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The Impact of Climate Change News on Mental Health: The Rise of Eco-Anxiety in Pakistan

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ABSTRACT

Over the last few years, the exacerbation of climate changes and its link to catastrophes results in intensified media attention, which is although informative but also evokes strong psychological reactions among the public particularly among youth. This research examines the effects of exposure to climate change news on the mental health of Pakistani youth, specifically focusing on the phenomenon of eco-anxiety. This research adopts a quantitative research design employing a survey research approach. A structured questionnaire is administered to a sample of 150 Pakistani youth, selected through purposive sampling. Responses are interpreted using pie charts for the visual representation of important trends and insights. The research is informed by three research objectives, which seek to determine the level of exposure to climate-related news, the psychological effect of such news, and the coping strategies employed by the youth. It also tackles three research questions, framed in statement form, to investigate how climate news reading influences emotional well-being, anxiety levels, and behavior changes. Furthermore, this research cross-tests three hypotheses about the news frequency eco-anxiety correlation and the demographic variables. The findings indicate high climate consciousness among Pakistani youth, but with increasing prevalence of eco-anxiety due to continued exposure to terrifying news. The research concludes from the data collected and then analysis that although climate change news is critical to awareness, it can, on the other hand, be a cause of psychological distress if not presented responsibly. The study suggests incorporating mental health literacy, positive framing of climate news, and climate education programs into national media and education policies to alleviate eco-anxiety and empower youth for effective climate action.

Introduction

The influence of media analysis on public attitudes and perceptions regarding climate change is undeniable. While scientific research and policy discourse are vital in shaping public understanding and action, media coverage holds equal significance in influencing perceptions and driving change (Boykoff & Roberts, 2007). Indeed, media representations of environmental issues profoundly impact how individuals perceive these issues and the actions they take in response (Nisbet & Scheufele, 2009). These practices construct narratives around issues, emphasizing specific aspects while downplaying others. How climate change is framed in the media influences public perception and the subsequent actions they take (Nisbet & Scheufele, 2009). Media consumption greatly impacts public awareness and understanding of science (Wilson, 1995), especially regarding complex and technical issues like climate change. Media coverage can translate scientific research into accessible and understandable language for the general public (Nisbet & Scheufele, 2009). Media consumption greatly impacts public awareness and understanding of science (McCombs, 2011), especially regarding complex and technical issues like climate change. News media plays a pivotal role in shaping public attitudes toward various topics, including climate change (Stecula & Merkley, 2019). Climate change is not a future warning; it is a steady, global emergency that has apparent, calculable impacts on the ecosystem, the economies, and people's lives. Over the last few decades, the number and severity of destructive weather patterns, the elevation in temperatures, as well as the worsening environment grow strikingly. While the climate emergency widens, newspapers across the world accelerate the coverage with an aim to notify and provoke awareness and policymaker action from their readerships. In Pakistan—a nation extremely susceptible to disasters caused by climate change like floods, droughts, and heatwaves climate change media coverage emerges as the core avenue for conveying essential information to the masses. Although climate reporting plays a crucial part in informing and warning society, its psychological consequences, especially for youth, constitute a new cause for concern. Ongoing utilization of threatening headlines and catastrophic predictions may develop into a mental state referred to as eco-anxiety—a lasting fear of environmental catastrophe. Eco-anxiety as a mental illness is reported more regularly among youth who spend more time accessing digital media and are most seriously concerned about long-term climate-related impacts. In Pakistan, where mental health services and climate resilience are both underdeveloped, the overlap between psychological distress and media influence is an important gap in research. Youth, who comprise a large proportion of the population, are the most informed as well as the most endangered group when it comes to the psychological impact of environmental degradation. It is important to understand how media coverage leads to eco-anxiety among Pakistani youth in order to develop responsive media practices, public health interventions, and educational reforms (Tanveer et al., 2024). This research seeks to investigate how Pakistani youth are affected psychologically by climate change news by analyzing their exposure patterns, emotional responses, and

coping strategies. Through a quantitative analysis of survey data, this study aims to underscore the pressing need for responsible climate reporting and mental health education in the face of a changing climate crisis.

Background

The media shapes how people view climate change and what they do in response by using framing. Framing climate change as a public health issue, for instance, could increase concern and support for mitigation initiatives, but highlighting the financial implications of switching to renewable energy may discourage public support (Nisbet & Scheufele, 2009). Public perception of climate change and other environmental issues has been greatly influenced by media figurative techniques such as framing and the use of metaphors (Boykoff & Boykoff, 2007). Climate change becomes one of the most serious issues of the 21st century that hits all parts of the globe with differing intensities. Scientific opinion attests to the fact that increased global warming, glacial melting, sea level rise, unstable weather, and more frequent natural disasters are immediate effects of human activities. For nations such as Pakistan, which ranks among the top climate-vulnerable countries as rated by the Global Climate Risk Index, the impacts of climate change not only have environmental implications but also social, economic, and psychological ones. Concurrently, the media's role in informing and influencing public opinion about climate change increases tremendously. Media outlets ranging from classical news sources to social media are instrumental in creating awareness, sharing scientific research, and defining public debate on matters of the environment. While the media are crucial in projecting climate-related disasters, crises, and forecasts, they become more frequent and sensational, thus playing a part that inadvertently creates emotional reactions among audiences, particularly among highly media-exposed and emotionally vulnerable young people. One of these reactions is eco-anxiety, or chronic worry, helplessness, and fear for the future of the planet. Not yet considered a mental disorder by authorities, eco-anxiety rises in popularity with psychologists, researchers, and policymakers. Reports from across the globe indicate that chronic exposure to stressful climate headlines links to increased levels of stress, unhappiness, and disaffection, particularly when people believe they are helpless to effect change. In Pakistan, where effects of climate change are regularly reported from catastrophic floods and heat waves to droughts and glacier melts the possible mental health effects of hearing such news remain uncharted territory. The youth, who form more than 60% of the population, are especially vulnerable to the psychological impact of climate fear, owing to their stake in the planet's future in the long term and their consistent exposure to electronic media. This study thus attempts to address a critical lacuna by looking into the psychological effects of climate change reporting on Pakistani youth. It particularly aims to study how eco-anxiety increases, how emotional reactions are constructed through media, and how policy-level interventions are required in order to ascertain balance between climate narratives and mental health. As global climate change steps up, the

mass media takes on the crucial role of public education and awareness concerning environmental degradation, policy reactions, and scientific research. While this heightened coverage is needed for public education, it also creates unforeseen psychological consequences, especially on young people. In Pakistan, where disasters triggered by climate are common and extensively reported in the media, young people are exposed more and more to frightening climate reports that focus on devastation and loss. This repeated exposure gives rise to eco-anxiety—a psychological condition of persistent anxiety, fear, and hopelessness regarding the future of the environment. As there is increasing worldwide acknowledgment of eco-anxiety, empirical studies on the influence of climate change-related media reports on the mental well-being of young people in Pakistan remain strikingly limited. Research in most studies tends to emphasize either physical or economic effects of climate change on communities and societies, ignoring the emotional and psychological toll that it places on younger generations. This study seeks to fill this void by looking at the impact of climate change news on Pakistani youth's mental well-being. More particularly, it investigates the prevalence and type of eco-anxiety among young people, the media most linked to it, and how people deal with such emotions. Without such awareness, mental health professionals, educators, and policymakers might be left unprepared to meet the increasing emotional burden of climate change in a nation already struggling with systemic issues in mental health infrastructure.

Problem Statement

According to the World Bank (Hussain & Khan, 2022) Pakistan is at a high risk of experiencing catastrophic climate events such as floods, storms, melting glaciers, landslides, rising sea levels, droughts, and food shortages. These difficulties highlight the requirement for greater understanding and activity at the national policy and general levels. German watch reports that between 1999 and 2018, Pakistan had 152 severe weather events, lost 9,989 lives, and suffered an estimated US\$ 3.8 billion in economic losses. Research in Pakistan actively examines climate change for its environmental, economic, and social effects. Several reports and scholarly publications consistently highlight the effects of increasing temperatures, water shortages, glacial melting, and natural disasters. In the same vein, the media's contribution to climate communication awareness, misinformation, and public participation receives modest attention in the research literature. Yet, the psychological effects of climate change news coverage, especially among young people in Pakistan, remain greatly unexplored. While worldwide research begins to document and examine the phenomenon of eco-anxiety, minimal to no empirical research exists in the Pakistani context that quantifies or explains the mental health effects of continued exposure to climate news (Tanveer et al., 2025). Additionally, no studies integrate three essential elements: media effect, climate change, and adolescent mental health, into a systematic methodological framework like survey-based quantitative analysis. In the absence of such studies, media practice might go on ignoring the psychological effect of their framing, and policymakers might not take appropriate steps

for the mental well-being of adolescents. This research aims to bridge this gap by analyzing the connection between climate change news and eco-anxiety among Pakistan's youth, based on primary data gathered from surveys and presented through visual representation of data, such as pie charts.

Objectives

The main objective of this research is to investigate the effect of climate change news on the mental well-being of Pakistani youth, with particular emphasis on the development of eco-anxiety. The research is informed by the following three specific objectives:

1. To analyze the level of exposure of Pakistani youth to climate change news through different media outlets
2. To measure the psychological effect specifically symptoms of eco-anxiety associated with regular exposure to climate-related media content
3. To investigate coping strategies, emotional reactions, and the necessity of policy-level action to respond to climate-related mental health issues among young people

Significance of the Study

This study holds tremendous academic and practical importance. As climate change remains a hot topic of global discussion, understanding its psychological effect particularly on susceptible groups like youth is imperative. In Pakistan, where climate-related phenomena like floods, heat waves, and droughts become more intense and recurrent, mass media usually serves as the most readily available source of information. The mental health consequences of ongoing exposure to traumatic climate stories do not receive much attention previously.

Through an examination of the phenomenon of eco-anxiety in Pakistani youth, this research identifies a newly emerging mental health issue that requires immediate attention. The research adds to the sparse existing literature at the nexus of climate change, media impact, and youth mental health. In addition, the research also provides recommendations for journalists, educators, and content producers about how to report on climate concerns responsibly without worsening psychological distress. From a policy point of view, this research offers evidence-based recommendations to incorporate mental health support in climate change education, awareness campaigns, and national youth strategies. Finally, it seeks to inform policy reforms that recognize and address the emotional burden of the climate crisis, creating a more resilient and mentally supported generation. The 2030 Agenda for Sustainable Development was established by the United Nations member states in 2015 as a response to global problems. This agenda consists of 169 targets to be met by 2030 and 17 Sustainable Development Goals (SDGs) (Nerini et al., 2017). Aiming to take immediate action to mitigate climate change and its effects is SDG 13, which especially targets climate action (United Nations General Assembly, 2017).

Hypotheses

1. There exists a strong relationship between exposure to climate change news frequency and echo-anxiety level among Pakistani youth
2. Young people who engage with climate content mainly through social media have greater levels of eco-anxiety than those who consume climate content mainly through mainstream media
3. There exists a statistically significant variation in levels of eco-anxiety among youth according to their demographic attributes like age, gender, and education

Limitations

Although this research provides useful insights into the psychological effects of climate change news on Pakistani youth, it has limitations. First, the research is confined to a quantitative survey approach, which does not completely cover the depth and richness of individual psychological processes or emotional shades that is involvi in eco-anxiety. Second, the sample size of 150 students, while adequate for statistical inference, might not be representative of the whole youth population across Pakistan's diverse regions, cultures, and socioeconomic environments. Third, the research is based on self-report measures, which could be subject to social desirability bias or respondents' self-limited insight into their own mental health. Second, because the survey was cross-sectional in design, it reflects a single snapshot in time and cannot track changes in exposure to the media or psychological effects over an extended period of time. Lastly, the application of pie charts in data analysis, although helpful in visual presentation, restricts the level of statistical interpretation complexity that more sophisticated approaches (e.g., regression analysis) might achieve.

Literature Review

According to the Intergovernmental Panel on Climate Change (IPCC), 2014, one of the biggest problems the world is currently experiencing is climate change, which has a negative influence on the environment, the economy, and people's quality of life. Numerous human actions, including the burning of fossil fuels, deforestation, and the emission of greenhouse gases, have contributed to the issue. Rising sea levels, melting glaciers, and more frequent and severe extreme weather events are only a few of the effects brought on by these variables (IPCC, 2014).

Climate action is a broad strategy that includes mitigation, adaptation, and understanding the underlying causes of environmental shifts in order to solve the difficulties faced by climate change (United Nations, n.d.). It entails proactive steps to lower greenhouse gas emissions, improve resilience to climate-related effects, and advance knowledge of the multifaceted forces influencing changes in the Earth's climate system.

Building knowledge and capacity to address climate change, implementing the United Nations Framework Convention on Climate Change, and promoting mechanisms to increase planning and management capacity are all goals of SDG 13 (United Nations,

nd.). Resilience and adaptive capacity to climate-related disasters are also targets of SDG 13. Indicators that go along with these targets offer a tool to track advancement towards achieving SDG 13 and its goals.

Reducing the amount of greenhouse gases released into the atmosphere is the main goal of mitigation, which is an essential component of climate action (SDG 13). These gases contribute to the greenhouse effect and the ensuing global warming, particularly carbon dioxide and methane. Communities, corporations, and nations may all play a key part in limiting the increase in global. As the climate catastrophe is intimately related to other SDGs, it is important to address it in addition to SDG 13 (Smajgl et al., 2015).

In fact, Nerini et al.'s (2019) structured evidence evaluation suggests that climate change can support all 17 SDGs. For instance, climate change worsens the lack of access to food and clean water (SDGs 2 and 6), raises the risk of sickness (SDG 3), and disproportionately impacts women and children (SDGs 5 and 4) (Nerini et al., 2019). Additionally, combating climate change can encourage the development of clean and inexpensive energy (SDG 7) and open doors for sustainable economic growth (SDG 8) (Sachs et al., 2016). Therefore, adopting steps to address climate change is crucial for reaching SDG 13 as well as the more general objectives of sustainable development.

According to recent data from UNICEF (2022) and the United Nations Office for the Coordination of Humanitarian Affairs (2022), millions of people, including children, as well as the nation's infrastructure, have been negatively impacted by the devastation caused by monsoon rains and floods. The overall damages and economic losses resulting from these incidents are estimated by the World Bank (2022) to be approximately huge amount USD's.

Media coverage can translate scientific research into accessible and understandable language for the general public (Nisbet & Scheufele, 2009). However, it is crucial to recognize that media coverage of science can also lead to misunderstandings and misrepresentations, further emphasizing the importance of responsible and accurate media coverage in promoting public understanding and action on climate change.

Mass media encompasses a vast industry of communication professionals, such as journalists, editors, publishers, and broadcasters, who disseminate information through various channels like newspapers, magazines, radio, television, and the Internet (Boykoff & Roberts, 2007). Media representations take diverse forms, from plays, poetry, and performance art to news reporting and political debate. Over the past two decades, numerous studies have investigated mass media's role in shaping public attitudes toward environmental issues. Bauer's (1995) review, for example, explored the link between news media and social movements during a time when nuclear power was a significant concern. Likewise, research on the relationship between climate science and social media has expanded, reflecting the dynamic and evolving nature of this field (Brüggemann & Engesser, 2014). This culture, according to Douglas is omnipresent, provides directions and attaches meanings to perceived views about the climate threats, guide decisions regarding tackling the issue and prompts subsequent actions. The theory further suggests that "institutional cultures" carry positive implications for looking at the issue of climate

change and proposing ways and means for mitigation and adaptation, and prompting effective actions

Research Design

This research uses a quantitative study design to examine the correlation between exposure to climate change media coverage and eco-anxiety among Pakistani youth. Survey research is used to gather information from a diverse sample of youth from different demographic groups. This design is particularly appropriate to use in answering the research questions because it enables gathering of numerical information on media usage patterns, mental well-being, and coping mechanisms. The questionnaires are standardized questions, such as Likert-scale questions to measure the frequency and sources of exposure to climate change news, and the extent of eco-anxiety. Through a quantitative focus, the research aims to yield clear, quantifiable answers regarding how media influence is related to psychological consequences among the youth population. Furthermore, a descriptive research design is employed to identify the media consumption patterns and its emotional impact. Descriptive statistics and the employment of visual tools like pie charts are used in analyzing data, to depict the frequency of various forms of exposure to media and distribution of respondents' eco-anxiety levels. This research employs a quantitative approach to analyze the effect of climate change headlines on the psychological well-being of Pakistani youth, specifically the emergence of eco-anxiety. The survey is the main data collection method, enabling the collection of structured data from a large number of participants.

Population and Sample

The population of study for this research includes Pakistani youth between the age group of 18-30 years, including university students, young professionals, and campaigner who are regularly encountering to media reports of climate change. The sample of this research includes 150 respondents, chosen on a convenience sampling basis from diverse areas of Pakistan. This number of respondents are considered sufficient to yield statistically relevant results, keeping in view the nature of the study.

Data Collection Instrument

1. **Demographic Details:** Questions regarding the age, gender, education level, and media consumption patterns of the participant.
2. **Exposure to Climate Change News Media:** Questions that measures the frequency and source of climate news viewed by the participants (e.g., social media, TV, print media).
3. **Eco-Anxiety Scale:** A set of Likert-scale items designed to assess the emotional and psychological effect of climate change news, i.e., worry, fear, and helplessness regarding environmental problems.

Procedure

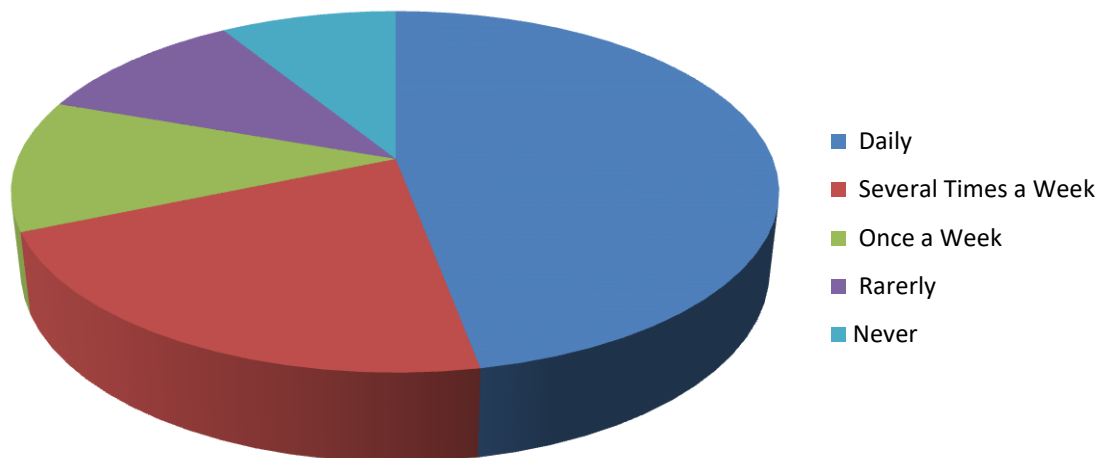
The surveys are conducted online via tools such as Google Forms or Survey Monkey to promote widespread accessibility. Participants are solicited via university networks, social media groups, and climate change associations. Upon consent, participants will take the survey, which should be completed in 15-20 minutes.

Data Analysis

The information is examined using descriptive statistics, such as frequency distributions, percentages, and measures of central tendency (mean and standard deviation). Pie charts are employed to demonstrate the distribution of media exposure and levels of eco-anxiety. Hypotheses testing are performed using relevant statistical tests, such as the Chi-square test, to establish the relationship between media exposure and levels of eco-anxiety.

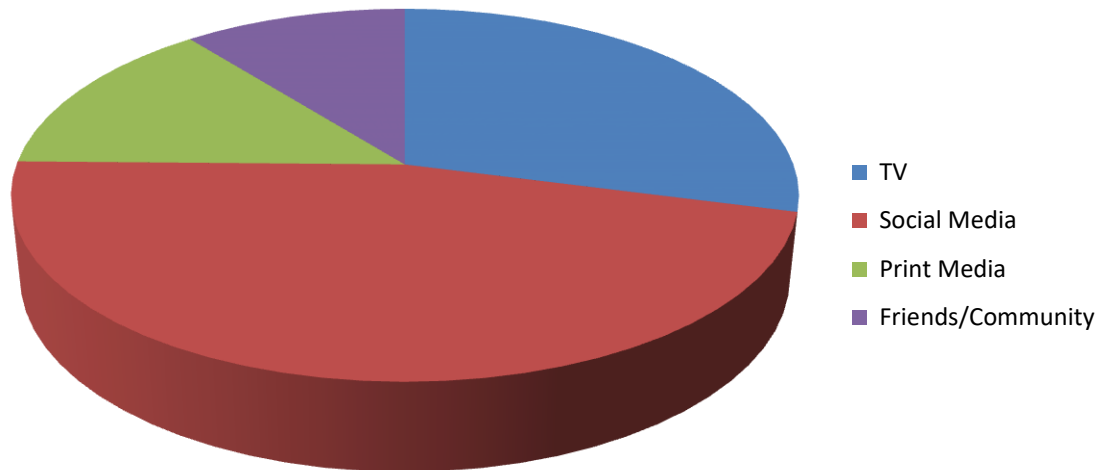
Data Analysis

1. Frequency Measures to Encounter Climate Change News on Media



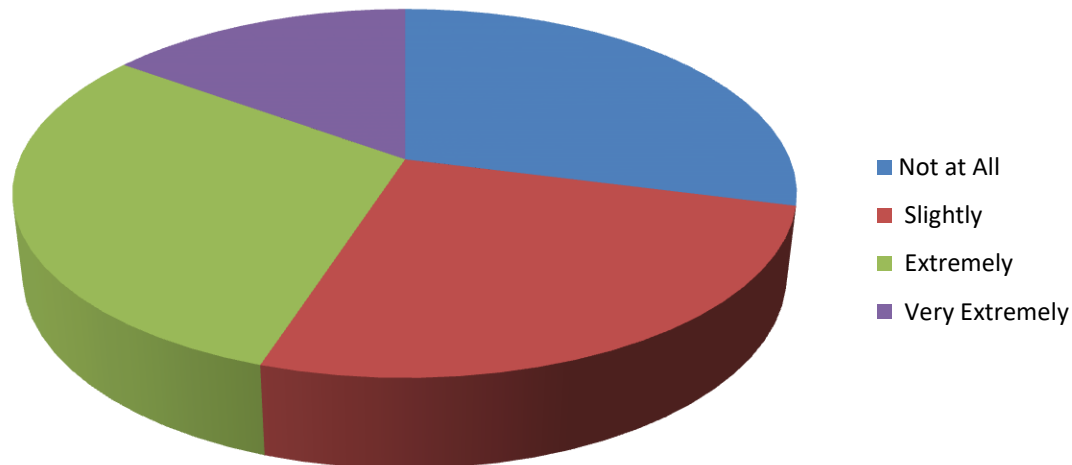
Discussion: The study drawn a conclusion from data that a lot of respondents encounter climate change news on daily basis, while a number of people consume climate change related news several times a week or once a week and few respondents rarely consume climate change related news.

2. Source of Climate Change News



Discussion: The main source to consume climate change related news is social media including Facebook, Instagram, Twitter(X) and YouTube etc. while people also rely on print media i.e., Newspaper and magazines while others rely on friends and community to hear about climate change news.

3. Level of Anxiousness or Stress after Consuming Climate Change News

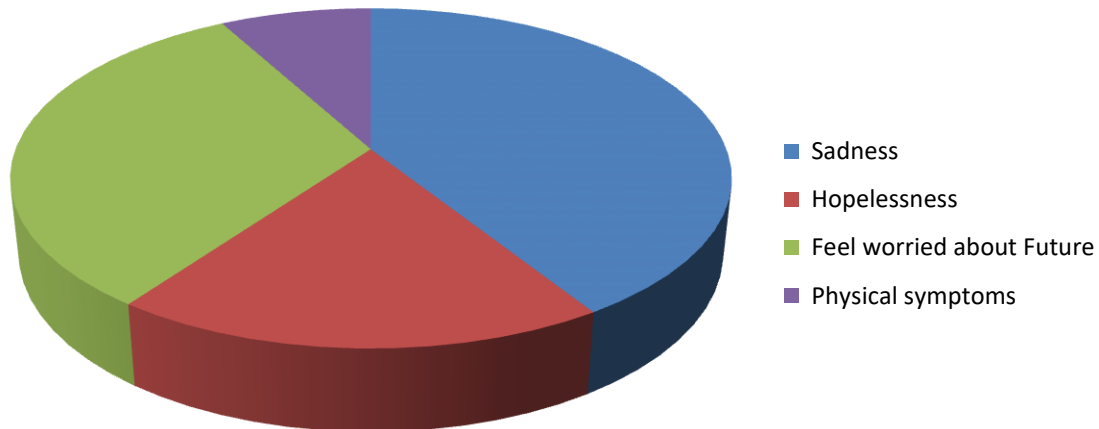


Discussion: Majority of Audience get stressed and their level of anxiety increases at

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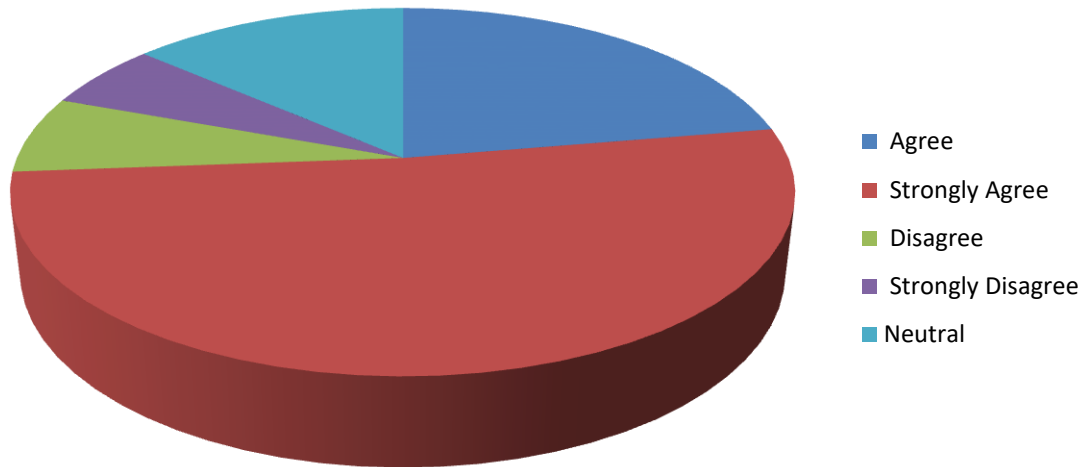
certain levels while some people get extremely stressed and anxious. Few respondents' claims that never get stressed or anxious in consuming climate change related news.

4. Symptoms after Reading/Watching Climate-related News



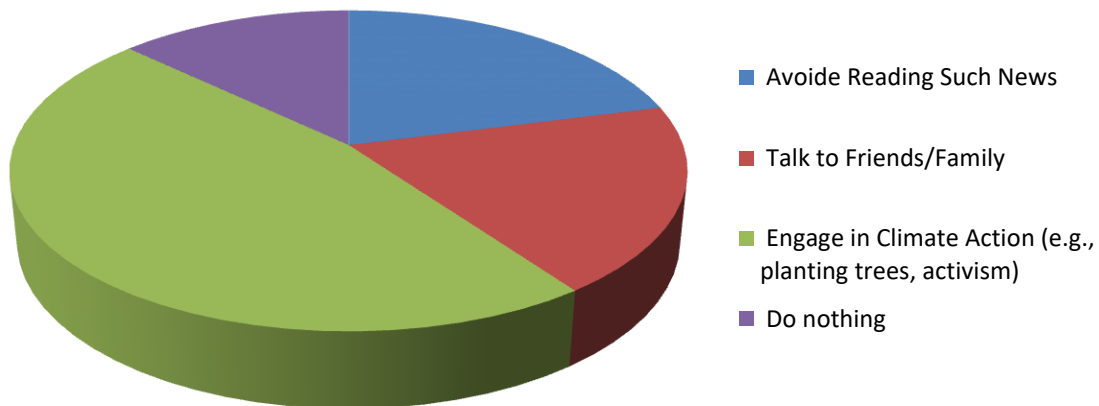
Discussion: After reading climate change news in the newspaper or after watching climate change news on TV and Social Media, the audience feels hopelessness to a greater extent and feels worried about the future. Some feels saddened and face physical symptoms.

5. Exposure to Climate Change News has affected your overall Mental Well-Being



Discussion: Mental Health of people gets affected while hearing climate change news to a greater extent and cause some serious consequences on cognitive level. Exposure to Climate news overall affect the mental well-being of audience.

6. Coping of eco-anxiety Triggered by Climate Change News

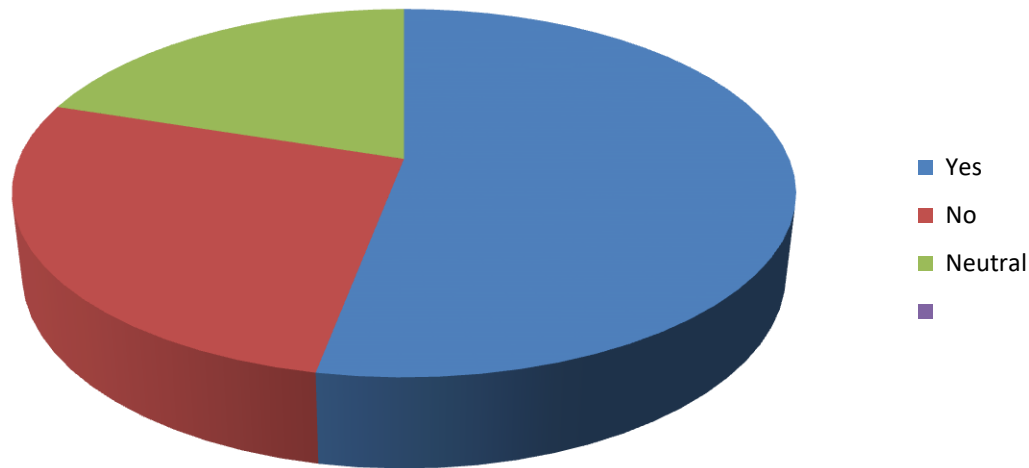


Discussion: Engaging in Climate Actions for example planting trees is suggested as the

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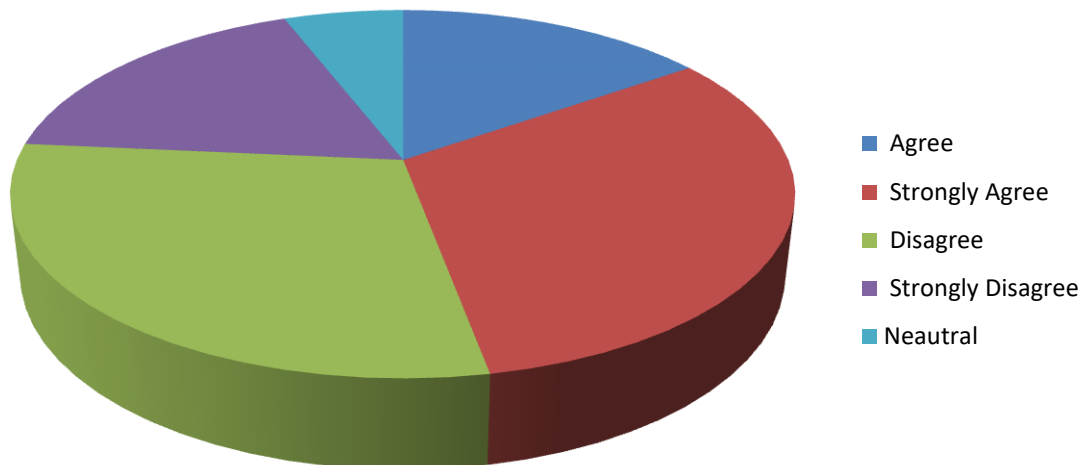
best possible mechanism to coping of eco-anxiety triggered by climate change news. Few respondents do nothing while other avoids reading such news and some talks to family or friends to cope eco-anxiety triggered by climate change news.

7. Has Climate Change News ever Inspired you to take any Action for the Environment?



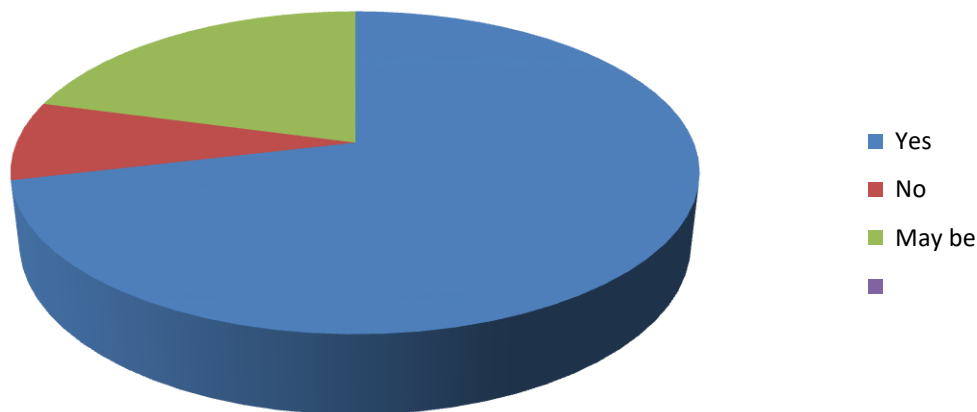
Discussion: Majority is inspired by climate change news to take actions for environment while some passive audiences are not inspired and some are neutral in this regard.

8. Climate Change Portrayed in the Media is too Alarming.



Discussion: Majority Disagree that Climate Change portrayed in the media is too alarming, while agree that the media portrayal of climate change news is alarming. Few respondents remain neutral in this regard.

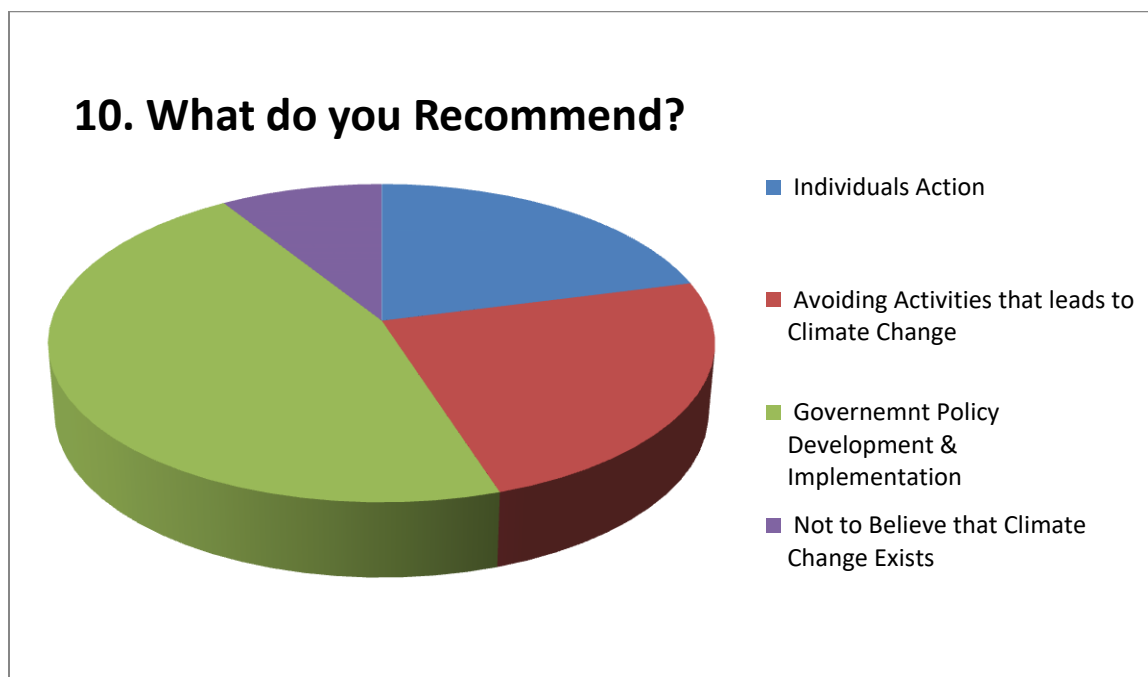
9. Would you support the inclusion of mental health tips or coping strategies in climate change news reports?



Discussion: The study found that community supports the inclusion of mental health tips

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or coping strategies in climate change news reports.



Discussion: The study found that citizens recommend individuals actions, avoiding activites that leads to climate change, Government policy development and implementation while few said not to believe that climate change exists

Findings

According to the analysis of the survey results, there are several key findings that indicated the interplay between exposure to climate change in the media and eco-anxiety among Pakistani youth. The findings from the data are:

1. High Media Exposure: A high percentage of the respondents mentioned frequent exposure to climate change news on social media, television and print media. Social media sites, especially Facebook, Twitter, and Instagram, are the most frequently cited sources of climate-related information.

2. Prevalence of Eco-Anxiety: Majority of the respondents has reported eco-anxiety symptoms, such as helplessness, worry, and fear regarding the future of the world. Out of these, 30% reported that the feelings are intense and frequent.

3. Coping Strategies: The respondents use a wide range of coping strategies, most of which involves seeking emotional support from friends, the use of mindfulness or relaxation exercises, and environmental activism.

Conclusion

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This research verifies that media exposure to climate change has a profound psychological effect on Pakistani youth, with many showing symptoms of eco-anxiety. The research highlights the significance of knowing how media content affects mental health, particularly in light of environmental crises. While the media is important in creating awareness on climate change, the sheer magnitude of such news can lead to mental health issues among young people. Additionally, the research identifies the importance of more integrated efforts to combat the psycho-social impacts of climate change, especially in terms of mental health care and ethical media coverage.

Policy Recommendations

- 1. Integration of Mental Health in Climate Policies:** Mental health assistance needs to be integrated into national climate policies, especially for vulnerable groups such as the youth. This can be done by providing counseling services, workshops for coping skills, and anti-stigma campaigns to help decrease stigma against eco-anxiety.
- 2. Accountable Media Reporting:** Media organizations, particularly those devoted to climate change news needs to take a more solution-focused approach. Climate change reporting must balance dire news with uplifting stories of environmental revitalization and ingenuity, painting a hopeful picture of possibilities and constructive actions that people can undertake.
- 3. Educational Reforms:** Climate change education addressing the environmental and psychological dimensions of the crisis should be integrated into schools and universities. The education can be designed to give students the knowledge and coping mechanisms necessary to deal with eco-anxiety, instilling constructive behavioral changes instead of generating helplessness.
- 4. Chamberlain Young People in Climate Solutions:** Young people are invited to get engaged in taking actions for the climate through acts such as ecological volunteering, living sustainably, and campaigning. Drawing young people in to join the solutions versus constantly talking about problems can work on building a resilience and feeling of agency.

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