

Undergraduates Students Perception and Attitude Towards Environmental Sustainability

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Abstract

Environmental awareness is having an understating of the environment, the impact of human behaviour's on it and the importance of its protection. Higher education institutions' environmental awareness programs play a significant role in educating and equipping the next generation for a green society. Examining the relationship between perception and attitude undergraduate students enrolled in several fields of specialty (economics, science, and arts) is the aim of this study. In all, 202 students from Mar Dionysius College Pazhanji took part in this study. A Likert scale was employed to gather information in order to assess students' perceptions and attitudes This study found that students who are aware of environmental sustainability develop an environmental culture in the society.

Keywords: Environmental awareness, Environment concern, Sustainability, Environment culture and Environmental sustainable product purchase intention

Introduction

In today's rapidly changing world, concerns about environmental sustainability have become increasingly prominent. From climate change to resource depletion, the pressing need for sustainable practices is evident across various domains of human activity. Environmental sustainability is a multifaceted concept that encompasses the responsible management of resources to ensure the well-being of both current and future generations. In 2023 the world saw new highs of green house gas emissions, temperature records tumbling and climate impacts arriving stronger and faster ((UN annual report 2023). Environmental Sustainability involves a balance between technological and economic advancement and the preservation of ecosystems, with a focus on preventing pollution and maintaining the integrity of the Earth's life-supporting systems. Environmental sustainability is a critical goal that involves the prudent use of resources, pollution prevention, and the integration of environmental considerations in product development and socio-economic policies. Despite the recognition of its importance, achieving sustainability is challenged by policy implementation failures and the need for a unified understanding of the concept. Education and a change in mindset are also vital in promoting sustainability practices. The development of clear indicators and a common language around sustainability terms can support the measurement and management of environmental sustainability efforts.

Understanding the perception and attitude of students towards environmental sustainability is essential for several reasons. Firstly, educational institutions have a unique opportunity to shape the values, beliefs, and behaviours of their student populations through formal education and extracurricular activities.

Secondly, students represent a demographic characterized by increasing awareness of environmental issues and a growing interest in social responsibility. Thirdly, as consumers, students wield considerable influence in shaping market demand, making their attitudes towards sustainability pivotal for driving change in corporate practices and product innovation.

Review of Literature

Environmental sustainability awareness among students is a critical focus area as educational institutions aim to prepare future leaders capable of addressing ecological challenges. Research has explored the factors influencing students' attitudes and behaviors toward environmental sustainability, as well as the effectiveness of environmental education in shaping these perspectives. Student attitudes toward environmental sustainability are significantly influenced by the theory of planned behavior, with attitudes being the strongest predictor of sustainability intentions and subjective norms affecting intentions through the influence of professors, business leaders, and politicians (Boca & Saraçlı, 2019). High levels of environmental knowledge stimulate university students' environmental concern, attitudes, and responsibility, suggesting that education for sustainability in higher education curricula can be improved (Teksoz, Şahin, & Tekkaya-Oztekin, 2012). Sensitivity to nature and environmental awareness positively influence university students' intention to support pro-environmental activities and ecological knowledge, leading to global concerns (Kukkonen, Kärkkäinen, & Keinonen, 2018).

Student attitudes and subjective norms significantly influence their intention and behavior toward environmental sustainability, with professors and business leaders being key reference points (Swaim, Maloni, Napshin, & Henley, 2014). Environmental education strongly correlates with students' environmental knowledge and awareness, leading to increased awareness of sustainable consumption and lifestyle changes (Zsóka, Szerényi, Széchy, & Kocsis, 2013). University students in engineering, electrical, mechanical, and economic fields show a positive relationship between environmental education, perception, attitudes, and environmental behavior, contributing to sustainability (Boca & Saraçlı, 2019). Higher education for sustainability can benefit from focusing on affective outcomes, such as values, attitudes, and behaviors, rather than solely on cognitive skills (Shephard, 2008). Environmental education is strongly correlated with students' environmental knowledge, and this relationship is enhanced by students' intrinsic motivation, particularly at the university level. The content of environmental education, especially when addressing consumerism, is crucial in shaping sustainable consumption attitudes (Zsóka, Szerényi, Széchy, & Kocsis, 2013). There is a positive relationship between students' perceptions, attitudes, and environmental behaviors with students involved in environmental protection activities regardless of their field of study. Academic education in environmental issues leads to increased student participation in sustainable practices (Swaim, Maloni, Napshin, & Henley, 2014). Students' conceptions of sustainability vary widely but generally include aspects related to the nature, purpose, and timescale of sustainability. The methods used to research students' understanding, such as concept mapping and interviews, can impact the findings (Swaim, 2014). The study examines the differences.

Hypotheses

Hypothesis 1 : There is no significant difference between female and male students with regard to the perception and attitude

Hypothesis 2: Students environmental sustainability knowledge have no relationship

between environmental sustainability culture.

Hypothesis 3: Students environmental sustainability concern has no relationship between environmental sustainability cultures

Materials and Methods

Taking into account the literature and research, the study was required to determine the participants' level of environmental sustainability awareness, what they should be able to accomplish in their everyday lives, and how they behave both in and toward the environment. A questionnaire was employed in this study as a data gathering instrument. In order to determine the profile and traits of the students, it consists of 22 questions and four criteria. 202 Mar Dionysius College students of Pazanhaji University of Calicut provided input on their perceptions of the environment and their attitudes toward it.

There were four sections in the survey that was designed to gather research data. We attempt to determine students' personal information and characteristics in the first section by asking four questions (gender, age, depart, and year of study); we attempt to measure students' perceptions in the second section (A1–A13 questions); we attempt to determine students' environmental attitude in the third section (culture B 1-B5).

Sample and Measurement Tool

A Likert-scale-style questionnaire is used to gauge the students' environmental awareness, concern, culture, and buying intention. The scale goes from 1 (not agree) to 5 (completely agree). The statistical analysis software SPSS was used to assess the hypotheses by means of an independent samples t test. To determine the relationship between the variables, correlation was used.

Conceptual Model

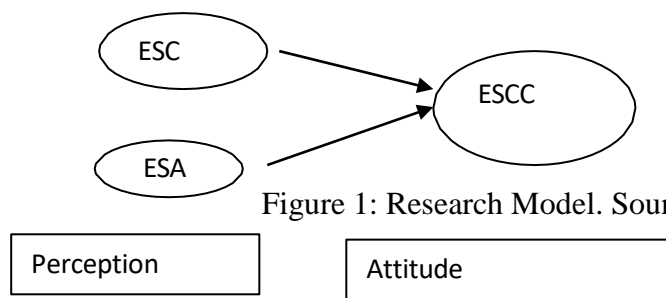


Figure 1: Research Model. Source: Authors

Independent Variables: ESC “Environmental Sustainability Concern”

ESA “ Environmental Sustainability Awareness”

Dependent Variables: ESCC ” Environmental Sustainability Culture”

Data Analysis and Interpretation

Reliability

Reliability is the measure of internal consistency of the constructs in the study. A construct is reliable if the Alpha value is greater than .70 (Hair et al.,2013). Construct reliability was assessed using Cronbach’s Alpha. The result revealed that the environmental sustainability awareness scale with eight item (.940) and the

environmental sustainability concern scale with five items (.897) were found reliable.

Similarly, environmental sustainability culture scale with five item (.955) were also found reliable. Reliability result are summarised in table

Table 1: Reliability Statistics

Constructs	No. Of items	Alpha
environmental sustainability awareness	8	.940
environmental sustainability concern	5	.897
environmental sustainability culture	5	.955

Source: Authors

t-test

H1 : There is no significant difference between female and male students with regard to the perception , attitude

Table 2: Gender wise comparison with perception and attitude

Constructs	Gender	N	Mean	Std. Deviation	Std. Error Mean	t- value	P Value	Inference
ESA	Female	146	3.8253	.73907	.06117	-1.124	.267	Insignificant
	Male	56	3.9554	.72748	.09721			
ESC	Female	146	4.2041	.77066	.06378	-.983	.327	Insignificant
	Male	56	4.3214	.72731	.09719			
ESCC	Female	146	3.3756	.96605	.07995	.314	.754	Insignificant
	Male	56	3.3274	1.00753	.13464			

Source: Authors

Table reveals that p value of the t-test of ESC, ESCC, ESA and ESPI on the gender of respondents. It is identified that there is no significant difference in the perception, attitude and behaviours of students based on their gender as the p values are .267,.327,and 0.754 which is greater than 5% level of significant, so we accept null hypothesis which means that mean difference on

environmental sustainability knowledge, concern and culture of male and female students were very small. So we can conclude that there is no gender difference in student's knowledge, environmental concern and culture.

Correlation

H1: Students environmental sustainability knowledge have no relationship between environmental sustainability culture.

H2: Students environmental sustainability concern has no relationship between environmental sustainability cultures.

Table 3: Correlation metric between the variables

Variables	ESC	ESCC	ESA
ESC	1		
ESCC	.518**	1	
ESA	.825**	.588**	1

Source: Authors

From the output correlation coefficient between environmental sustainability culture and environmental concern is .518 and the p-value for two tailed test of significance is less than .0005

Then we conclude that there is strong positive correlation between environmental sustainability culture and concern and that correlation is significant at the significance level of 0.01.

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The article provides information

Undergraduate's students of Mar Dionysius College have a high score for environmental perception

and attitude. And there is positive strong relationship between the perception and attitude.

Conclusions

Research in this area often explores how students perceive environmental problem, their level of concern about this issue and their willingness to take action to address them. Understanding student's Environmental concern and awareness (perception and attitude) can inform the development of effective environmental education programs and sustainability initiatives within higher education institutions. It can also contribute to broader efforts to cultivate a more environmentally conscious and responsible society.

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