal group shows a marginally higher engagement in environmentally friendly practices compared to the nontribal group.

Table 6. Comparison of Environmental Practices between Tribal and Non-tribal students

Sr. no.	Statements	Nontribal		Tribal	
		Yes	No	yes	no
1	Do you use appliances that are not energy-efficient	31 (51.67%)	29 (48.33%)	33 (55%)	27 (45%)
2	I over watering the garden to keep it green	29 (48.33%)	31 (51.67%)	27 (45%)	33 (55%)
3	Do you burn leaves, trash, or other materials to clean the environment	32 (53.33%)	28 (46.67%)	27 (45%)	33 (55%)
4	Are you involved in any clean-up events	51 (85%)	9 (15%)	54 (90%)	6 (10%)

From the table, for the question on using non-energy-efficient appliances, 51.67% of non-tribal respondents answered "yes" while 48.33% said "no", compared to 55% "yes" and 45% "no" among tribal respondents. Regarding overwatering gardens, 48.33% of nontribal individuals admitted to it, whereas 51.67% did not; for the tribal group, 45% said "yes" and 55% "no". When asked about burning leaves, trash, or other materials to clean the environment, 53.33% of non-tribal respondents confirmed they do, while 46.67% denied it; in the tribal group,

45% answered "yes" and 55% "no". Lastly, 85% of non-tribal participants reported involvement in clean-up events, with only 15% not participating; in contrast, 90% of tribal respondents are involved, and 10% are not.

Clean-Up Events Participation: Both groups show high involvement, with tribal students being slightly more active. This comparison highlights that tribal students tend to engage more in practices that are not environmentally friendly, but they also show a higher participation rate in clean-up activities compared to non-tribal students.

Theme 1: Dispose of food Waste

Both tribal and non-tribal students prioritize planting trees as a key method for promoting environmental awareness, with tribal students particularly favouring it. While both groups value the use of drama and social media, non-tribal students show a higher preference for social media. Tribal students additionally emphasize the importance of village outreach significantly more than their non-tribal counterparts. Overall, both groups lean towards practical, engaging methods to enhance environmental practices, with tribal students showing a broader interest in direct community involvement.

Theme 2: Activities and Programmes for Improving Environmental Practices in Schools

Both tribal and non-tribal students said that only Bana Mohotsav organizes to improve environment practice in their school.

Theme 3: Environmental Protection Activities Practised Outside the School

Considering the participation of tribal and non-tribal people in different types of environmental activities other than schooling, it is noted that tree planting is much more common among tribal people, with 31 participants in comparison to 17 non-tribal participants. Regarding the act of watering trees, a slight majority of non-tribal participants are noted, with 12 in number in comparison to 8 tribal participants. Separating plastic waste is more common among non-tribal people as compared to tribal people, with 10 participants against 5 tribal participants. Moreover, there is a significant number of both tribal and non-tribal people who have not participated in any sort of environmental activity, which are 16 and 21, respectively.

Theme 4: New Habits Planned for Environmental Sustainability

When considering new habits for environmental sustainability, the most popular choice among both tribal and non-tribal individuals is planting a tree, with 18 tribal and 17 non-tribal participants expressing this preference. Reducing plastic use is also a significant choice, favoured by 14 tribal and 13 non-tribal individuals. Other notable habits include water conservation, with 10 tribal and 11 non-tribal participants, and throwing plastic in separate places, with 10 tribal and 9 non-tribal participants. Planting trees on birthdays is less popular but still noteworthy, with 8 tribal and 10 non-tribal individuals planning to adopt this habit. This data indicates a strong overall commitment to planting trees and reducing plastic use as key strategies for environmental sustainability among both tribal and non-tribal groups.

Theme 5: Suggestions for Promoting Environmental Awareness and Sustainable Practices

To enhance environmental awareness and practices among tribal and non-tribal communities, several effective strategies have been identified. Both groups show strong support for planting trees, with 16 tribal and 12 non-tribal individuals prioritizing this activity. Drama emerges as a promising tool for education and advocacy, favoured by 12 tribal and 11 non-tribal participants. Engaging communities directly and using social media platforms are also key, with non-tribal individuals particularly enthusiastic about social media's potential (12 participants). Promoting sustainable transportation options garners interest from both groups, highlighting a shared concern for reducing carbon footprints (8 tribal, 7 non-tribal). Additionally, conducting environmental awareness campaigns in villages is valued by 13 tribal and 10 non-tribal participants, indicating a widespread

desire to spread knowledge and practices throughout rural areas. These efforts collectively aim to empower communities and foster a culture of environmental stewardship across diverse demographics.

MAJOR FINDINGS

After analysis and interpretation of collected data, the present study highlights several key findings regarding environmental awareness and practices among tribal and non-tribal secondary school students.

- The study revealed that both tribal and non-tribal secondary school students possess a considerable level of environmental awareness.
- The analysis indicated that tribal students demonstrate environmental awareness mainly through traditional ecological knowledge and their close interaction with nature.
- Non-tribal students showed environmental awareness primarily through formal education, school curriculum, and exposure to media and environmental programmes.
- The findings also showed that students practice several environmentally responsible behaviours, such as planting trees, conserving water, reducing plastic use, and maintaining cleanliness in their surroundings.
- The responses from the open-ended questionnaire highlighted that students are aware of the importance of environmental protection and sustainable practices in their daily lives.
- The study suggests that combining traditional environmental knowledge with formal environmental education can enhance environmental awareness among secondary school students.
- Both groups, however, reveal areas for improvement in reducing environmentally unfriendly practices. Strategies such as using drama, social media, and community engagement are identified as effective methods to enhance environmental awareness across both tribal and non-tribal communities.

Overall, the study underscores the need for targeted interventions to foster sustainable behaviours tailored to the specific preferences and behaviours observed in tribal and non-tribal student populations. The present study examined the level of environmental awareness among tribal and non-tribal secondary school students, as well as their actual behaviour regarding environmental protection. In terms of awareness, tribal students achieved a slightly higher mean score ($M = 21.71$) compared to non-tribal students ($M = 20.50$). However, this difference was not statistically significant, $U = 1545, p = .176$. This finding is consistent with the results of Soren and Acharya (2022) and Bhat and Husain (2017), who similarly reported no statistically significant difference in environmental awareness between tribal and non-tribal students.

In terms of environmental behaviour, both groups are concerned about environmental protection, but their level of perceived behavioural control is moderate. This is similar to what Murat Cetin (2010) found in his study.

In terms of their approach towards the environment, tribal students are more involved in activities such as recycling and planting trees, whereas non-tribal students are more interested in activities such as taking public transport and participating in cleanliness drives. This is also in line with Abdul Hassan (2010) and also with the views presented by Suleyman Hasloglu (2011), which assert that the environmental habits followed by the students are determined by environmental education and active participation in such activities.

Overall, it can be seen that both tribal and non-tribal students are moderately aware about environmental issues and are also taking good steps towards protecting the environment. However, there is still a need to improve environmental education among school-going children so that they are more aware and also behave positively towards the environment. This is also in line with the views presented by R. Gopal et al. (2023).

EDUCATIONAL IMPLICATION

- This may enable the teacher to influence their teaching methods, curriculum choice and overall approach to education.

- Teachers may integrate environment topic into their lessons, fostering a deeper understanding of ecological systems and the importance of conservation.
- Environmental awareness can drive teachers to advocate for environmentally responsible policies within their schools and communities.

SUGGESTION FOR FURTHER RESEARCH

- Longitudinal Study: Conduct a longitudinal study to track changes in environmental practices and attitudes over time. Additionally, longitudinal studies could track how environmental attitudes and behaviours evolve among these student populations. Exploring these avenues will not only deepen our understanding of environmental stewardship among youth but also inform the development of effective strategies to promote sustainable practices in diverse educational settings and communities.
- Sample size increased in future study
- Further research may also be done in different districts of Odisha.

CONCLUSION

In conclusion, it is safe to say that this study has provided valuable insights into environmental awareness among tribal and non-tribal secondary school-going students. The findings of this study indicate that there is a similarity in the environmental consciousness of tribal and non-tribal secondary school-going students. There is a general consensus among these two groups of respondents about the importance of protecting the environment. They also engage in different sustainable activities. There is, however, a lot of scope for future research in this area. Future studies could be conducted to understand the factors responsible for these sustainable activities. Future studies could also be conducted to understand how these two groups of respondents change in their environmental consciousness over time.

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