# PRO-ENVIRONMENTAL CONCERNS - GENDERED NARRATIVES OF SUSTAINABILITY AMONG COLLEGE STUDENTS

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#### Abstract

The New Ecological Paradigm (NEP) is a novel way of considering how we interact with the environment. The NEP emphasizes the significance of a finite biophysical environment that places strong physical and biological limitations on human activities, in contrast to sociology's assumption that the biophysical environment is mostly inconsequential. This research study aims to investigate the intersection of gender and pro-environmental concerns among college students, employing the NEP scale as a key metric. The primary objective is to quantitatively identify the gender influences on environmental communication, shedding light on the nuanced dynamics that shape pro-environmental concerns within the college population. Using a quantitative research design, a structured survey instrument with the NEP scale and questions to assess gender identity, environmental communication preferences, and specific proenvironmental concerns was administered to a diverse sample of college students. Statistical analyses were employed to identify patterns and relationships between gender, environmental communication variables, and NEP scores. This comprehensive approach seeks to unravel the multifaceted relationship between gender, environmental communication, and ecological concerns among college students.

#### Keywords:

Environmental Sustainability, Environmental Communication, Proenvironmental Concerns, New Ecological Paradigm

## 1. INTRODUCTION

With mounting awareness along with environmental problems, it was recognized that humans are not immune to ecological constraints and future generations and ecosystem are in jeopardy [1]. Measuring and analysing public perceptions of the environment are becoming core elements in promoting environmental sustainability, which is a key goal to be achieved [2]. The New Ecological Paradigm (NEP) is a novel way of considering how humans interact with the environment. It represents a fundamental shift in how they see and engage with the environment around them, not merely a passing fad. There are several well-established environmental behavior measures and, among them, the New Environmental Paradigm (NEP) Scale is one used to measure the environmental concern of citizens [3]. NEP fundamentally resembles a fresh set of spectacles that alters how humans perceive their surroundings. They view nature as being intertwined with their life rather than treating it as something distinct from them. Realizing how closely their wellbeing and the well-being of the next generation are related to the health of the planet is key. The Human Exceptionalism Paradigm (HEP) has had an impact on most traditional sociology. This paradigm resulted from sociologists' efforts to establish sociology as a distinct field. The paradigm holds that sociology studies a wholly distinct field from nature because of how significant culture is to human civilization. Because of this, the field of study was founded on a paradigm that caused most sociologists,

regardless of their theoretical inclination, to believe that contemporary society are immune from ecological restrictions [4]. As a result, it disregarded how dependent all human activity is on the biophysical environment and ecosystems (NEP).

A fresh viewpoint a New Ecological Paradigm is necessary. Interactions between society and the environment are the main emphasis of this viewpoint. This viewpoint moves away from using simply social facts to describe sociological phenomena and instead places a strong emphasis on the interactions between society and the environment [5]. Although humans vary from other living things in that they have traits like culture and technology, they are still only one species among many that exist within a global ecosystem. Human society is influenced by social and cultural variables, but it is also shaped by complex cause, effect, and feedback loops in the web of nature [6].

The NEP emphasizes the significance of a finite biophysical environment that places strong physical and biological limitations on human activities, in contrast to sociology's assumption that the biophysical environment is mostly inconsequential. Traditional sociology has made the assumption that the accumulation of more advanced technology and social knowledge and understanding may advance indefinitely [7]. The NEP contends that this is a lie and that human ingenuity cannot overcome ecological limits that put a limitation on how much harmful human activity the earth can support as an ecological system [6]. Therefore, it is crucial to identify the gender influences on environmental communication, shedding light on the nuanced dynamics that shape proenvironmental concerns within the college population.

## 1.1 NEED FOR NEP

In order to address urgent environmental issues and promote a more sustainable interaction between people and nature, the NEP is required. Here are five crucial ideas emphasizing the necessity of NEP:

- Ecosystem Health: NEP places a strong emphasis on the interdependence of all ecosystems and life forms. For ecological health to be maintained, understanding these relationships is essential. NEP encourages good stewardship by emphasizing that human well-being depends on the health of natural systems.
- Long-Term Sustainability: NEP encourages sustainability and long-term thinking. It challenges us to think about how our decisions may affect coming generations. Sustainable behaviours are essential for a globe in prosperity in a world confronting environmental risks like climate change.
- Environmental concerns: These are frequently complicated, requiring a number of variables and feedback cycles. The systems thinking approach that NEP promotes is crucial for developing comprehensive answers that deal with the underlying causes of these difficulties.

- Behaviour Modification: NEP is an effective strategy for encouraging pro-environmental behaviour. It inspires people and cultures to embrace more sustainable lifestyles and activities by fostering a better sense of our interconnectedness with environment.
- Environmental Education and Policy: NEP contributes to the development of environmental education and policy. It offers a framework for formulating policies that adhere to the fundamentals of sustainability and responsible environmental management and establishing successful educational programs.

## 2. OBJECTIVE OF THE STUDY

• To assess the eco-gender gap in ecological concern employing the New Ecological Paradigm

## 3. REVIEW OF LITERATURE

In their study [7] which explored the influence of age and gender on the endorsement of the New Ecological Paradigm (NEP) found that there was a weak correlation between age and NEP endorsement, but there was no significant relationship between gender and the NEP though in context of parental status, women with children more pro-environmental attitude in comparison to women without children.

The author of [8] explored the effect of brief environmental module consisting of global environmental problems and energy issues on the endorsement of the New Ecological Paradigm on college students. In this regard, one set of students were administered the module while the others were not and then the NEP scale was administered to all sets of students. The results of this study showed that students who received the educational module showed more environmental concern and endorsed the New ecological paradigm (NEP).

To study the relationship between academic major and environmentalism among college students. So, the New ecological paradigm scale was administered to the students and the results showed that there was indeed a relationship between the perception of environmentalism and the academic major of the student. More specifically, business majors had lower scores than every other group on the NEP, recycling and support for campus environmental initiatives scales. The study also found that gender did not mediate environmentalism among the students [9].

A study to find out if environmental education (in this case a 'green classroom' was setup in the university) had any impact on the long-term effectiveness on students. About 104 students were asked to write an essay about small animals and insects. It was found that the students who had visited the green classroom had better understanding and viewed small animals on a positive perspective indicating that environmental education did have on impact on them [10].

A mixed-methods research focused on one mountain resort in order to acquire insight on the topic of environmental responsibility (ER). The initial study phase examined message framing and motives using qualitative approaches educating customers about ER. Results show that framing ER was intentionally done even so, just somewhat motivated. In the

second study phase, a scale was used investigation strategy to look at the effects of ER on customer perceptions and expectations. Results showed that customers' environmental awareness was modest awareness and that the organizations had a small influence on their behavioural goals ER programs. Overall, the study showed that framing is important for organizational staff. Environmental messaging created dissonance, yet the ER had an impact on consumers activities [11].

It is aimed to investigate how gender, age, locus of control, and community socioeconomic setting (CSES) connected to precollege students' perception of risk for 20 environmental hazards. The sample included 231 individuals. Young people aged 10 to 17 who attend 12 schools in a big city part of the Southeast of the US. Students who were female showed substantially higher perception of risk and male students had lower perception-of-risk ratings. Individuals involved in the internal locus of compared to either the intermediate or control groups, the control group had higher perceptions of risk or outside entities. Age and CSES did not significant correlation with risk perception [12].

The author [13] looked at the connection between visitors to zoos' environmental concern and their agreement with messaging framed in that concern. Observations from two zoos. Using two message forms, (N = 298; N = 400) yielded substantially comparable findings, indicating visitors are highly concerned about the environment and, generally, concur more with remarks that have been formulated by planetary concern. Environmental awareness is more likely to be sparked by biosphere messaging among zoogoers' conservation-related worries and practices. Zoos ought to think about technology such as smartphone applications that provide onsite, specifically phrased alerts about environmental concerns visitors. In-depth investigation is required to establish preferred communication styles outside of zoos. Thus, concluding that zoos must effectively communicate environmental challenges to influence visitor behaviour if they are to fulfil their objective.

#### 4. RESEARCH METHODOLOGY

Researchers adopted a quantitative approach for this study. The sampling method used was simple random sampling and the data were collected using a structured questionnaire employing the New Ecological Paradigm scale. Primary data was collected from college students from around Coimbatore using convenience sampling. The sample consisted of college students aged between 18 and 23 years. The questionnaire consisted of two sections. One section included questions to determine participant's environmental attitudes using the NEP scale, the respondents were asked to specify their level of agreement or disagreement with a series of statements (15 questions) using a five-point Likert scale, ranging from 1 to 5 (1 - 'strongly Agree' (SA), 2 - 'Agree' (A), 3 - 'Neutral' (N), 4 - 'Disagree' (D), 5 - 'strongly Disagree' (SD). The other section was to record the socio-demographic profile of the respondents.

RQ1: Does gender play a role in the pro-environmental concerns among college students?

#### 4.1 HYPOTHESIS

- H1: There is gender difference in the perception of ecological concern.
- H0: There is no gender difference in the perception of ecological concern.

## 5. RESULTS AND DISCUSSION

Table.1. Socio-demographic Characteristics of the Participants at Baseline

Distribution	Variables	Frequency	Percentage	
Gender	Male	100	50	
Gender	Female	100	50	
	Urban	112	56	
Area of Residence	Semi-urban	40	20	
Residence	Rural	48	24	
	Less than Rs.20,000/-	40	20	
Family Income	Rs.20,001/- to Rs.40,000/-	116	58	
	More than Rs.40,000/-	44	22	

The Table.1 contains the socio-demographic characteristics of the participants. Out of the 200 respondents, 50% were female and 50% were male. The majority of the respondents were from urban locality when compared to the rural setting followed by respondents from semi-urban locality. The majority of the respondents belonged to the middle-income range in the given ranges followed by high-income range respondents and finally the low-income range. Thus, a major part of the population was from the city with an income range of Rs.20,001/- to Rs.40,000.

Table.2. T-test for New Ecological Paradigm (NEP) and Gender

Measure	F	Sig.	t	p
New Ecological Paradigm	3.330	.074	2.200	0.032

*Note.* N=200

The Table.2 shows the t-test value which compares the means of the New Ecological Paradigm (NEP) scores between the Female and Male of the group. The independent sample t-test was conducted which reveals that the F-statistic is 3.330 which suggests a potential difference in variances between the groups, which may have influenced the results. The significance level(sig.) of 0.074 indicates that is no strong evidence to reject the null hypothesis however, significance level (p-value) of 0.032 is less than the conventional threshold of 0.05, suggesting that the difference observed is unlikely to be due to random chance, the t-value is 2.200 which when interpreted along with the p-value indicates that there is statistically significant evidence suggesting that there may exist a borderline relationship between NEP and gender.

This result suggests that there is evidence to support the claim that gender differences exist in NEP scores, with females showing a higher level of ecological concern compared to males. This increased level of ecological concern among the females may be attributed to several intrapersonal factors such as gender roles, values & beliefs, Self-concept, self-efficacy, reflection, and awareness. Hence the H0 has been rejected and H1. Accordingly, gender roles especially in the Indian society has a rigid ideology whereby females are often encouraged to be nurturing and empathetic which may have influenced the perception of the environment by making the females more ecologically concerned and endorse the New Ecological paradigm much more than the male participants. Values & beliefs are strongly held principles which guides the individual's choices and what they consider to be real or true, in this case females might internalize the belief that protecting the natural world is a moral duty much more owing to strongly held eco-centric values and beliefs in comparison to males. While self-concept is concerned, people who see themselves as environmentally conscious are more likely to prioritize ecological concern in their decision-making and behaviour.

In terms of self-efficacy, which refers to an individual's belief that they are capable and can accomplish tasks which may make a difference and have a positive impact on the environment, such individuals in this case females are more likely to engage in proenvironmental behaviours and advocacy. Reflection encourages individuals to introspect themselves, here it is ecological concern and such continuous examination of one's ecological concern and the effectiveness of one's efforts in promoting sustainability influences their endorsement of the New Ecological Paradigm (NEP). Lastly, awareness of the environment and environmental issues allows individuals to absorb information from various sources, such as media, education, and personal experiences. This internal dialogue helps individuals become aware of ecological issues, including climate change, biodiversity loss, and pollution thus enabling them to be more concerned about the environment.

#### 6. CONCLUSION

This study was aimed at finding out whether there exists a gender difference in the perception of ecological concern among college students aged between 18 and 23 years. In this regard, a total of 200 data (100 males and 100 females) was collected. From descriptive statistics, it was found that major part of the population lived in the city and belonged to middle-income group. This increased level of ecological concern among the females may be attributed to several intrapersonal factors such as gender roles, values and beliefs, self-concept, self-efficacy, reflection, and awareness. Overall, the results of the study indicate that gender difference exists among the individuals in terms of ecological concern wherein females were more concerned in comparison to males.

The study confirmed that increasing people's ecological consciousness can make environmental sustainability a more attainable objective. This approach has opened up new areas for future investigation. The first is about enhancing youth's NEP scores by expanding their environmental consciousness that bring them closer to the natural environment. Environmental education, both formal and informal, from elementary to university levels, can help establish an ecological worldview in future generations.

#### 6.1 LIMITATIONS OF THE STUDY

The study consisted of data only from college students and was limited to the geographical location of Coimbatore city. Sample size of the study was limited to 100 males and 100 females.

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