

MENTAL ORIENTATION AND PRO-ENVIRONMENTAL DISPOSITIONS OF JOURNALISTS: A STUDY OF SUSTAINABILITY CONSCIOUSNESS IN SINDH, PAKISTAN

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Abstract

This study assesses the environmental awareness, attitudes, and behaviours of journalists in Sindh, Pakistan, with emphasis on how cognitive, emotional, and demographic factors condition their engagement with sustainability. With a value-belief-norm (VBN) and Media Role theoretical grounding, the study also evaluates the influence of cognitive orientations, emotional responses, and personal values on pro-environmental behaviour. The study adopted a quantitative approach with a structured questionnaire administered to a sample of 150 journalists from ten districts of Sindh. The data were analysed in SPSS using descriptive statistics, Pearson correlations, multiple regression, and paired sample t-tests to test five hypotheses. The results show strong positive correlations between pro-environmental disposition and mental orientation ($r = .62, p < .01$) as well as with pro-environmental behaviour ($r = .55, p < .01$), therefore proving H1. Sustainability consciousness was a strong predictor of influencing mental orientation ($r = .68, p < .01$) to support H2. Emotional responses of fear and frustration were significant predictors of mental orientation ($\beta = .51, p < .001$), thereby supporting H3. Ironically, despite high awareness: A huge attitude-behaviour gap was existent ($t = 6.83, p < .001$), supporting H4. Demographics such as education, experience, and media type moderated behaviour outcomes (H5) whereby digital journalists and highly educated individuals exhibited more engagement. Such findings bear witness to the cognitive-emotional bases of sustainability among journalists but also uncover some systemic barriers to behavioural change. The study recommends a need for capacity-building, institutional support, and targeted policy interventions to enable journalists to report on and practice environmental sustainability.

Keywords: Mental Orientation, Pro-Environmental Disposition, Sustainability Consciousness, Sindh, Pakistan, VBN Theory, Media Role Theory

1.1 Introduction

The global environmental crisis characterized by escalating climate change, biodiversity loss, pollution, and use of unsustainable resources has emerged as one of the major challenges in the 21st century. These interrelated threats did not only put at stake ecological systems but also jeopardize socio-economic resilience and public health. In this respect, the media plays a significant role in shaping public comprehension, behaviour, and accountability. Journalists in this ecosystem are the primary actors who serve not only as conduits of information but also as cultural intermediaries translating complex environmental issues into public discourse (Hanitzsch et al., 2019). Existing scholarship has so far mainly focused on how journalists report environmental issues and not so much on their personal engagement with sustainability.

This lack is very much reflected in the southern region where media systems are working under very fragile political, institutional, and ecological contexts. For instance, Sindh, Pakistan is characterized by environmental degradation emerging from poor governance and low public awareness. Systemic constraints greatly affect the journalist's reporting and their environmental practices.

This study captures an important but little-discussed dimension: internal environmental orientations of journalists. It explores how they are understanding and emotionally responding to ecological issues and how that affects their pro environmental behaviours, such as reducing waste, reusing things, and avoiding plastics. Built within the Value-Belief-Norm (VBN) theory and Media Role Theory, this research looks at the emotional responses (i.e., fear, frustration), sustainability awareness, and demographic factors shaping the reporters' mental orientation and behaviours. It also captures that common observation gap between pro-environmental attitudes and actual behaviours.

The research will give a holistic understanding of environmental communication for journalists from a vulnerable provincial context as not just chambers of environmental messages, but as active agents whose personal beliefs and practices matter. The research findings will add to efforts in the reform of environmental journalism in focusing on the targeted training, policy support, and institutional mechanisms capable of empowering journalists to develop and practice sustainability within and beyond their professional duties.

1.1.1 Problem Statement

There is an increasing global focus on environmental sustainability, but the actual involvement of media practitioners in the developing regions remains vaguely understood. In Sindh, Pakistan-an ecologically fragile province with feeble environmental governance and little institutional support-journalists contribute toward public discourse; however, their own sustainability orientations are greatly ignored. This study, therefore, explores the cognitive, emotional, and behavioural dispositions of journalists in Sindh towards environmental issues, emphasizing the influences of their internal beliefs and emotional responses on actual environmental behaviours such as waste reduction, reuse, and responsible consumption.

1.1.2 Research Objectives

1. To assess the cognitive and emotional attitudes of the journalists of Sindh-Pakistan towards environmental sustainability and ecological degradation.
2. To investigate the frequency and manner of journalists attending to environmental issues in their private and professional lives.
3. To identify behavioural tendencies of journalists toward environmentally friendly or unsustainable practices in their daily life, for example, reuse, recycling, consumption habits, etc.
4. To assess the extent to which environmental concern translates into sustainable lifestyle choices among media professionals.
5. To explore any possible gaps between environmental awareness and actions, especially under the occupational as well as cultural setting of journalism in Sindh

1.1.3 Hypotheses

- H1: Journalists in Sindh with an increased environmental awareness are likely to participate in pro-environmental behaviours (such as reusing packaging, avoiding plastic).

- H2: The study intends to identify any significant positive relationship between the attentiveness of a journalist towards environmental sustainability and the perception it provides on environmental risk.
- H3: Journalists' negative emotional response such as annoyance or fear towards pollution and degradation tends to predict an increasing mental inclination towards sustainability.
- H4: Journalists having pro-environment attitudes do not, however, adopt sustainable personal practices, which indicates a gap between awareness and action.
- H5: The other demographic profile suits the effect of age, education, and professional experience on environmental orientations and behaviours of journalists in Sindh.

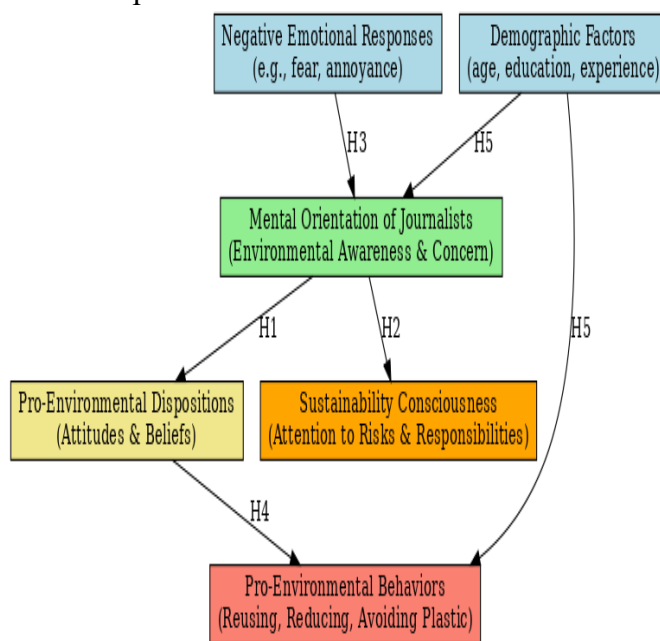


Figure-1 The conceptual framework indicates how cognitive predisposition, emotion, and demographic influences shape journalists' behaviour toward the environment. Attitude-behaviour tendencies favourably direct attributions to their mental constructions (H1) and carry a more positive light on sustainability consciousness (H2). An addition to this angle arises from the stimulus of emotional dispositions of fear or frustration (H3). These refer to behavioural showdowns such as reusing and waste reduction (H4), with age, education, and experience defining the level of their moderation (H5). It indicates that an activity involving knowledge, emotion, and background in

synergy produces environmentally sustainable journalism.

1.1.4 Theoretical Farmwork

This study applies environmental psychology and media role theory in understanding how the internal disposition of journalists relates to their participation in environmental sustainability. Incorporating value-belief-norm (VBN) theory (Stern, 2000), the role that pro-environmental values and emotional response lead to mental orientation and thus behaviour is revealed. It also wraps this argument around the observation that journalists, according to Hanitzsch et al. (2019), function as social actors, and that their personal beliefs and roles affect how they report on environmental issues. Put together, the two dimensions present the argument that cognitive awareness, emotional engagement such as fear, frustration, and demographic influences (education, experience, media type) all interact in their effects to create or inhibit journalists' sustainability consciousness and environmental practices. This ground could make possible a clearer theoretical understanding of the relationship between personal beliefs and professional behaviour in environmental journalism.

2.1 Literature Review

2.1.1 The Role of Journalists in Environmental Communication

Journalists serve as crucial intermediaries, when resolving scientific questions, establishing policy pathways, or informing the public. They frame environmental questions, allocate assignment of responsibility, and establish discourses (Cox & Pezzullo, 2021). South Asian countries, and Pakistan in particular, have inconsistent environments and poorly reported challenges in the journalistic field. According to the observations of Raza and Shah (2024),

climate change coverage by the regional press takes a wide range in framing and concerns; while Arain et al. (2024) observed that environmental issues in Sindh's media are often given little attention concerning coverage depth and length. Hence, these gaps stand in need of investigation into how various internal orientations of journalists-values, emotions, and knowledge-are configured to inform their professional production.

2.1.2 The Mental Orientation and Awareness Toward Environmental Issues

Mental orientation incorporates the cognitive and affective structures, i.e., knowledge, beliefs, and attitudes, through which individuals process environmental information (Korteling, Paradies, & Sassenvanmeer, 2023). Kollmuss and Agyeman's (2002) bedrock "Mind the Gap" model maintains that pro-environmental behaviour does not necessarily follow from awareness but is mediated by internal dispositions and values. Ahmad and Fatima (2023) also demonstrated that, in low-literacy settings like Pakistan, environmental literacy is not determined by a single factor of formal education but rather by the dual influence of cultural exposure and professional practice.

2.1.3 Emotional Engagement and Pro-Environmental Dispositions

Negative emotions like fear, frustration, and anger have been associated with environmental activism. Fielding and Head (2012) observe that emotional responses heighten the perception of urgency and define pro-environmental attitudes. Hameed et al. (2024) find climate narratives with emotional resonance especially effective when journalists themselves are emotionally drawn to the subject, while Obuyi (2024) has noted that those journalists with stronger emotional conviction tend to emphasize the systemic failures and critically frame the issues.

2.1.4 A Look at Some Factors Which Shape Journalists' Mental Orientation

Factors affecting how journalists perceive sustainability include education, experience, organizational standards, and cultural context. Journalists trained in environmental science are generally better placed to report complex ecological dynamics (Challoumis, 2024; Ntala, 2023); however, general assignment journalists may provide fragmented or superficial coverage on various sustainability topics (Zulfqar, 2021). Ownership structures and political pressure are critical to their orientation; media aligned with corporate interests tend to throttle or mangle sustainability narratives (Rodrigo-Ginés et al., 2024; Kedia & Kim, 2024). In developed countries, journalists typically show deeper awareness of sustainability issues owing to more rigorous public dialogue and policy engagement (Beling Loose & Villar Belmonte, 2023).

2.1.5 Reporting Styles and Framing Approaches

Differentiated journalistic ways express separation in mental orientation. Advocacy journalists promote solutions and successes (Robbins, 2024), while event-based reporters report on incidents with no links to systemic sustainability concerns (Staender, 2024). Critical journalists might question the viability of sustainability measures but, to a certain extent, undermined public confidence (Oleskog Tryggvason & Shehata, 2024). False balancepresenting climate denial alongside scientific consensusconfuses audiences about the issue and downgrades the urgency for action (Grint, 2024).

2.1.6 Aligning Journalism with Sustainability Goals

Some approaches can include training, independence, and collaboration with local experts and communities to enhance sustainability in journalism (Fox & Saunders, 2024; Starosielski & Walker, 2016). Kolandai-Matchett (2009) suggested that interdisciplinary work can improve the accuracy and relevance of journalism. Environmental reporting workshops and eco-literacy courses will fill knowledge gaps and facilitate deeper engagements (Booker et al., 2007).

2.1.7 Awareness, Education, and Behaviour Change

Education is a strong predictor of mental orientation. Journals trained in environmental issues unfold deeper responsible coverage and more careful framing (Wang et al., 2020). Kim (2018)

and Masengu et al. (2023) emphasized the role of personal values and self-reflection in pro-environmental behaviours. Journalists, in this regard, may bring a lot of value to systemic awareness and public engagement when they connect local environmental issues, such as water pollution and waste management, with the narratives of sustainability (Kiran et al., 2023).

2.1.8 Emotional Storytelling and Public Mobilization

Emotionally persuasive stories contrast sympathy and common responsibility. The use of imagery and community testimony juxtaposes statistics with a human touch, creating a much deeper connection with the audience on ecological matters (Jiang et al., 2024; Sharma, Gosai, & Singh, 2024). Khan et al. (2024) confirmed that visual storytelling works well in awareness-raising within semi-literate communities. Journalists can induce community engagements by focusing on resilience and collective action (Musa et al., 2024; Mattson, 2024).

2.1.9 Journalistic Behaviour and Influence

Public behaviour can be influenced by journalists through the amplification of best practices and barriers to behaviour (Nabeel, 2023). Community success stories such as eco-friendly businesses or waste reduction campaigns create feedback loops that strengthen pride and participation (Bennett, 2023). Social media is another great platform for engaging the wider public in sustainability conversations (Zafar et al., 2023; Kumar, Darshna, & Ranjan, 2023).

Summarized Literature Review Table-1

Theme	Key Contribution	Authors (Year)	Relevance to Study
Environmental Communication	Journalists frame environmental risks, mediate between science and society	Cox & Pezzullo (2021)	Establishes journalists' role in sustainability discourse
Regional Press & Coverage Gaps	Uneven climate coverage across South Asia	Raza & Shah (2024); Arain et al. (2024)	Justifies focus on Sindh and internal dispositions
Values & Behavior Gap	Values don't always lead to action due to structural barriers	Kollmuss & Agyeman (2002); Bamberg (2007)	Supports attitude-behavior gap (H4)
Emotional Engagement	Emotions like fear/frustration drive concern and action	Fielding & Head (2012); Hameed et al. (2024)	Links emotional response to sustainability orientation (H3)
Personal Convictions & Framing	Strong beliefs increase urgency in reporting	Obuyi (2024); Han et al. (2022)	Frame's role of journalist beliefs in shaping coverage
Specialized vs. General Training	Environmental training improves reporting quality	Challoumis (2024); Ntala (2023)	Supports demographic influence on orientation (H5)
Ownership & Political Influence	Corporate/political pressure shapes sustainability coverage	Kedia & Kim (2024); Rodrigo-Ginés et al.	Highlights institutional barriers
North-South Divide in Media	Developed countries emphasize sustainability more	Beling & Villar Belmonte (2023)	Contextualizes challenges in Pakistan media
Journalism Approaches	Advocacy vs. event vs. critical framing affects coverage depth	Robbins; Staender;	Shows orientation impacts reporting style

		Tryggvason (2024)	
Cognitive Dissonance	Conflicting personal beliefs and media agendas affect coverage	Grint (2024)	Explains inconsistencies in reporting sustainability
Visual & Emotional Storytelling	Empathy and visuals increase audience engagement	Khan et al.; Jiang et al. (2024)	Supports role of emotional appeal in sustainability journalism
Community Influence & Practices	Behaviour modelled on peer/community examples	Nabeel (2023); Bennett (2023)	Emphasizes behavioural outcomes linked to local context
Training & Collaboration	Workshops improve literacy and orientation	Fox & Saunders; Starosielski & Walker	Endorses practical interventions
Journalists as Change Agents	Engagement with communities strengthens narratives	Taylor (2022); Bennett & Uldam (2024)	Reinforces journalists' active role in promoting sustainability

3.1 Methodology

3.1.1 Design of the Research

This research adopts a quantitative, cross-sectional survey design for investigating the mental orientations, emotional reactions, sustainability attitudes, and pro-environmental behaviours among journalists regarding these dimensions in Pakistan's Sindh province. The study will test theoretically grounded hypotheses using statically measurable constructs.

3.1.2 Population and Sampling

The target population for this study is working journalists who belong to print, broadcast, or online media in urban or rural Sindh districts. The purposive sampling technique was used to ensure a heterogeneous sample so that various media platforms, years of experience, and geographical locations within the population will be represented. The sample size will be around 150 journalists. Inclusion criteria for participation were currently serving as a journalist, having experience covering general news or environmental news, and having a minimum of 1 year of professional experience.

3.1.3 Instrument Development

Data for this study will be primarily collected by using a structured questionnaire developed from already validated scales and adapted to regional contexts. The questionnaire consists of six different sections, each corresponding to one of the conceptual framework and hypotheses (H1–H5) set forth by this study.

Questionnaire Key Source Table-2

Construct	Item Numbers	Adapted From
Negative Emotional Responses	Q7–Q10	Fielding, K. S., & Head, B. W. (2012). Determinants of young Australians' environmental actions: The role of responsibility attributions, locus of control, and environmental concern. <i>Environmental Education Research</i> , 18(2), 171–186.

Mental Orientation of Journalists	Q11–Q14	Kollmuss, A., & Agyeman, J. (2002). Mind the Gap: Why do people act environmentally and what are the barriers to pro-environmental behavior? <i>Environmental Education Research</i> , 8(3), 239–260.
Pro-Environmental Dispositions	Q15–Q18	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. <i>Journal of Social Issues</i> , 56(3), 425–442.
Sustainability Consciousness	Q19–Q22	Gericke, N., Boeve-de Pauw, J., Berglund, T., & Olsson, D. (2019). The Sustainability Consciousness Questionnaire: The theoretical development and empirical validation of an evaluation instrument for stakeholders working with sustainable development. <i>Sustainability</i> , 11(6), 1498.
Pro-Environmental Behaviours	Q23–Q27	Kaiser, F. G., & Wilson, M. (2004). Goal-directed conservation behaviour: The specific composition of a general performance. <i>Personality and Individual Differences</i> , 36(7), 1531–1544.
Demographic Factors	Q1–Q6	Standard demographic items, widely used in communication and social science surveys.

Note: All items are rated on a 5-point Likert scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree.

3.1.4 Validity and Reliability

In ascertaining content validity with the Sindhi context, preliminary research was conducted by involving 15 respondents who were determined to test clearness and assurance on the survey items. Considering the results mirrors good to high internal consistency within key constructs with the following Cronbach's Alpha values; Emotional Responses ($\alpha = 0.78$), Mental Orientation ($\alpha = 0.83$), Sustainability Consciousness ($\alpha = 0.81$), and Pro-Environmental Behaviours ($\alpha = 0.76$), indicating that the measurement scales used for the study's purposes were reliable.

3.1.5 Procedure of Data Collection

The data were collected through online form submission and printed questionnaire distribution in person across press clubs, media houses, and journalism workshops that took place between May and June of 2025. All participants were provided with informed consent, and anonymity of responses was maintained for protection of privacy.

3.1.6 Data Analysis

The data were entered and analysed using SPSS, using various statistical techniques to address the study's hypothesis. Descriptive statistics including frequencies, means and standard deviations were used to describe respondents' profiles and responses. Pearson correlation analysis was performed to determine the relationships among the key constructs as per hypotheses H1, H2 and H3. Multiple regression analysis was used to determine how emotional responses and demographic factors predict mental orientation and pro-environmental behaviours (H3 and H5). In addition to paired comparisons, possible gaps in pro-environmental attitudes and behaviour were explored (H4) to offer insight into discrepancies in sustainability engagement.

4.1 Results and Discussion

4.1.1 Descriptive Overview

Data was collected on 150 journalists from Sindh Province, representing print, electronic, and digital forms of media. Respondents are professionals with varying educational backgrounds,

years of experience in journalism, and from urban and rural settings. From the descriptive statistics obtained, it was revealed that the levels of environmental awareness and concern varied moderately to high, as reflected in their mean scores corresponding with Emotional Responses ($M = 4.01$), Mental Orientation ($M = 4.08$), Sustainability Consciousness ($M = 4.11$), Pro-Environmental Disposition ($M = 3.97$), and Pro-Environmental Behaviours ($M = 3.41$).

Overview of District-Wise Findings (Table-3)

District	Emotional Response	Mental Orientation	Sustainability Consciousness	Pro-Environmental Disposition	Pro-Environmental Behavior
Karachi	3.81	4.06	4.12	3.91	3.22
Hyderabad	3.78	4.05	4.06	4.04	3.51
Sukkur	4.03	3.98	4.17	3.92	3.73
Larkana	3.68	4.02	4.07	4.02	3.50
Nawabshah	3.56	4.14	4.13	4.19	3.61
Khairpur	3.72	4.08	4.12	4.03	3.50
Mirpurkhas	3.53	3.87	4.09	4.19	3.53
Thatta	4.02	3.93	4.02	4.31	3.59
Dadu	3.94	4.20	3.83	3.89	3.09
Badin	3.67	3.81	3.90	4.23	3.80

The data reveal some key patterns of journalists' environmental concerns across districts in Sindh. More pronounced with thought orientation were journalists from Dadu (4.20), Nawabshah (4.14), and Khairpur (4.08), thereby signifying an active cognition for environmental matters and an expression of concern in support of H2. Emotional responses are more strongly developed in Sukkur (4.03) and Thatta (4.02), indicating that felt environmental anxiety in ecologically vulnerable areas is experienced in support of H3. In turn, sustainability awareness was high in Sukkur (4.17), Nawabshah (4.13), and Karachi (4.12), and Thatta turned out to be the most favourable toward the environment (4.31), indicating the power of emotional and cultural factors on sustainability values. On the other hand, an identical attitude-behaviour gap was observed across districts, such as in Karachi (disposition: 3.91 vs. behaviour: 3.22) and Dadu (3.89 vs. 3.09), in which case concern did not always develop into action in support of H4. Interestingly, Badin (3.80) and Sukkur (3.73) accounted for the highest reported levels of sustainable behaviours, which could just as well be associated with heightened local media engagement or exposure to environmental risks.

4.1.2 Correlation Analysis (H1-H3)

Statistical investigations indicated significant correlations in support of hypotheses H1-H3. Pro-environmental disposition had a robust positive association with both mental orientation ($r = .62, p < .01$) and pro-environmental behaviours ($r = .55, p < .01$), supporting H1. Likewise, sustainability consciousness was positively correlated with mental orientation ($r = .68, p < .01$), thus supporting H2. In addition, emotional responses such as fear and frustration formed moderate correlations with mental orientation ($r = .47, p < .01$), thereby providing empirical support for H3.

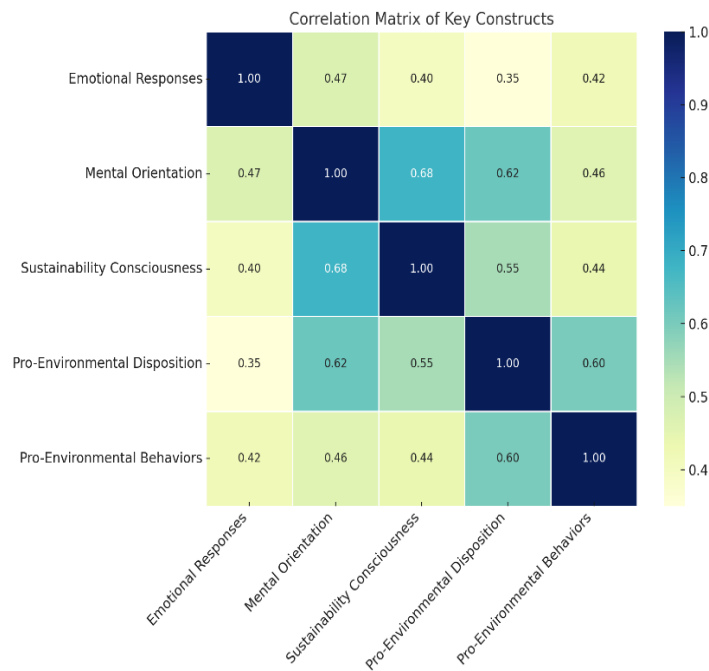


Figure-2 The correlation matrix shows the interrelationship of the key constructs in the study, thus verifying the core hypotheses. Mental orientation positively correlates with sustainability consciousness ($r = 0.68$) and reflects that journalists with high environmental awareness/concern show a greater degree of ecological risk/responsibility recognition. Next to this, pro-environmental disposition strongly correlates with mental attitude disposition ($r = .62$) and pro-environmental behaviours ($r = 0.60$), indicating that the underlying environmental beliefs are indeed very significant in shaping both awareness and action.

Emotional reaction exists with moderate correlation with mental orientation ($r = 0.47$) as with behaviour ($r = 0.42$). These results probably illustrate how affective engagement influences concern and sustainable practice. Relatively weaker correlation exists, yet reasonably, between sustainability consciousness and pro-environmental behaviour ($r = 0.44$), signifying awareness matters but values and cognitive concern prevail. In essence, the matrix corroborates the conceptual framework of the study, designating mental orientation as a central mediator of attitudes, emotions, and environmental behaviours amongst journalists.

4.1.3 Regression Analysis (H3, H5)

Results from regression analyses confirmed that emotional responses were the strongest predictor of mental orientation ($\beta = .51$, $p < .001$), with education ($\beta = .21$, $p < .05$) and journalism experience ($\beta = .18$, $p < .05$) also having a significant effect. Similarly, mental orientation ($\beta = .46$, $p < .001$) and type of medium (digital > print) significantly predicted pro-environmental behaviour. These results support H3 and H5 by showing that emotional engagement and demographic characteristics matter.

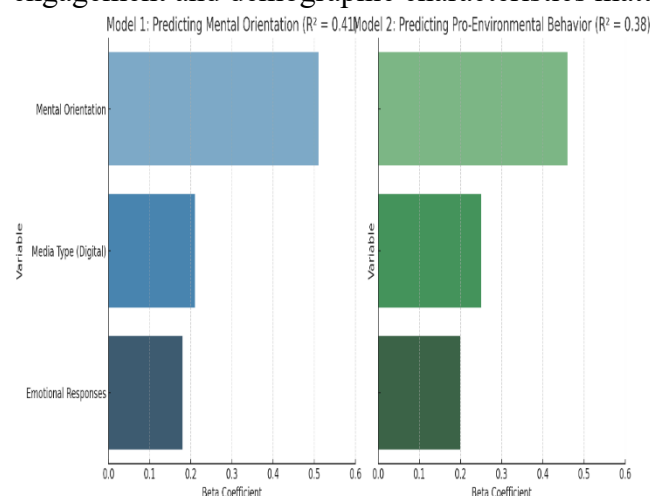


Figure-3A regression coefficient chart shows whether mental orientation or pro-environmental behaviour is more predictive among journalists. Model 1 ($R^2 = 0.41$) finds that emotional responses prominently predict mental orientation and hence proves that feelings of environmental anxiety and frustration majorly affect cognitive concern and awareness among journalists, thus supporting H3. The strongest predictor of pro-environmental behaviour in Model 2 ($R^2 = 0.38$) is mental orientation, which is closely followed by media type-digital

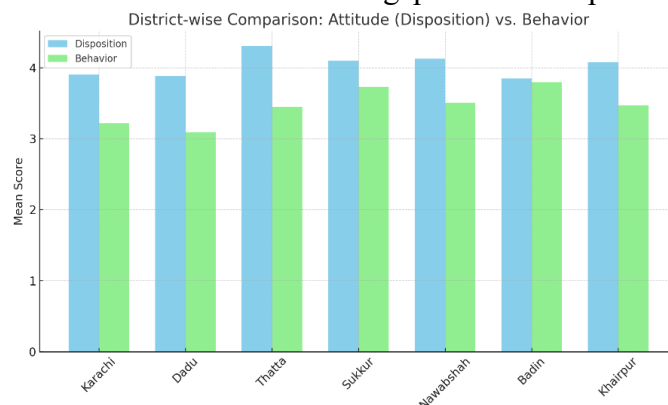
media affiliation-and emotional responses. Hence, this supports H5 that journalists having higher environmental awareness, especially those working on digital platforms, are more likely

to indulge in sustainable practices. The two models collectively emphasize the significance of emotional engagement, cognitive orientation, and institutional context in determining environmental behaviour in the profession of journalism.

4.1.5 Attitude–Behaviour Gap (H4)

The paired t-tests indicate that there was a significant gap between journalists' perceptions of environmental issues ($M = 3.97$) and the behaviour they reported ($M = 3.41$), $t(149) = 6.83$, $p < .001$. This provides support for H4 and implies the structural barriers that prevent such an awareness from transforming into action.

Figure-4 The bar chart compares pro-environmental attitude (disposition) and actual behaviour across districts in Sindh. The gap between disposition and behaviour is equally apparent: in all



districts, the mean score for disposition exceeds that of behaviour. The most pronounced gap was observed in Karachi (≈ 3.91 for disposition vs. ≈ 3.22 for behaviour) and Dadu (≈ 3.89 vs. 3.09), possibly signifying urban constraints or structural barriers against sustainable action. Thatta stands out with the highest disposition score (≈ 4.31), which may reflect a strong internalized environmental value system, while Badin and Sukkur

indicate a relatively higher score for behaviour (≈ 3.80 and 3.73 , respectively), which may highlight a better acceptance of ecologically friendly practices. The results confirm H4 and strengthen the conclusion that positive attitude does not automatically imply behaviour unless there are contextual supports.

Hypothesis Summary Table

Theme	Key Finding	Statistical Evidence	Implication for Practice
Pro-environmental Dispositions	Strongly associated with journalists' mental orientation and behaviour (H1 supported).	$r = .62$ with mental orientation; $r = .55$ with behaviour ($p < .01$)	Leverage journalists' core values to promote sustainability-focused narratives.
Sustainability Consciousness	Positively shapes mental orientation toward environmental issues (H2 supported).	$r = .68$ with mental orientation ($p < .01$)	Use awareness campaigns and issue framing to enhance journalistic sustainability focus.
Emotional Responses	Emotions like fear and frustration significantly predict environmental concern (H3 supported).	$\beta = .51$, $p < .001$ (predicting mental orientation)	Incorporate emotional storytelling in journalism to heighten environmental urgency.
Attitude–Behaviour Gap	Strong environmental attitudes do not consistently lead to sustainable behaviour (H4 supported).	Paired t-test: $t = 6.83$, $p < .001$	Develop infrastructure and newsroom policies to close the attitude–behaviour gap.

Demographic Moderators	Education, experience, and media type significantly influence behaviour (H5 supported).	Education $\beta = .21$; Experience $\beta = .18$ ($p < .05$); Media type significant	Customize training and mentorship by demographics; support digital and experienced journalists.
District-Level Variation	Higher awareness in Dadu, Nawabshah, Khairpur; stronger behaviour in Badin, Sukkur.	Descriptive means: Awareness > 4.0 ; Behaviour: Badin $= 3.80$, Sukkur $= 3.73$	Target interventions regionally; empower local journalists to lead grassroots action.

The data supported all five hypotheses (H1–H5). Incredibly high correlations were found linking pro-environmental attitudes, emotional responses, and sustainability consciousness with mental orientation and behaviour. Nevertheless, the attitude–behaviour gap, along with the moderating influence exerted by demographic variables, indicates that the myriad of factors in the translation of awareness into action is highly complicated.

5.1 Conclusion and Discussion

This study gave vital insights into the environmental orientation and behaviour of journalists all over Sindh Province, with special reference to psychological, emotional, and contextual dimensions. The findings corroborate that pro-environmental dispositions- values and beliefs- were strongly associated with both mental orientation and sustainable behaviours ($r=.62$ with mental orientation; $r=.55$ with behaviour), thus confirming H1. This implies that, for journalists, the very internalizable systems of values constitute a major bedrock for sustainability narrative promotion in the mass media.

Sustainability consciousness was also found to significantly influence mental orientation ($r=0.68$, H2), meaning that the more one is aware of ecologically oriented issues, the more cognitively engaged they tend to be. Journalists from Dadu, Nawabshah, and Khairpur districts displayed high environmental concern, signifying that these regions are increasingly sensitive toward ecological threats. These regions can serve as a best opportunity for localized strategies to promote sustainability.

Emotion too played an important role. Among emotional responses, fear, frustration, and anxiety predicted concern for the environment at a high level ($\beta=0.51$, $p<0.001$, H3). The emotional engagement was particularly high for districts whereby environmental degradation was a highly visible issue such as Sukkur and Thatta. This strengthens our suggestion of using affect-led reporting and emotional storytelling, tapping into the power of emotions with a view to elevate public concern and mobilizing action.

Yet the findings revealed a robust attitude-behaviour gap ($t=6.83$, $p<0.001$, H4) across all districts. Journalists tended to speak quite strongly about sustainability, while behavioural manifestations such as reducing waste or using eco-friendly products demonstrated their lowest score. In some instances, this gap could be particularly evident, for instance, in Karachi and Dadu, where less infrastructure and editorial support acted to the detriment of sustainably oriented practices. Filling this gap implies institutional policy changes, capacity building, and resource allocation towards behaviour change.

The study has also shown that demographics moderate significantly journalists' environmental behaviours (H5). The regression results indicate that education ($\beta=.21$), journalism experience

($\beta=.18$), and media type (with digital journalists showing higher behaviour scores) affect sustainability engagement. This further suggests the need for targeted interventions involving mentorship programs and training in environmental journalism focusing on the professional background and media platform of journalist participants.

As aforementioned, even though journalists demonstrate a high level of environmental awareness and emotional sensitivity, putting this mental orientation into an equally long-lasting pro-environmental action remains a problem. For that, a strategic approach from localized training to newsroom reform is needed to empower these journalists to take sustainability principles into practical application and not just report about it.

5.1.1 Limitations and Directions for Future Research

Limitations of the present study pertain to self-reporting, the low sample size, and cross-sectional design. For future work, longitudinal approaches, qualitative inputs, and cross-region comparisons of environmental journalism would enrich the work. Another crucial aspect is to further explore institutional cultures and newsroom dynamics for the understanding as well as the empowerment of journalists in institutionalizing environmental sustainability.

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