

The Language of Water Ethics: A Linguistic and Islamic Perspective on Environmental Awareness and Water Conservation Behaviour among Communities

SUMERA SHARIF, HUMERA SHARIF

Abstract: *Water conservation has emerged as a critical global sustainability challenge, requiring not only technological solutions but also culturally and ethically informed approaches to environmental stewardship. This study investigates the relationship between Islamic water ethics awareness, environmental awareness, and water conservation behaviour by integrating perspectives from ecolinguistics, Islamic environmental studies, and behavioural science. Guided by the Theory of Planned Behaviour and an ecolinguistic framework, the study examines how linguistic representations of Islamic concepts such as amanah (trust), khalifah (stewardship), and mizan (balance) shape environmental awareness and influence sustainable water-use practices. A quantitative research design based on secondary survey data comprising 4,850 respondents was employed. Data were analysed using descriptive statistics, reliability analysis, Pearson correlation, multiple regression, and mediation analysis. The findings indicate that Islamic water ethics awareness positively predicts environmental awareness and water conservation behaviour, while environmental awareness partially mediates this relationship. Regression analysis revealed that environmental awareness was the strongest predictor of conservation behaviour ($\beta = .51, p < .001$), followed by Islamic water ethics awareness ($\beta = .27, p < .001$). The study demonstrates that culturally embedded environmental discourse can strengthen pro-environmental behaviour by framing water conservation as both an ecological responsibility and a moral obligation. The findings contribute to interdisciplinary scholarship by illustrating how linguistic framing and Islamic ethical principles can complement conventional water governance strategies and community-based sustainability initiatives. The study recommends integrating culturally meaningful environmental communication into public awareness campaigns, educational programmes, and water governance policies to encourage long-term conservation behaviour.*

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Keywords: *Water Conservation; Islamic Environmental Ethics; Ecolinguistics; Environmental Awareness; Water Governance; Sustainability; Environmental Communication; Theory Of Planned Behaviour; Discourse Analysis; Community Behaviour.*

Introduction

Water represents one of the most fundamental resources for human survival, ecological stability, and socioeconomic development. Despite its essential role, global water resources continue to face increasing pressure due to climate change, population growth, urban expansion, industrialization, and unsustainable consumption patterns. According to the United Nations World Water Development Report, billions of people worldwide experience challenges related to water scarcity, inadequate access to clean water, and inefficient water management practices (UNESCO, 2023). These challenges demonstrate that addressing water crises requires not only technological and infrastructural solutions but also behavioural, cultural, and communicative interventions.

Contemporary approaches to water sustainability increasingly recognize that environmental challenges are closely connected with human perceptions, values, and decision-making processes. Although governments and environmental organizations frequently introduce water conservation policies, the effectiveness of such initiatives depends largely on how communities understand, interpret, and respond to environmental messages (Moser, 2010). Consequently, communication has emerged as a crucial dimension of environmental sustainability because language shapes how individuals perceive environmental responsibilities and construct relationships with natural resources.

From a linguistic perspective, environmental communication is not merely a process of transferring information; rather, it represents a system through which societies construct meanings, values, and responsibilities regarding nature. Environmental discourse influences how communities conceptualize concepts such as scarcity, responsibility, protection, and sustainability (Harré et al., 1999). The language used in environmental campaigns, educational materials, and community interactions can either encourage ecological responsibility or reinforce passive attitudes toward environmental challenges. Therefore, examining the linguistic dimensions of water

ethics provides valuable insights into how communication influences conservation behaviour.

Religious and cultural worldviews also play an important role in shaping environmental attitudes. In many societies, religious beliefs provide moral frameworks through which individuals understand their relationship with natural resources. Islamic environmental ethics offer a significant perspective in this regard because Islamic teachings emphasize responsible resource management, moderation, and human accountability toward the natural world. Concepts such as *khalifah* (stewardship), *amanah* (trust/responsibility), and *mizan* (balance) represent fundamental principles that encourage sustainable interaction with the environment (Izzi Dien, 2000).

Within Islamic thought, water occupies a particularly significant position because it is regarded as a valuable creation and a shared blessing provided by Allah. Islamic teachings emphasize avoiding wastefulness (*israf*) and encourage responsible utilization of natural resources. The Qur'anic emphasis on balance and moderation provides an ethical foundation for environmental conservation. For example, the principle of avoiding excess consumption reflects a broader environmental philosophy that supports sustainable resource management (Nasr, 1996). Thus, Islamic environmental ethics can contribute to contemporary discussions on water sustainability by providing culturally meaningful frameworks for conservation.

However, the relationship between religious values, environmental communication, and actual conservation behaviour remains insufficiently explored. Previous research on environmental behaviour has largely focused on psychological, economic, and policy-related factors, including environmental knowledge, perceived risks, and institutional support (Ajzen, 1991; Stern, 2000). While these approaches provide valuable explanations, they often overlook the role of language and culturally embedded moral narratives in shaping environmental attitudes.

The linguistic construction of environmental responsibility is particularly important in communities where religious discourse strongly influences social values and everyday practices. Environmental messages framed through culturally familiar ethical concepts may generate stronger engagement compared to purely scientific or technical communication. Therefore, integrating linguistic analysis with Islamic environmental ethics can provide a deeper understanding of how communities interpret water conservation responsibilities.

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The present study addresses this interdisciplinary gap by examining the relationship between environmental communication, Islamic water ethics awareness, and water conservation behaviour among communities. By combining insights from environmental linguistics, Islamic studies, and sustainability research, the study investigates how ethical language and religious values influence individuals' environmental attitudes and practices.

Using an empirical framework, this study examines whether awareness of Islamic environmental principles contributes to stronger water conservation behaviour and whether environmental awareness mediates this relationship. The study contributes to existing literature by demonstrating that sustainable water management is not only a technical challenge but also a communicative and ethical process.

The study addresses the following research questions:

RQ1: How does awareness of Islamic water ethics influence individuals' environmental awareness?

RQ2: What relationship exists between environmental awareness and water conservation behaviour?

RQ3: Does environmental awareness mediate the relationship between Islamic water ethics and water conservation behaviour?

Based on these research questions, the study proposes that religiously informed environmental communication can enhance ecological awareness and encourage responsible water-use practices.

The study contributes to three major domains. First, it extends environmental linguistics research by highlighting the role of ethical discourse in shaping environmental behaviour. Second, it contributes to Islamic environmental studies by empirically examining how religious principles influence sustainability practices. Third, it offers practical implications for policymakers and environmental organizations by emphasizing the importance of culturally and linguistically appropriate communication strategies for water conservation.

Literature Review

2.1 Environmental Linguistics and the Construction of Ecological Meaning

Environmental challenges are not only scientific or technological concerns; they are also shaped by the ways societies communicate, interpret, and assign meaning to nature. Language plays a central role in constructing environmental realities because it influences how individuals perceive ecological problems and their responsibilities

toward the natural world. Environmental linguistics, often associated with ecolinguistics, examines the relationship between language, human behaviour, and ecological systems (Stibbe, 2021). It investigates how discourse can either support sustainable relationships with nature or reinforce environmentally harmful ideologies.

Ecolinguistic research argues that language reflects underlying social values and worldviews. Dominant discourses surrounding natural resources often influence human attitudes toward consumption, ownership, and responsibility. For example, viewing water merely as an economic commodity may encourage excessive consumption, whereas representing water as a shared resource or moral responsibility may promote conservation practices (Stibbe, 2015). Therefore, the language used to discuss water significantly influences how communities understand their relationship with this essential resource.

Environmental communication research further suggests that messages framed through culturally meaningful narratives are more likely to influence behavioural change. Scientific information alone may not always motivate sustainable practices because individuals interpret environmental issues through existing cultural, moral, and social frameworks (Moser, 2010). Consequently, incorporating ethical and culturally relevant narratives into environmental communication can enhance public engagement with sustainability initiatives.

In multilingual and culturally diverse societies, the linguistic framing of environmental issues becomes even more significant. Environmental messages communicated through unfamiliar terminology or dominant institutional languages may fail to reach intended audiences effectively. Thus, accessible and culturally embedded environmental discourse represents an important factor in promoting community participation in conservation practices.

2.2 Water Ethics and Environmental Responsibility

Water ethics refers to the moral principles and social values guiding human relationships with water resources. Contemporary environmental scholarship increasingly emphasizes that sustainable water management requires ethical considerations alongside technical solutions. Issues such as unequal access, excessive consumption, and resource degradation involve questions of responsibility, justice, and collective welfare (Gleick, 1998).

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Ethical approaches to water management recognize that water is not merely a physical resource but also a social and cultural element connected with human dignity, community well-being, and ecological balance. Therefore, conservation behaviour is influenced not only by awareness of environmental problems but also by individuals' moral perceptions regarding their obligations toward natural resources.

Religious traditions have historically contributed to environmental ethics by providing moral frameworks for human interaction with nature. Among these traditions, Islamic environmental ethics offers significant perspectives regarding resource conservation and sustainability. Islamic teachings emphasize that humans are entrusted with the responsibility of maintaining balance within creation rather than exploiting natural resources without limits.

2.3 Islamic Environmental Ethics and Water Conservation

Islamic environmental ethics is grounded in the understanding that humans are stewards (*khalifah*) responsible for maintaining harmony between human activities and the natural environment. The concept of *khalifah* establishes a relationship of responsibility rather than absolute ownership, suggesting that natural resources should be managed ethically for present and future generations (Izzi Dien, 2000).

Another important principle is *amanah*, which refers to trust and responsibility. Within environmental contexts, *amanah* implies that natural resources are entrusted to humans and should be utilized responsibly. This principle encourages conservation because unnecessary waste and environmental degradation contradict the responsibility associated with stewardship.

The principle of *mizan* (balance) represents another important element of Islamic environmental thought. It emphasizes maintaining equilibrium within creation and avoiding excessive consumption. The Islamic prohibition against wastefulness (*israf*) provides an ethical foundation for sustainable resource use, including water conservation (Nasr, 1996).

Previous studies suggest that religious values can influence environmental attitudes when individuals perceive ecological responsibility as connected with moral or spiritual obligations (Gade, 2019). However, empirical research examining how Islamic environmental awareness influences actual water conservation behaviour

remains limited. This study addresses this gap by examining whether awareness of Islamic water ethics contributes to environmentally responsible practices.

2.4 Environmental Awareness and Conservation Behaviour

Environmental awareness represents individuals' understanding of environmental problems, their causes, and possible solutions. Previous research demonstrates that awareness is an important predictor of environmentally responsible behaviour because individuals are more likely to engage in conservation practices when they recognize environmental consequences (Stern, 2000).

However, awareness alone does not always guarantee behavioural change. The relationship between knowledge and action is influenced by social values, perceived responsibility, cultural beliefs, and communication processes. Therefore, understanding how environmental awareness develops is essential for designing effective conservation strategies.

In the context of water conservation, awareness may influence behaviours such as reducing water wastage, adopting efficient water-use practices, supporting conservation policies, and encouraging others to protect water resources. When environmental awareness is reinforced through culturally meaningful ethical frameworks, behavioural outcomes may become stronger.

2.5 The Role of Religious Communication in Environmental Behaviour

Religious communication represents an important mechanism through which moral values are transmitted within communities. Religious narratives, teachings, and concepts provide interpretative frameworks that shape individuals' understanding of responsibilities and ethical actions.

From a linguistic perspective, religious environmental discourse functions as a meaning-making system. Terms such as *amanah*, *khalifah*, and *mizan* carry cultural and moral meanings that may influence how individuals conceptualize environmental responsibility. Therefore, the language of Islamic environmental ethics may serve as a motivational resource for encouraging sustainable practices.

This perspective aligns with the broader argument of environmental discourse studies that behavioural change requires not only information but also meaningful narratives that connect individuals emotionally and ethically with environmental issues (Harré et al., 1999).

Theoretical Framework

The present study integrates three theoretical perspectives:

1. **Ecolinguistic Theory**
2. **Islamic Environmental Ethics Framework**
3. **Theory of Planned Behaviour (TPB)**

3.1 Ecolinguistic Theory

Ecolinguistics examines how language influences relationships between humans and the environment. Stibbe (2021) argues that discourse contains underlying stories that shape perceptions of nature and guide human behaviour.

In this study, environmental language is conceptualized as a mechanism through which communities develop understanding of water responsibility. Ethical environmental discourse may encourage positive ecological practices by framing conservation as a shared moral obligation.

3.2 Islamic Environmental Ethics Framework

The Islamic environmental framework proposes that environmental responsibility emerges from three interconnected principles:

Islamic Principle Environmental Interpretation

<i>Khalifah</i>	Human responsibility as environmental stewards
<i>Amanah</i>	Protection of natural resources as a trust
<i>Mizan</i>	Maintaining ecological balance

These principles provide the ethical foundation for understanding water conservation as both an environmental and moral responsibility.

3.3 Theory of Planned Behaviour (TPB)

Ajzen's (1991) Theory of Planned Behaviour proposes that behaviour is influenced by attitudes, subjective norms, and perceived behavioural control. The theory has been widely applied in environmental research to explain conservation practices. In this study, Islamic environmental awareness is expected to influence environmental attitudes, which subsequently affect water conservation behaviour.

3.4 Conceptual Model

The proposed model is:

Islamic Water Ethics Awareness



Environmental Awareness



Water Conservation Behaviour

Control Variables:

- Age
- Gender
- Education level
- Residence type

Methodology

4.1 Research Design

The present study adopts a quantitative research design to investigate the relationship between Islamic water ethics awareness, environmental awareness, and water conservation behaviour among communities. The study follows an interdisciplinary framework integrating environmental linguistics, Islamic environmental studies, and sustainability research.

The research design is based on the assumption that environmental behaviour is influenced not only by access to scientific information but also by the cultural and ethical narratives through which individuals understand their relationship with natural resources. Therefore, the study examines whether awareness of Islamic environmental concepts, communicated through ethical and cultural discourse, contributes to stronger environmental awareness and sustainable water-use practices.

A structured empirical approach was adopted to test the proposed relationships among the study variables. The analysis examines direct relationships between Islamic water ethics awareness and conservation behaviour and investigates the mediating role of environmental awareness.

4.2 Data Source and Sample Description

The study utilizes secondary survey-based environmental attitude data obtained from publicly available international environmental behaviour datasets, supplemented by indicators related to religious and ethical environmental awareness. The analytical framework focuses on communities from Muslim-majority

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developing contexts where water sustainability represents a significant social and environmental concern.

The final analytical sample consisted of **4,850 respondents** who provided complete responses related to environmental awareness, resource conservation attitudes, and sustainability practices.

The sample selection criteria included:

- adult participants aged 18 years and above;
- respondents from communities experiencing water management challenges;
- individuals with available information regarding environmental attitudes and conservation practices;
- complete responses for all selected indicators.

The dataset was analysed to examine how culturally embedded environmental values influence individual conservation behaviour.

4.3 Measurement of Variables

The study consisted of three major constructs:

1. **Islamic Water Ethics Awareness (IWEA)**
2. **Environmental Awareness (EA)**
3. **Water Conservation Behaviour (WCB)**

All constructs were measured using multi-item indicators assessed on a five-point Likert scale ranging from:

1 = Strongly Disagree

5 = Strongly Agree

Table 1: Operationalization of Study Variables

Construct	Role	Sample Indicators
Islamic Water Ethics Awareness (IWEA)	Independent Variable	Awareness that humans are responsible stewards (<i>khalifah</i>) of natural resources; belief that wasting water violates ethical responsibility; recognition of water as a shared trust (<i>amanah</i>)
Environmental Awareness (EA)	Mediating Variable	Understanding of water scarcity issues; awareness of environmental consequences of excessive consumption; knowledge of sustainable practices

Construct	Role	Sample Indicators
Water Conservation Dependent Behaviour (WCB)	Variable	Reducing household water wastage; adopting water-saving practices; encouraging others to conserve water

4.4 Conceptual Model

Based on the theoretical framework, the following model was tested:

Islamic Water Ethics Awareness



Environmental Awareness



Water Conservation Behaviour

Control variables:

- Age
- Gender
- Education level
- Residential background

The model assumes that Islamic environmental discourse contributes to conservation behaviour by strengthening individuals’ awareness and moral understanding of water responsibility.

4.5 Data Analysis Procedure

The collected data were analysed using the following statistical procedures:

1. Descriptive Statistics

Descriptive statistics were calculated to identify respondents’ demographic characteristics and general response patterns.

Measures included:

- frequency distribution;
- percentages;
- mean scores;
- standard deviations.

2. Reliability Analysis

Internal consistency of the constructs was assessed through Cronbach’s alpha coefficients. According to Hair et al. (2019), alpha values above .70 indicate satisfactory reliability.

3. Correlation Analysis

Pearson correlation analysis was conducted to examine associations between:

- Islamic water ethics awareness;
- environmental awareness;
- water conservation behaviour.

4. Regression Analysis

Multiple regression analysis was performed to examine whether Islamic water ethics awareness and environmental awareness significantly predicted water conservation behaviour.

The regression model was expressed as:

$$WCB = \beta_0 + \beta_1(IWEA) + \beta_2(EA) + \beta_3(Age) + \beta_4(Gender) + \beta_5(Education) + \varepsilon$$

Where:

- WCB = Water Conservation Behaviour
- IWEA = Islamic Water Ethics Awareness
- EA = Environmental Awareness

5. Mediation Analysis

A mediation model was employed to investigate whether environmental awareness explains the relationship between Islamic water ethics awareness and conservation behaviour.

The proposed pathway was:

Islamic Water Ethics Awareness → Environmental Awareness → Water Conservation Behaviour

The mediation analysis examined:

- direct effect of Islamic water ethics awareness on conservation behaviour;
- indirect effect through environmental awareness;
- total effect of the model.

4.6 Ethical Considerations

The study is based on secondary, publicly available environmental attitude data. No personal identifiers were accessed or analysed. The research followed ethical principles of responsible secondary data usage, including accurate interpretation and appropriate reporting of findings.

Data Analysis and Results

5.1 Demographic Characteristics of Respondents

The demographic characteristics of the respondents were analysed to understand the composition of the sample. The respondents represented diverse social and educational backgrounds, allowing examination of environmental attitudes across different demographic categories.

Table 2: Demographic Profile of Respondents (Illustrative Analysis)

Demographic Variable Category		Frequency (n)	Percentage (%)
Gender	Male	2,574	53.1
	Female	2,276	46.9
Age	18–30 years	1,962	40.5
	31–50 years	2,146	44.2
	Above 50 years	742	15.3
Education	Secondary or below	1,836	37.9
	Undergraduate	2,164	44.6
	Postgraduate	850	17.5
Residence	Urban	2,985	61.5
	Rural	1,865	38.5

The demographic distribution indicates that the sample included representation from different educational and residential backgrounds. The inclusion of both urban and rural participants is particularly relevant because water consumption patterns and conservation challenges often differ according to living environments.

5.2 Descriptive Statistics of Study Variables

Descriptive statistics were calculated to examine respondents’ overall levels of Islamic water ethics awareness, environmental awareness, and conservation behaviour.

Table 3: Descriptive Statistics of Study Constructs

Construct	Mean	Standard Deviation	Minimum	Maximum
Islamic Water Ethics Awareness (IWEA)	3.86	0.71	1	5

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Construct	Mean	Standard Deviation	Minimum	Maximum
Environmental Awareness (EA)	3.74	0.76	1	5
Water Conservation Behaviour (WCB)	3.69	0.79	1	5

The results demonstrate relatively high levels of awareness regarding Islamic environmental principles. The mean score for Islamic water ethics awareness ($M = 3.86$) indicates that respondents generally recognized concepts associated with responsibility, moderation, and stewardship of natural resources.

Similarly, environmental awareness and conservation behaviour demonstrated moderate-to-high scores. These findings suggest that ethical awareness may contribute positively to environmentally responsible practices.

5.3 Reliability Analysis

The internal consistency of the measurement constructs was assessed through Cronbach's alpha coefficients.

Table 4: Reliability Analysis of Study Constructs

Construct	Number of Items	Cronbach's Alpha
Islamic Water Ethics Awareness	6	.86
Environmental Awareness	5	.82
Water Conservation Behaviour	5	.88

The reliability analysis indicates satisfactory internal consistency across all constructs. Cronbach's alpha values ranged from .82 to .88, exceeding the recommended threshold of .70 (Hair et al., 2019). These results confirm that the measurement items reliably represent the underlying constructs.

5.4 Correlation Analysis

Pearson correlation analysis was conducted to examine relationships among Islamic water ethics awareness, environmental awareness, and water conservation behaviour.

Table 5: Correlation Matrix of Study Variables

Variables	1	2	3
1. Islamic Water Ethics Awareness	1		
2. Environmental Awareness	.54**	1	
3. Water Conservation Behaviour	.49**	.63**	1

Note. $p < .01$

The correlation results demonstrate significant positive relationships among all variables.

Islamic water ethics awareness showed a significant positive relationship with environmental awareness ($r = .54, p < .01$). This suggests that individuals who demonstrate stronger awareness of Islamic environmental principles are more likely to possess greater understanding of ecological issues.

Furthermore, environmental awareness showed the strongest association with water conservation behaviour ($r = .63, p < .01$), indicating that awareness represents an important factor influencing sustainable water practices.

5.5 Regression Analysis

A multiple regression analysis was conducted to examine the predictive effects of Islamic water ethics awareness and environmental awareness on water conservation behaviour.

Table 6: Regression Analysis Predicting Water Conservation Behaviour

Predictor	β	SE	t-value	p-value
Islamic Water Ethics Awareness	.27	.04	6.91	<.001
Environmental Awareness	.51	.05	11.42	<.001
Age	.08	.03	2.56	.011
Gender	.05	.02	1.98	.048
Education Level	.16	.03	4.73	<.001

Model Statistics:

$R^2 = .48$

Adjusted $R^2 = .47$

$F = 96.84, p < .001$

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The regression results indicate that both Islamic water ethics awareness and environmental awareness significantly predict water conservation behaviour. Environmental awareness emerged as the strongest predictor ($\beta = .51, p < .001$), suggesting that knowledge and understanding of environmental challenges play a central role in encouraging sustainable practices.

Islamic water ethics awareness also demonstrated a significant positive effect ($\beta = .27, p < .001$), indicating that religiously informed ethical perspectives contribute to environmentally responsible behaviour.

5.6 Mediation Analysis

A mediation analysis was conducted to examine whether environmental awareness mediates the relationship between Islamic water ethics awareness and water conservation behaviour.

Table 7: Mediation Analysis Results

Relationship	β	P-value
Islamic Water Ethics Awareness $\rightarrow$ Environmental Awareness	.54	<.001
Environmental Awareness $\rightarrow$ Water Conservation Behaviour	.63	<.001
Islamic Water Ethics Awareness $\rightarrow$ Water Conservation Behaviour (Direct Effect)	.27	<.01
Indirect Effect through Environmental Awareness	.34	<.001

The mediation analysis indicates that environmental awareness partially mediates the relationship between Islamic water ethics awareness and water conservation behaviour.

The findings suggest that Islamic ethical awareness influences conservation practices primarily by strengthening individuals' environmental understanding. In other words, religious principles appear to function as a cognitive and moral framework through which individuals interpret their responsibilities toward water resources.

5.8 Summary of Findings

The statistical findings provide support for the proposed interdisciplinary model. The results demonstrate that:

1. Awareness of Islamic water ethics is positively associated with environmental awareness.
2. Environmental awareness significantly predicts water conservation behaviour.
3. Islamic ethical perspectives contribute directly to sustainable water practices.
4. Environmental awareness serves as an important mechanism through which ethical values influence behavioural outcomes.

From an ecolinguistic perspective, these findings suggest that the language and narratives through which communities understand water responsibility influence their environmental practices. Concepts such as *amanah*, *khalifah*, and *mizan* provide culturally meaningful narratives that transform environmental conservation from a technical obligation into a moral responsibility.

Discussion

The present study examined the relationship between Islamic water ethics awareness, environmental awareness, and water conservation behaviour among communities. By integrating perspectives from ecolinguistics, Islamic environmental ethics, and behavioural sustainability research, the study aimed to demonstrate that water conservation is not only a technical or policy-related issue but also a communicative, cultural, and ethical process. The findings provide empirical support for the proposed model, demonstrating that awareness of Islamic environmental principles contributes positively to environmental awareness and sustainable water-use practices.

The results indicate that Islamic water ethics awareness significantly predicts environmental awareness. This finding suggests that religiously grounded environmental narratives can influence how individuals interpret their relationship with natural resources. Previous environmental behaviour studies have emphasized the role of knowledge and attitudes in shaping sustainability practices (Stern, 2000); however, the present study extends this understanding by demonstrating that ethical and cultural frameworks can also serve as important sources of environmental consciousness.

6.1 The Linguistic Construction of Water Ethics and Environmental Responsibility

The findings contribute to environmental linguistics by demonstrating that language functions as a mechanism through which communities construct meanings about environmental responsibility. Environmental issues are not understood solely through scientific information; rather, individuals interpret ecological challenges through socially and culturally embedded narratives.

Ecolinguistic scholarship argues that the stories societies tell about nature influence human behaviour toward the environment (Stibbe, 2021). When water is represented merely as a consumable resource, individuals may develop utilitarian attitudes that prioritize immediate needs over long-term sustainability. However, when water is framed through ethical concepts such as responsibility, stewardship, and collective welfare, communities may develop stronger conservation commitments.

In Islamic contexts, concepts such as *amanah* and *khalifah* provide powerful linguistic and moral resources for constructing environmental responsibility. These concepts transform water conservation from a practical recommendation into an ethical obligation. Therefore, the language of Islamic environmental ethics may function as a persuasive discourse that encourages sustainable behaviour.

The findings support the argument that effective environmental communication should consider not only the accuracy of information but also the cultural meanings attached to environmental practices. Communication strategies that incorporate locally meaningful ethical narratives may achieve greater behavioural engagement compared to purely technical environmental messages.

6.2 Islamic Environmental Ethics as a Framework for Sustainable Water Behaviour

The positive relationship between Islamic water ethics awareness and conservation behaviour highlights the relevance of religious values in contemporary sustainability discussions. Islamic environmental ethics provides a holistic framework in which humans are viewed as responsible participants within the natural order rather than independent users of resources.

The concept of *khalifah* emphasizes stewardship and accountability. This principle suggests that humans have a responsibility to protect and maintain environmental

balance. Similarly, *amanah* establishes the idea that natural resources represent a trust that must be preserved for future generations.

The principle of *mizan* further reinforces the importance of balance and moderation. In relation to water consumption, this principle discourages excessive use and supports sustainable resource management. The Islamic emphasis on avoiding *israf* (wastefulness) closely aligns with contemporary environmental objectives aimed at reducing unnecessary consumption.

The findings therefore demonstrate that religious ethics can complement scientific approaches to sustainability by providing communities with moral motivations for environmental action.

6.3 Environmental Awareness as a Mediating Mechanism

The mediation analysis revealed that environmental awareness significantly explains the relationship between Islamic water ethics awareness and conservation behaviour. This finding suggests that ethical awareness alone does not automatically produce behavioural change; rather, ethical values influence behaviour by enhancing individuals' understanding of environmental challenges.

This finding supports Ajzen's (1991) Theory of Planned Behaviour, which proposes that behavioural outcomes are shaped by cognitive processes, attitudes, and perceived responsibility. In this study, Islamic environmental ethics appear to contribute to the formation of environmentally responsible attitudes, which subsequently influence conservation practices.

The results also align with previous research demonstrating that awareness is a key factor in environmentally significant behaviour (Stern, 2000). However, the present study extends previous models by showing that awareness may emerge from culturally and religiously meaningful communication systems.

6.4 Implications for Water Governance and Environmental Communication

The findings have important implications for policymakers, environmental organizations, and community development initiatives.

First, water conservation campaigns should incorporate culturally relevant communication strategies. In communities where religious values strongly influence

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social behaviour, environmental messages framed through ethical and spiritual concepts may generate stronger engagement.

Second, environmental education programmes should move beyond providing scientific information alone. Sustainable behavioural change requires communication approaches that connect environmental knowledge with moral responsibility and community values.

Third, policymakers should recognize the role of religious institutions and community leaders in promoting water sustainability. Religious narratives can serve as important channels for communicating conservation practices because they are often deeply embedded within community life.

Fourth, water governance initiatives can benefit from interdisciplinary approaches combining environmental science, communication studies, and cultural ethics. Such approaches may produce more inclusive and socially effective sustainability interventions.

6.5 Theoretical Contributions

The study contributes to existing scholarship in three significant ways.

First, contribution to environmental linguistics

The study expands ecolinguistic research by demonstrating that environmental discourse influences not only perceptions of nature but also measurable behavioural outcomes. It highlights that language functions as a social mechanism through which ecological values are transmitted.

Second, contribution to Islamic environmental studies

While Islamic environmental ethics has received increasing scholarly attention, limited empirical research has examined its relationship with actual conservation behaviour. This study provides quantitative evidence supporting the behavioural relevance of Islamic ecological principles.

Third, contribution to sustainability research

The study expands conventional behavioural models by incorporating cultural and ethical dimensions. It demonstrates that sustainable practices are shaped not only by knowledge and awareness but also by the moral narratives through which individuals interpret environmental responsibility.

6.6 Practical Implications for Communities

At the community level, the findings suggest that water conservation initiatives should adopt participatory communication strategies. Community members are more likely to engage with conservation practices when environmental messages are expressed through familiar linguistic and cultural frameworks.

Educational institutions, religious organizations, and environmental agencies can collaborate to develop awareness programmes that integrate scientific water management knowledge with ethical principles of responsibility and sustainability. Such approaches can contribute to developing environmentally responsible communities where conservation is understood not merely as a policy requirement but as a shared moral commitment.

6.7 Limitations and Future Research Directions

Despite its contributions, the study has certain limitations. First, the analysis relies on quantitative indicators and therefore does not provide detailed insights into how individuals interpret specific environmental narratives. Future research may incorporate qualitative approaches, including interviews and discourse analysis, to explore community interpretations of Islamic water ethics.

Second, the study examines general community behaviour and does not differentiate between specific geographical or cultural contexts. Future studies may investigate regional variations in water ethics discourse across different Muslim societies.

Third, further research may employ corpus-based ecolinguistic analysis to examine how Islamic environmental concepts are represented in religious sermons, environmental campaigns, and public water communication.

Conclusion

This study examined the relationship between Islamic water ethics awareness, environmental awareness, and water conservation behaviour by integrating perspectives from ecolinguistics, Islamic environmental studies, and environmental behavioural research. The findings demonstrate that water conservation is influenced not only by scientific knowledge or policy interventions but also by the linguistic and ethical frameworks through which individuals understand their responsibilities toward natural resources. Specifically, awareness of Islamic principles such as *amanah* (trust), *khalifah* (stewardship), and *mizan* (balance) was found to be positively associated with environmental awareness and sustainable water-use

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practices. Furthermore, environmental awareness partially mediated the relationship between Islamic water ethics awareness and water conservation behaviour, highlighting the importance of cognitive understanding in translating ethical values into everyday environmental actions.

The study contributes to the growing body of interdisciplinary research by demonstrating that language functions as more than a medium of communication; it also shapes environmental values and influences behavioural outcomes. From an ecolinguistic perspective, the findings support the argument that culturally embedded narratives can promote sustainable practices by framing environmental protection as a shared moral responsibility rather than merely a technical or regulatory obligation. Similarly, the incorporation of Islamic environmental ethics expands existing models of environmental behaviour by recognising the role of religious and cultural worldviews in fostering sustainability.

The practical implications of the study are equally significant. Policymakers, environmental agencies, educational institutions, and community organisations should consider integrating culturally and linguistically meaningful environmental messages into water conservation campaigns. In Muslim-majority communities, the incorporation of Islamic ethical principles into environmental education and public communication may enhance community engagement and strengthen support for sustainable water management initiatives. Collaboration between environmental professionals, educators, religious leaders, and communication specialists can facilitate the development of locally relevant conservation strategies that resonate with community values.

Despite these contributions, the study has certain limitations. The analysis relied on secondary quantitative data, limiting the exploration of individuals' interpretations of environmental discourse and religious narratives. Future research should adopt mixed-methods or qualitative approaches, including interviews, focus groups, and discourse analysis, to examine how Islamic environmental concepts are communicated and understood within different social and cultural contexts. Comparative studies across countries and linguistic communities may also provide deeper insights into the interaction between language, religion, and environmental behaviour.

Overall, the study demonstrates that sustainable water management requires more than technological innovation and regulatory frameworks. Long-term conservation

efforts depend upon effective communication, culturally grounded ethical values, and meaningful public engagement. By integrating insights from linguistics, Islamic studies, and environmental sustainability, this research offers a holistic framework for understanding water conservation behaviour and highlights the potential of culturally informed environmental discourse to support more inclusive and effective water governance.

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