



A STUDY ABOUT THE PERCEPTION ABOUT CLIMATE TECHNOLOGY AMONG STUDENTS

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Abstract ABSTRACT:

This study delves into the perceptions of climate technology among students, aiming to uncover their attitudes, awareness, and beliefs regarding the role of technology in addressing climate change. Understanding these perceptions is crucial for devising effective educational strategies and fostering engagement in climate action initiatives. The research employs a mixed-methods approach, combining surveys and has an equivalent qualitative and interviews to gather comprehensive data.

Preliminary findings reveal a spectrum of attitudes among students, ranging from optimism about technology's potential to scepticism regarding its efficacy in mitigating climate change. Factors influencing these perceptions include environmental awareness, technological literacy, and socio-cultural influences. Additionally, the study explores differences across demographic variables.

Insights garnered from this research will contribute to the development of targeted educational interventions and policy initiatives aimed at enhancing student engagement with climate technology. By fostering a deeper understanding of student perspectives, this study seeks to empower the younger generation to become active participants in shaping a sustainable future.

Keywords: student perception, climate technology, attitudes, awareness, beliefs, mixed-methods approach, environmental awareness, technological literacy, socio-cultural influences, demographic variables, educational interventions, sustainability.

Index Terms - Component, formatting, style, styling, insert.

I. INTRODUCTION

INTRODUCTION

The accelerating pace of climate change presents one of the most pressing challenges of our time, demanding urgent action across all sectors of society. Among the key players in this global effort are our students, who represent the future stewards of our planet. Understanding their perceptions of climate technology—innovations designed to mitigate and adapt to climate change—is critical for shaping effective and efficient strategies to combat this existential threat. While numerous studies have explored public attitudes towards climate change, relatively less attention has been given to understanding how students perceive climate technology specifically. This demographic holds unique perspectives, being both beneficiaries of and contributors to technological advancements. Investigating their perceptions can provide valuable insights into how to tailor educational initiatives, policy interventions, and technological innovations to effectively engage and empower the upcoming technologies and next generation of environment. This study seeks to fill this gap by examining the perceptions of climate technology among students

across diverse educational backgrounds, demographics, and geographic regions. By employing a mixed-methods approach, combining surveys and qualitative interviews, we aim to capture the multifaceted nature of student attitudes, awareness, and beliefs regarding climate technology. Additionally, exploring potential influencing factors such as environmental awareness, technological literacy, and socio-cultural influences will enrich our understanding of perceptions.

Through this research, we endeavour to contribute to the development of evidence-based strategies for fostering greater student engagement with climate technology. By empowering students with the knowledge, skills, and agency to harness the potential of technology in addressing climate change, we can cultivate a generation of proactive and informed environmental stewards poised to tackle the challenges of the 21st century.

3.2 Data and Sources of Data

The study's implications will be discussed in terms of their relevance to education, policy-making, and public engagement. Recommendations will be provided for educators, policymakers, and stakeholders seeking to foster greater awareness, acceptance, and support for climate technology among students and as well as emerging youth and the whole of the youths.

3.3 Theoretical framework

The dependent variables include students' attitude, belief, exposure, knowledge and understanding about climate technology. The independent variables include knowledge level, understanding and level of comprehension about the climate technology industry.

RESEARCH METHODOLOGY

The research is based on conventional sampling. The universe of study is research and academia; the sample of study is specific institutions around Chennai and Coimbatore. Source of data is from students of a plethora of major.

3.1 Population and Sample

Awareness research plays a crucial role in identifying gaps in knowledge and perceptions, as well as informing the development of targeted interventions and communication strategies. It helps organizations, policymakers, and advocates gauge the effectiveness of their messaging and outreach efforts. For instance, in public health, awareness research can evaluate the impact of health education campaigns on preventive behaviours such as vaccination uptake or smoking cessation.

Moreover, awareness research contributes to raising consciousness about pressing social issues and mobilizing support for change. By uncovering misconceptions or barriers to action, it enables stakeholders to tailor their approaches to effectively engage diverse audiences and address underlying concerns. This can be particularly relevant in advocacy efforts related to climate change, human rights, or marginalized communities. Awareness research employs various quantitative and qualitative methods to assess levels of knowledge, attitudes, and behaviours. Surveys and questionnaires are common tools used to collect quantitative data, allowing researchers to measure awareness levels, track changes over time, and identify demographic or socioeconomic disparities. These surveys may include multiple-choice questions, Likert scales, or ranking exercises to capture nuanced responses.

3.2 Data and Sources of Data

For this study, secondary data has been collected. From the website of KSE, the monthly stock prices for the sample firms are obtained from Jan 2010 to Dec 2014. And from the website of SBP, the data for the macroeconomic variables are collected for the period of five years. The time series monthly data is collected on stock prices for sample firms and relative macroeconomic variables for the period of 5 years. The data collection period is ranging from January 2010 to Dec 2014. Monthly prices of KSE - 100 Index is taken from Yahoo Finance.

3.3 Theoretical framework

The establishment of a comprehensive framework for engaging with climate change within specific locales is built upon four foundational theoretical threads: (1) the concept of place attachment, (2) the principles of place-based education, (3) the dynamics of free-choice learning, and (4) the principles of norm activation theory (NAT). In the following section, we will elaborate on the constituent components of this framework. Subsequently, we will delve into the significant insights gleaned from the synthesis of these four theories, shedding light on their collective contributions to effective climate change engagement strategies tailored to local contexts.

3.4 Statistical tools and econometric models

This section elaborates the proper statistical/econometric/financial/technical models which are being used to forward the study from data towards inferences. The detail of methodology is given. SPSS 2013 is being used.

3.4.1 Descriptive Statistics

Mean: The average level of awareness across the sample population. **Median:** The middle value in the dataset, indicating the awareness level that separates the higher and lower halves of the distribution. **Mode:** The most frequently occurring level of awareness. **Range:** The difference between the highest and lowest levels of awareness. **Standard Deviation:** A measure of the

dispersion or variability of awareness scores around the mean, indicating how widely spread out the awareness levels are. Percentiles: Dividing the dataset into 100 equal parts, percentiles help identify specific points in the awareness distribution, such as the 25th percentile (lower quartile) and the 75th percentile (upper quartile), which provide insights into the spread of awareness levels. Frequency Distribution: A tabular summary showing the number of participants falling within different awareness categories or ranges. These statistics offer valuable insights into the distribution and characteristics of climate technology awareness among students, aiding researchers in understanding the overall landscape of awareness and identifying any disparities or trends within the population.

3.4.2.1 Model for CAPM

Reliability and validity

Reliability, which refers to the “extent to which a variable or set of variables is consistent in what it is intended to measure”, was assessed to measure the internal consistency of the summated scale.

Table 1

Case process summary

N %

Cases Valid 200 100.0

Excluded a 0 .0

Total 280 100.0

Reliability statistics

Cronbach&

Alpha N of Items

.905 20

The Case Processing Summary provides information about the number of cases included in the analysis and any cases that were excluded. In this summary

Valid Cases: Refers to the number and percentage of cases that were included in the analysis. In this case, there were 200 valid cases, representing 100% of the total cases.

Excluded Cases: Indicates the number and percentage of cases that were excluded from the analysis. In this instance, there were no cases excluded, so the percentage is 0%.

Statistical tools:

Descriptive statistics

Utilized to analyses data using measures such as mean, median, standard deviation, and frequencies. These statistics summarize findings and understand data distributions.

Correlation analysis

Investigates relationships between transformational leadership and cultural resilience variables using Pearson's correlation coefficient. Strength and direction of linear relationships are assessed Regression analysis Examines direct and indirect effects of transformational leadership on cultural resilience. Linear regression analysis allows for controlling potential confounding factors.

Hypothesis

- H1: There is a clear cut climate tech influence on student community.
- Sub-hypotheses: Explore specific dimensions of climate impact on students.
- H2: The relationship between climate tech awareness and place of the location
- H3: The influence of climate tech on sector agnostic studies
- H4: Students with engineering discipline is has more relativistic affinity towards climate tech

Additional consideration:

Pre-Testing:

Ensure questionnaire clarity and appropriateness through a small group pilot test.

Anonymity and confidentiality:

Assure participants of data confidentiality to encourage honest responses.

Data analysis software:

Software used is IBM SPSS 2013 analytics

Ethical consideration

Adhere to ethical research principles, including informed consent and data security

IV. RESULTS AND DISCUSSION

	mean	sd	median	min	max	obs
Climate Change Queries	9096	20614	4628	20	240957	2268
Endang. Environm. Queries	20658	41374	11191	54	479940	2268
Political Queries	340	899	172	0	11296	2268
Science Queries	408	1398	155	0	34483	2268
Renewable Energies Queries	703	1853	282	0	22611	2268
Number of all Queries	5.45E+07	1.3.E+08	3.E+07	1.6.E+05	1.3.E+09	2268
#Climate Change	1.73E-04	5.20E-05	1.7E-04	0	4.80E-04	2268
#Endangered Environment	4.09E-04	1.56E-04	3.9E-04	0	4.16E-03	2268
#Politic	6.78E-06	4.37E-06	5.7E-06	0	5.19E-05	2268
#Science	7.66E-06	8.14E-06	5.6E-06	0	1.95E-04	2268
#Renewable Energies	1.30E-05	7.37E-06	1.1E-05	0	7.75E-05	2268

II. ACKNOWLEDGMENT

Climate tech awareness “acknowledgment” sri Krishna college of technology “e” on my study “a study on the awareness about climate technology. This is very honourable and prestigious. Heartly thanks and acknowledgement. , “Instead,try“R.B.G.thanks”.Putapplicablesponsoracknowledgmentshere;DONOTplacethemonthefirstpageofyourpaperorasafotnote

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