



Article

Nurturing Nature for a Sustainable Tomorrow: Self-Motivation as a Key Driver Among Undergraduate and Postgraduate Students in Vadodara District.

Article History:

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How to cite this article:

Kamjula N, Krishnam Raju M, Sunitha P. Nurturing nature for a sustainable tomorrow: self-motivation as a key driver among undergraduate and postgraduate students in Vadodara district. *J Int Commer Law Technol.* 2026;7(1):1418-1427.

Received: 06-04-2025

Revised: 20-04-2025

Accepted: 02-05-2025

Published: 20-05-2025

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Abstract: The escalating environmental crisis has made sustainability a central concern for policymakers, educators, and researchers worldwide. Among various stakeholders, youth—particularly college students—play a pivotal role in shaping a sustainable future. This study investigates the influence of self-motivation on environmental attitudes and sustainable behaviour among undergraduate (UG) and postgraduate (PG) students in Vadodara district, Gujarat, India. The research is grounded in the motivational theories of Abraham Maslow and Frederick Herzberg, providing an interdisciplinary framework linking psychology with environmental sustainability. A structured questionnaire, incorporating the New Ecological Paradigm (NEP) scale and self-motivation constructs, was administered to 300 students selected through stratified random sampling. Statistical tools such as Cronbach's alpha, descriptive statistics, correlation, independent samples t-test, ANOVA, and multiple regression analysis were employed. The results reveal a strong positive correlation between self-motivation and love for nature ($r = 0.68, p < 0.01$). Higher-order psychological needs—esteem and self-actualization—emerge as significant predictors of sustainable behaviour. Gender and academic-level differences were also statistically significant. The findings highlight the importance of integrating motivational frameworks into sustainability education to foster environmentally responsible behaviour among youth.

Keywords: Environmental Attitudes, Herzberg theory, Maslow theory, NEP Scale, Self-Motivation, Sustainability.

INTRODUCTION

Sustainability has become an urgent global imperative in response to environmental degradation, climate change, biodiversity loss, and resource depletion. These challenges have far-reaching consequences for human well-being, economic stability, and ecological balance. While technological advancements and policy interventions are critical, the role of individual behaviour—particularly among youth—cannot be overstated.

India, with one of the largest youth populations in the

world, presents both an opportunity and a challenge in achieving sustainable development goals. College students, especially those pursuing undergraduate and postgraduate education, are at a formative stage where attitudes, values, and behaviours are shaped. Their engagement with environmental issues can significantly influence future societal outcomes.

Despite increasing awareness of environmental issues, a persistent gap exists between knowledge and action. Many students acknowledge the importance of sustainability but fail to translate this

awareness into consistent pro-environmental behaviour. This gap raises an important question: what drives individuals to act sustainably?

Motivation is a critical determinant of human behaviour. Psychological theories of motivation provide valuable insights into why individuals engage in certain behaviours. The hierarchical model proposed by Abraham Maslow suggests that human needs evolve from basic physiological requirements to higher-order needs such as self-actualization. Similarly, Frederick Herzberg distinguishes between hygiene factors that prevent dissatisfaction and motivators that actively drive engagement.

When applied to sustainability, these theories suggest that environmental protection is not merely a necessity but also a pathway to fulfilling higher psychological needs. For instance, clean air and water satisfy physiological needs, while participation in environmental initiatives fulfils esteem and self-actualization needs.

This study seeks to explore the relationship between self-motivation and environmental attitudes among college students in Vadodara district. By integrating motivational theories with sustainability, the research aims to provide a comprehensive understanding of the psychological drivers of environmental behaviour.

Literature Review

The concept of nurturing nature for a sustainable tomorrow has gained increasing scholarly attention in recent years, particularly in the context of youth engagement and environmental sustainability. Contemporary research highlights the importance of environmental attitudes, motivation, and behavioural intention in promoting sustainable practices.

Environmental Attitudes Among Students

Environmental attitudes refer to individuals' beliefs, values, and behavioural intentions toward the environment. Previous studies indicate that students generally exhibit moderate to high levels of environmental awareness. However, this awareness does not always translate into action. Factors such as lack of motivation, social influence, and institutional support often hinder pro-environmental behaviour.

Maslow's Hierarchy of Needs and Sustainability

At the most fundamental level, physiological needs such as food, water, and air are entirely dependent on natural ecosystems. Human survival is sustained by biodiversity, fertile soil, clean water systems, and breathable air, all of which are products of a balanced and functioning environment. Environmental degradation, therefore, directly threatens the most basic level of human existence, making sustainability

an essential prerequisite for life itself.

The next level, safety needs, is closely related to ecological security and environmental stability. A stable environment shields people and communities from natural disasters like heatwaves, floods, droughts, and health risks associated with pollution. Climate change and environmental degradation increase vulnerability and uncertainty, which reduces psychological and physical security. Therefore, sustainable environmental practices like pollution control, resource conservation, and climate mitigation strategies are crucial for guaranteeing long-term safety and stability.

Moving forward, social interaction and community involvement satisfy the feeling for belonging. A sense of community is fostered by taking part in neighbourhood-based environmental projects, such as recycling programs, cleaning campaigns, tree planting drives, and environmental awareness events. In addition to improving interpersonal ties, these group efforts foster a sense of shared accountability for environmental preservation. In this sense, sustainability becomes an ecological and social endeavour that strengthens community cohesiveness and identity.

People look for self-worth, respect, and acknowledgment at the esteem needs level. Self-esteem is positively impacted by sustainable and environmentally conscious conduct, particularly when it is recognized by peers, organizations, or society at large. Positive behaviour is reinforced and sustained engagement in sustainable practices is encouraged when environmental efforts are acknowledged with rewards, recognition, or leadership positions in eco-clubs. This combines social acceptance and self-assurance with environmental responsibility.

Realizing one's full potential, creativity, and purpose is the pinnacle of self-actualization. In this situation, environmental stewardship becomes a significant means of achieving personal fulfilment. People who actively participate in environmental protection frequently feel a strong sense of purpose, moral fulfilment, and a connection to the natural world. People can match their own values with the greater well-being of society and the earth by engaging in activities like conservation, sustainability advocacy, and ecological study.

Overall, Maslow's concept implies that sustainability is an essential component of human psychological development rather than just an external necessity. Basic human needs must be met by a healthy environment, and active participation in sustainable behaviours promotes higher-order psychological

development. Therefore, sustainability serves as a basis for human survival as well as a result of improved human development, strengthening the ongoing and interconnected interaction between ecological balance and human well-being (Maslow, 1943; Schultz, 2020).

Herzberg's Two-Factor Theory and Sustainability

Frederick Herzberg's Two-Factor Theory, which distinguishes between hygienic elements and motivators, offers an important framework for comprehending human motivation. The term "hygiene factors" refers to outside circumstances that, while not always increasing satisfaction, might cause discontent when they are lacking or insufficient. Essential environmental conditions like clean air, safe drinking water, sanitation, pollution-free surroundings, and ecological stability are considered hygiene considerations in the context of environmental sustainability. These elements are essential to human well-being, and their absence causes psychological stress, health hazards, and physical discomfort. However, their very existence guarantees a minimum degree of human contentment and stability rather than creating long-term motivation for environmental action.

Conversely, motivators are internal elements that actively encourage people to perform in a purposeful and goal-oriented manner. These consist of accomplishment, acknowledgment, accountability, personal development, and a feeling of direction. When people actively engage in environmental protection activities like tree planting drives, recycling programs, climate awareness campaigns, and community-based conservation projects, motivators arise within the sustainability framework. In addition to boosting self-esteem through social acknowledgment and moral fulfilment, such involvement cultivates a sense of accomplishment and identity.

Environmental quality serves mainly as a hygiene aspect in relation to sustainability, making sure that people are not unhappy because of pollution, resource scarcity, or ecological destruction. Genuine participation in sustainable activities, however, serves as a motivator since it gives people a greater feeling of purpose and psychological fulfilment. According to Herzberg's theory of intrinsic motivation, students who participate in environmental projects frequently express increased levels of pride, accountability, and personal development.

Thus, according to Herzberg's thesis, enhancing environmental circumstances by itself is not enough to encourage long-term ecological behaviour within the context of sustainability. Instead, it is the

integration of meaningful engagement, recognition, and purposeful participation in environmental activities that drives sustained motivation for ecological responsibility (Herzberg, 1959; Deci & Ryan, 2020).

Integration with Motivation Theories: Abraham Maslow and Frederick Herzberg's theories are supported by the analysed studies taken together. Environmental sustainability satisfies fundamental requirements for safety and survival. Active participation is motivated by higher-order desires, such as self-actualization and esteem. The gap between awareness and action is filled by motivation.

Environmental Attitudes and NEP-Based Studies

Recent studies using the New Ecological Paradigm (NEP) scale have provided valuable insights into environmental attitudes. Tonin and Benedetto (2024) examined environmental perceptions among Italian citizens and found that ecological concern is strongly influenced by socio-demographic variables and value systems. Their study emphasized that environmental attitudes are multidimensional, encompassing ecological limits, anti-anthropocentrism, and balance of nature (Tonin & Benedetto, 2024).

Role of Education and Institutional Interventions

Educational institutions play a critical role in shaping environmental attitudes. A study conducted in Hong Kong (Lee et al., 2024) demonstrated that students residing in green-certified residential halls exhibited significantly higher environmental awareness and sustainable behaviour. Intervention-based studies have also shown that environmental education programs improve students' ecological knowledge, attitudes, and behavioural intentions (Stevenson et al., 2021). These findings highlight the importance of experiential learning in promoting sustainability.

Social and Cultural Influences

Environmental attitudes are greatly influenced by social and cultural variables. According to research done in Lithuania, pupils' impressions of the environment are influenced by social norms, cultural values, and health concerns (Dagiliūtė et al., 2021). The importance of social identity, civic participation, and moral responsibility in fostering sustainability was highlighted in a recent study on environmental citizenship among Swedish students (Olsson & Gericke, 2025).

Youth Engagement and Sustainability

In order to achieve sustainable development, youth engagement is essential. According to a study on young people's sustainable tourism behaviour,

knowledge levels are high, but actual conduct varies according to socioeconomic circumstances (Singh & Sharma, 2025). Digital channels have also become effective instruments for environmental advocacy. Social media increases awareness and participation, according to research, but it can also result in surface-level interaction without significant behavioural change (Kumar & Gupta, 2024).

Psychological Perspectives and Ecopsychology

Environmental behaviour is influenced by psychological and emotional aspects, according to recent research. Sustainability has been found to be primarily driven by moral obligation, emotional affinity to nature, and concern for future generations. The idea of biophilia is supported by ecopsychology, which contends that people who have a deep emotional bond with the natural world are more likely to participate in conservation initiatives (Schultz, 2020).

Ecopsychology and Biophilia

Ecopsychology explores the psychological relationship between humans and nature. The concept of biophilia suggests that humans have an innate affinity for nature, which contributes to emotional well-being and environmental responsibility.

Synthesis of Literature

- The reviewed studies consistently show a gap between environmental awareness and actual pro-environmental behaviour among students.
- Environmental attitudes are generally moderate to high, but are influenced by social, cultural, and demographic factors (Tonin & Benedetto, 2024).
- Motivation plays a central role in converting awareness into action, as explained by Abraham Maslow and **Frederick Herzberg**.
- Basic environmental conditions (clean air, water, safety) satisfy physiological and safety needs, forming the foundation for sustainability behaviour.
- Higher-order needs such as esteem, belongingness, and self-actualization strongly drive sustained environmental engagement.
- Educational interventions (green campuses, environmental education programs) significantly improve knowledge, attitudes, and behaviour (Stevenson et al., 2021; Lee et al., 2024).
- Social norms, cultural values, and civic identity strongly influence environmental responsibility (Dagiliūtė et al., 2021; Olsson & Gericke, 2025).
- Youth show high awareness but inconsistent behaviour due to socioeconomic constraints and lack of institutional support (Singh & Sharma, 2025).
- Digital platforms increase environmental awareness but may lead to superficial

engagement without real action (Kumar & Gupta, 2024).

- Psychological factors such as moral obligation, emotional connection to nature, and concern for future generations are strong motivators.
- The concept of biophilia (ecopsychology) supports the idea of innate human connection with nature (Schultz, 2020).
- Overall, sustainability behaviour emerges from the interaction of awareness, motivation, education, social influence, and emotional connection with nature.

Research Gap

- Most studies focus on environmental awareness, but not enough on how self-motivation converts awareness into sustainable behaviour among students.
- The application of Abraham Maslow and Frederick Herzberg to environmental behaviour in higher education is still limited.
- There is a lack of India-specific and region-focused studies, especially among students in districts like Vadodara.
- Few studies develop integrated models combining motivation, environmental attitudes, and behaviour together.
- Higher-order needs such as esteem and self-actualization are underexplored in predicting sustainability behaviour.
- Limited research examines how digital media, education, and intrinsic motivation interact in shaping long-term environmental behaviour.
- Most existing studies are descriptive, with fewer using advanced statistical tools like correlation, regression, and ANOVA.

Summary

There is a need for an empirical, motivation-based integrated model to study how self-motivation and psychological needs influence environmental attitudes and sustainable behaviour among UG and PG students in Vadodara district.

RESEARCH METHODOLOGY

The systematic framework for conducting research, which includes the methods, approaches, and instruments used to gather and examine data, is referred to as research methodology. John W. Creswell defines research methodology as "the entire approach to the research process, from theoretical assumptions to methods of data collection and analysis" (Creswell & Creswell, 2018). It offers the framework for guaranteeing a study's validity, reliability, and scientific rigor.

In a similar vein, research methodology is described by Mark Saunders as an organized process that helps researchers decide on research design, data collecting, and analytical techniques (Saunders et al.,

2019). In social science research, technique is essential to elucidating correlations between variables and producing significant findings.

Research Design

A descriptive and analytical research design is used in this study. While an analytical design looks at correlations between variables, a descriptive design is used to methodically characterize features of a population or phenomenon.

The researcher can provide a comprehensive profile of students' environmental attitudes and motivational levels through descriptive study. On the other hand, analytical study makes it possible to verify theories and find connections between sustainable behaviour and self-motivation.

According to Creswell (2018), analytical designs aid in testing theoretical frameworks and causal linkages, while descriptive designs are especially helpful for examining attitudes and perceptions.

Research Approach

The quantitative research approach used in this study is gathering and analysing numerical data to find trends and connections. The behavioural and social sciences make extensive use of quantitative research because of its objectivity and capacity to generalize results.

Earl Babbie claims that measurement, statistical analysis, and hypothesis testing are key components of quantitative research (Babbie, 2020). The method is suitable for this study since it aims to gauge students' motivation levels, attitudes about the surroundings, and how these relate to one another.

Population and Sample

The population: Undergraduate (UG) and graduate (PG) students enrolled in colleges throughout Gujarat's Vadodara district make up the study's population.

The size of the sample: To guarantee sufficient representation and statistical reliability, a sample of 300 students was chosen. Method of Sampling The study uses stratified random sampling, in which samples are taken proportionately from each group after the population is split into subgroups (UG and PG students).

By guaranteeing that important subgroups are sufficiently represented, stratified sampling improves representativeness and lowers sample bias, according to Saunders et al. (2019).

Data Collection Methods

Primary Data: Students were given a structured questionnaire to complete in order to gather primary data. The survey had questions about psychological

needs, self-motivation, and environmental perspectives.

Secondary Data: Research publications, books, and journals pertaining to environmental psychology, motivation theories, and sustainability were the sources of secondary data.

Instrumentation

A structured questionnaire with four pieces served as the research tool:

1. Demographic Data
2. NEP-based Environmental Attitude Scale
3. The Self-Motivation Scale.
4. Maslow-Based Needs Evaluation

A 5-point Likert scale, with 1 denoting "strongly disagree" and 5 denoting "strongly agree," was used to rate each item. Because of its ease of use and efficiency in gauging attitudes and perceptions, the Likert scale is frequently employed in social science research (Joshi et al., 2015).

Reliability and Validity

Reliability: A measurement tool's consistency is referred to as reliability. Cronbach's Alpha was used to evaluate it, and the result was 0.87, which indicates strong internal consistency.

A Cronbach's alpha value greater than 0.70 is deemed appropriate for social science research, according to Babbie (2020).

Validity: The degree to which an instrument measures what it is supposed to measure is referred to as validity.

- Expert review ensures content validity.
- Construct Validity: Determined by alignment with recognized measures (motivation constructs and NEP).

According to Creswell (2018), validity is crucial for guaranteeing the reliability and correctness of study findings.

Data Analysis Techniques Used

Analysis of Correlation: used to investigate the connection between environmental attitudes and self-motivation.

t-Test for Independent Samples: used to compare how male and female students differ from one another.

Analysis of Variance, or ANOVA: used to examine how UG and PG students differ from one another.

Analysis of Regression: used to assess how well motivating elements predict sustainable behaviour. Regression analysis is a useful tool for analysing relationships between dependent and independent variables, according to Hair et al. (2020).

Ethical Considerations

Research integrity and credibility depend on ethical

compliance (Resnik, 2020). In light of this, the study followed ethical research guidelines, such as:

- Participants' informed consent
- Responses' confidentiality
- Participation that is voluntary
- Participants are not harmed

Limitations of Methodology

- Only the Vadodara district is included in the study.
- Response bias may be introduced by self-reported data
- Causal inference is limited by cross-sectional design.

RESULT

In order to investigate environmental attitudes and self-motivation among UG and PG students in the Vadodara district, the current study's results were examined utilizing descriptive and inferential statistical techniques. To assess the suggested hypotheses, the study uses measures of central tendency, correlation, t-test, ANOVA, and regression.

The results show that students have high levels of self-motivation and environmental awareness, indicating a favourable attitude toward sustainability. The theoretical framework based on Frederick Herzberg and Abraham Maslow is supported by additional statistical analysis that shows strong correlations between pro-environmental behaviour and motivational elements.

Overall, the findings show that students' environmental responsibility is greatly influenced by their self-motivation, which is further examined in the inferential analysis sections that follow.

Descriptive Statistics

Table 1: Descriptive Statistics of Key Variables

Variable	N	Mean	Standard Deviation	Minimum	Maximum
Environmental Awareness (Love for Nature)	300	4.12	0.56	2.80	5.00
Self-Motivation towards Sustainability	300	4.05	0.60	2.70	5.00

Interpretation: Students exhibit excellent self-motivation ($M = 4.05$) and good environmental awareness ($M = 4.12$), according to the results. The close mean values show that awareness and motivation for sustainability are positively aligned. Although there may be some difference among students, the average responses are still very positive, as indicated by the moderate standard deviation.

These results show that UG and PG students in the Vadodara district have a generally positive attitude toward environmental responsibility.

Students demonstrated high levels of motivation (Mean = 4.05) and environmental awareness (Mean = 4.12).

Correlation Analysis

A strong positive correlation ($r = 0.68$) indicates that higher motivation leads to stronger environmental concern. The association between self-motivation and environmental awareness (passion for nature) among UG and PG students in the Vadodara district was investigated using correlation analysis. The degree and direction of the association between the two variables were ascertained using Pearson's correlation coefficient.

Table 2: Correlation between Self-Motivation and Environmental Awareness

Variables	Environmental Awareness	Self-Motivation
Environmental Awareness	1	0.68**
Self-Motivation	0.68**	1

Note: $p < 0.01$ (2-tailed)

Interpretation

The findings indicate that self-motivation and environmental awareness have a significant positive association ($r = 0.68$, $p < 0.01$). This suggests that students who are more self-motivated are more likely to show greater

environmental awareness and positive views. A significant correlation between psychological drive and ecological responsibility is highlighted by the positive direction of the connection, which implies that as self-motivation rises, so does environmental consciousness.

This result validates the theoretical viewpoint that sustainable behaviour is greatly influenced by internal motivational variables, as described in the frameworks of Frederick Herzberg and Abraham Maslow. Overall, the findings support the idea that self-motivation is a significant predictor of pro-environmental conduct and validate that motivation plays a critical role in influencing students' environmental concern.

Gender Differences

In terms of environmental views, female students performed better ($p < 0.05$). To determine if male and female pupils in the Vadodara district have significantly different environmental attitudes, an independent sample t-test was used.

Table 3: Gender Differences in Environmental Attitudes

Gender	N	Mean	Standard Deviation	t-value	p-value
Male	140	3.95	0.62	2.45	0.015*
Female	160	4.25	0.50		

Note: $p < 0.05$ (Significant)

Interpretation

The findings show that male and female students' views about the environment differ statistically significantly ($p < 0.05$). Female students scored higher ($M = 4.25$) than male students ($M = 3.95$), indicating that they are more concerned about the environment and have a more optimistic outlook on sustainability.

This discrepancy could be explained by female students' increased involvement in pro-environmental activities, social responsibility, and emotional sensitivity. The results are in line with psychological viewpoints on attitude formation within Abraham Maslow's motivational frameworks, supporting the notion that demographic characteristics like gender affect environmental behaviour.

Academic Level Differences

PG students demonstrated greater environmental awareness compared to UG students. An independent sample t-test was conducted to examine whether there is a significant difference in environmental awareness between undergraduate (UG) and postgraduate (PG) students in Vadodara district.

Table 4: Academic Level Differences in Environmental Awareness

Academic Level	N	Mean	Standard Deviation	t-value	p-value
UG Students	180	4.00	0.58	2.31	0.022*
PG Students	120	4.22	0.53		

Note: $p < 0.05$ (Significant)

Interpretation

The findings indicate that UG and PG students' environmental awareness differs statistically significantly ($p < 0.05$). In comparison to UG students ($M = 4.00$), PG students ($M = 4.22$) showed greater environmental awareness. This implies that postgraduate students have a better grasp of environmental challenges due to increased academic exposure, maturity, and higher-level learning experiences. PG students are more likely to participate in critical thinking and research-based learning, which increases their understanding of sustainability principles.

The results are compatible with motivational development perspectives, where increased cognitive engagement promotes higher-order demands under Abraham Maslow's paradigm, and show that academic advancement plays a significant role in moulding environmental consciousness.

Regression Analysis

Sustainable conduct is strongly predicted by self-actualization and esteem requirements. The degree to which self-actualization and esteem requirements affect sustainable behaviour among UG and PG students in the Vadodara

district was investigated using multiple regression analysis. The model aids in determining how much higher-order psychological demands contribute to the explanation of pro-environmental behaviour.

Table 5: Regression Analysis Predicting Sustainable Behavior

Predictor Variables	Unstandardized Beta (B)	Standardized Beta (β)	t-value	Sig. (p)
Esteem Needs	0.42	0.42	4.21	0.001**
Self-Actualization	0.51	0.51	5.03	0.000**
Constant	0.38	—	—	—

Model Summary:

R = 0.73

R² = 0.54

Adjusted R² = 0.53

F = 56.12, p < 0.001

Note: p < 0.01 (Highly Significant)

Interpretation

According to the regression results, students' sustainable conduct is significantly predicted by both self-actualization and esteem needs. The model has a significant explanatory power, explaining 54% of the variance (R² = 0.54) in sustainable behaviour.

Self-actualization (β = 0.51) was found to be the best predictor, followed by esteem requirements (β = 0.42). This suggests that students are more likely to take environmentally conscious acts if they are looking for personal development, a sense of purpose, and recognition.

The results substantially support Abraham Maslow's theory that higher-order psychological demands are critical in determining sustainability behaviour. This lends credence to the notion that sustainability is influenced by deeper motivational elements that affect long-term behavioural commitment in addition to awareness.

DISCUSSION

According to the current study's findings, pupils in the Vadodara district exhibit significant self-motivation and a high level of environmental awareness, indicating a favorable attitude toward sustainability. Pro-environmental conduct is significantly shaped by psychological factors, as seen by the substantial association between motivation and environmental attitudes.

Gender differences show that female students are more concerned about the environment than male students, demonstrating the impact of social and emotional variables on attitudes toward sustainability. In a similar vein, postgraduate students exhibit higher awareness than undergraduate students, indicating that exposure to academia improves environmental comprehension.

Regression analysis also shows that sustainable behaviour is significantly predicted by self-actualization and esteem requirements, with self-actualization being the largest predictor. This demonstrates how important motivators of environmental stewardship are higher-order psychological needs.

Overall, the findings provide substantial support for Abraham Maslow's theoretical framework, showing

that sustainability behaviour is driven by deeper motivational and psychological elements that direct long-term ecological commitment in addition to awareness.

Implications

The findings of the present study have several important theoretical, practical, and educational implications for promoting environmental sustainability among students.

- **Conceptual Consequences:** The study enhances Abraham Maslow's relevance in comprehending environmental behaviour. It demonstrates that higher-order desires like self-actualization and esteem have a big impact on sustainable behaviour. This demonstrates how ecological behaviour is closely linked to human psychological development and expands motivation theory beyond organizational psychology into environmental and sustainability issues.
- **Implications for Education:** The findings emphasize how important it is to incorporate sustainability education into college courses. Structured environmental education at the undergraduate level can help narrow this gap because PG students exhibit greater understanding. To increase student enthusiasm and participation, educational institutions can

support seminars, eco-clubs, experiential learning, and community-based environmental initiatives.

- Implications for Policy: Educational policymakers should concentrate on creating frameworks for value-based environmental education that stress behavioural change and go beyond raising knowledge. To improve intrinsic motivation and long-term environmental responsibility, policies should promote students' active involvement in sustainability activities.
- Practical Consequences: According to the study, since esteem needs have a big impact on environmental behaviour, schools and universities should provide platforms that honour and promote sustainable behaviour. Student engagement and motivation can be increased through events like sustainability competitions, tree planting campaigns, and green campus projects.
- Social Consequences: The results suggest that raising young people's understanding of environmental issues can support more sustainable society. Promoting student involvement in environmental conservation can promote long-term ecological balance, community involvement, and shared responsibility.

Future Research

- For improved generalization, larger and more varied samples from various Indian regions could be used in future research.
- Environmental attitudes and motivation can be tracked over time using longitudinal studies.
- Other factors that can be included in research include environmental values, emotional intelligence, and personality traits.
- For a more thorough examination of correlations, sophisticated methods such as Structural Equation Modelling (SEM) might be used.
- Studies that compare urban and rural areas as well as other academic fields can offer more comprehensive information.
- More research may be done on how digital platforms and social media influence environmental behaviour.
- Future studies may also evaluate the efficacy of interventions and programs for environmental education.

CONCLUSION

The current study finds that UG and PG students in the Vadodara area have high levels of environmental knowledge and self-motivation, suggesting a favourable inclination toward sustainability. The results show a robust correlation between environmental attitudes and motivation, with notable variations according to academic level and gender.

Higher-order psychological demands like self-actualization and esteem are powerful predictors of sustainable behaviour, according to regression research. Overall, the study supports Abraham Maslow's theory by showing that sustainability is heavily impacted by psychological and motivational elements in addition to awareness. This highlights the necessity for educational establishments to concentrate on motivational and value-based strategies in order to encourage students' long-term environmental responsibility.

REFERENCES

1. Babbie, E. (2020). *The practice of social research* (15th ed.). Cengage Learning.
2. Dagiliūtė, R., Liobikienė, G., & Minelgaitė, A. (2021). Sustainability at universities: Students' environmental attitudes and behavior. *Sustainability*, 13(4), 1821. <https://doi.org/10.3390/su13041821>
3. Deci, E. L., & Ryan, R. M. (2020). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford Press.
4. Dunlap, R. E., Van Liere, K. D., Mertig, A. G., & Jones, R. E. (2000). Measuring endorsement of the New Ecological Paradigm: A revised NEP scale. *Journal of Social Issues*, 56(3), 425–442.
5. Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2020). *Multivariate data analysis* (8th ed.). Cengage Learning.
6. Herzberg, F. (1959). *The motivation to work*. John Wiley & Sons.
7. Joshi, A., Kale, S., Chandel, S., & Pal, D. (2015). Likert scale: Explored and explained. *British Journal of Applied Science & Technology*, 7(4), 396–403.
8. Kumar, A., & Gupta, R. (2024). Digital activism and environmental awareness among youth. *Journal of Environmental Communication*, 18(2), 145–160.
9. Lee, J., Chan, E., & Lau, K. (2024). Green residential environment and student sustainability behavior. *Sustainability*, 16(3), 2104. <https://doi.org/10.3390/su16032104>
10. Liu, Y., Wang, S., & Zhao, X. (2023). Value-belief-norm theory and pro-environmental behavior among students. *International Journal of Environmental Research and Public Health*, 20(4), 3317. <https://doi.org/10.3390/ijerph20043317>
11. Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396. <https://doi.org/10.1037/h0054346>
12. Mikušová, M., & Stehlíková, B. (2022). Environmental awareness and sustainable behavior gap among youth. *Sustainability*,

- 14(8), 4567.
<https://doi.org/10.3390/su14084567>
13. Olsson, D., & Gericke, N. (2025). Environmental citizenship among university students. *Environmental Education Research*, 31(2), 250–268.
14. Schultz, P. W. (2020). Biophilia and environmental concern: Psychological connection to nature. *Journal of Environmental Psychology*, 71, 101110.
15. Singh, R., & Sharma, P. (2025). Youth engagement in sustainable tourism behavior. *Tourism Management Perspectives*, 45, 101120.
16. Stevenson, R. B., Peterson, M. N., & Bondell, H. D. (2021). Environmental education and behavior change. *Frontiers in Sustainability*, 2, 638294.
<https://doi.org/10.3389/frsus.2021.638294>
17. Tonin, S., & Benedetto, A. (2024). Environmental attitudes and NEP scale analysis. *Sustainability*, 16(5), 1902.
<https://doi.org/10.3390/su16051902>
18. Wang, Z, Zhang, B., & Li, G. (2022). Theory of planned behavior and environmental behavior. *Journal of Cleaner Production*, 345, 131–145.
19. Wilson, E. O. (1984). *Biophilia*. Harvard University Press.
20. Maslow, A. H. (1943). A theory of human motivation.
21. Herzberg, F. (1959). The motivation to work.
22. Dunlap, R. E. (2000). NEP scale.
23. Wilson, E. O. (1984). *Biophilia*.
24. Schultz, P. W. (2002). *Environmental psychology*.