Article

Religiosity, Institutional Policy, and Climate Awareness in Shaping Environmental Behaviour Among Gen Z Students at Islamic and Catholic Universities

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M Pasqa
Department of Political Science, Faculty of Social and Political Sciences, UIN Bandung, Indonesia.
pasqa@uinsgd.ac.id

Asep Muhamad Iqbal
Department of Sociology, Faculty of Social and Political Sciences, UIN Bandung, Indonesia.
am.iqbal@uinsgd.ac.id

ABSTRACT

This study examines how religiosity, institutional environmental policies, and climate change awareness shape pro-environmental behaviour among Generation Z students at an Islamic and a Catholic university in Indonesia. Using a convergent mixed-methods design, it integrates survey data from 300 students with six in-depth interviews to assess how faith-based institutions expect ecological values to inform daily practices. PLS-SEM results indicate that climate change awareness plays the most central role in encouraging pro-environmental behaviour, while institutional environmental policy primarily strengthens awareness rather than directly influencing habits. Religiosity functions more as a broad moral reference than as a consistent guide for concrete environmental actions. The research findings show that students' climate awareness develops largely through everyday experiences and digital exposure, rather than through formal religious instruction or campus initiatives policy. The study challenges faith-based universities to reconceptualise environmental education from abstract theological instruction toward experiential programs actively involving students in sustained environmental practices, integrating religious values into lived habits through channels that genuinely shape Gen Z consciousness.

Keyword: Climate Awareness; Environmental Behaviour; Gen Z, Institutional Policy; Religiosity

ABSTRAK

Penelitian ini mengkaji bagaimana religiusitas, kebijakan lingkungan institusional, dan kesadaran terhadap perubahan iklim membentuk perilaku pro-lingkungan pada mahasiswa Generasi Z di sebuah universitas Islam dan universitas Katolik di Indonesia. Dengan menggunakan desain metode campuran konvergen, penelitian ini mengintegrasikan data survei dari 300 mahasiswa dengan enam wawancara mendalam untuk menilai sejauh mana institusi berbasis agama mendorong nilai-nilai ekologis tercermin dalam praktik kehidupan sehari-hari mahasiswa. Hasil analisis PLS-SEM menunjukkan bahwa kesadaran terhadap perubahan iklim memiliki peran paling sentral dalam mendorong perilaku pro-lingkungan. Sementara itu, kebijakan lingkungan institusional terutama berperan dalam memperkuat kesadaran mahasiswa, tetapi belum secara langsung memengaruhi kebiasaan ekologis mereka. Religiusitas cenderung berfungsi sebagai rujukan moral yang bersifat umum, tetapi belum secara konsisten menjadi pedoman bagi tindakan lingkungan yang konkret. Temuan penelitian menunjukkan bahwa kesadaran iklim mahasiswa lebih banyak berkembang melalui

Corresponding Author
Name : *M Pasqa*
Email : pasqa@uinsgd.ac.id

pengalaman sehari-hari dan paparan media digital dibandingkan melalui pengajaran keagamaan formal maupun kebijakan lingkungan kampus. Studi ini menantang perguruan tinggi berbasis agama untuk merekonstruksi pendidikan lingkungan, dari pengajaran teologis yang abstrak menuju program berbasis pengalaman yang secara aktif melibatkan mahasiswa dalam praktik lingkungan berkelanjutan. Dengan demikian, nilai-nilai keagamaan dapat diintegrasikan ke dalam kebiasaan nyata melalui saluran yang benar-benar relevan dalam membentuk kesadaran Generasi Z.

Kata Kunci: Kesadaran Iklim; Perilaku Pro-Lingkungan; Generasi Z; Kebijakan Institusional; Religiusitas

1. Introduction

Generation Z is often described as digitally native and crisis aware. (Wijaya & Kokchang, 2023). They have become a pivotal cohort in climate politics and everyday sustainability practices (Herlina et al., 2025a). Yet high exposure to climate information does not automatically translate into consistent pro environmental behaviour, particularly in institutional settings that explicitly claim moral authority over students' values (Asyari et al., 2024). Faith based universities routinely frame environmental care as a religious duty and embed sustainability messages in campus programs. The empirical puzzle is whether these moral and institutional claims operate as behavioural engines in students' daily lives, or whether Gen Z's environmental practices are shaped more strongly by non institutional channels such as lived disruption, convenience, and digitally mediated climate narratives.

Existing research on Gen Z environmental engagement is dominated by Western settings (D'Arco et al., 2023; Juma-Michilena et al., 2024; Pinho & Gomes, 2023), while studies in the Global South remain comparatively limited, especially in higher education contexts. (Amrullah et al., 2025; Irawan et al., 2022). In Indonesia, studies report significant perception-action gaps: students demonstrate environmental awareness but low participation in sustainability practices (Sa'id et al., 2024). While Hidayat (2021) and Permana et al. (2023) discuss Islamic ecological concepts like khalifah and rahmatan lil 'alamin, and Catholic theology emphasises creation care, these studies remain largely normative without empirically testing how students internalise and enact these values. Critically, comparative research across different religious-institutional contexts is virtually absent, leaving unclear whether Islamic and Catholic higher education produce distinctive patterns of environmental engagement (Vencatsamy, 2024) or whether universal generational factors outweigh denominational differences among digitally native young adults (Kędzior-Laskowska et al., 2025).

This study is motivated by two interrelated gaps. First, the mechanism converting climate awareness into sustained behaviour remains underexplored in student settings, where everyday infrastructure, convenience, and perceived efficacy often determine whether awareness becomes habit (Maran et al., 2023; Radzi et al., 2025; Yusliza et al., 2020). Second, the behavioural role of religious and institutional authority requires direct testing in contemporary faith-based universities. Students may reproduce religious environmental language as an ethical frame while still relying on non-religious pathways to awareness and convenience driven routines in practice (Calculli et al., 2021; Sa'id et al., 2024; Shutaleva et al., 2021). Comparative evidence across distinct faith based higher education environments is also rare. This leaves open whether denominational contexts generate distinctive environmental pathways or whether generational information environments outweigh institutional differences.

To address these gaps, the study examines how religiosity and institutional environmental policy relate to climate change awareness and pro environmental behaviour among Gen Z students in an Islamic and a Catholic university in Indonesia. It advances debates on religion and environmental behaviour by analytically distinguishing religiosity as a broad moral vocabulary from religiosity as a behavioural driver, and by testing an institutional pathway in which campus policy may increase awareness without necessarily producing durable habits. Using a convergent mixed methods design that integrates PLS SEM within depth interviews, the study estimates structural relationships and explains why specific pathways succeed or fail in students lived contexts. It further compares Islamic and Catholic university settings to assess whether behavioural mechanisms diverge by denominational environment or converge under shared generational conditions.

The practical urgency of this research stems from two critical realities. First, Indonesia faces severe and accelerating climate impacts, including rising sea levels, erratic rainfall disrupting

agriculture, and extreme weather affecting millions, with Gen Z bearing the greatest burden of these consequences throughout their lives (Fitri & Nastiti, 2025; Hidayat & Hidayat, 2021). Second, religious universities educate hundreds of thousands of Indonesian students annually, making these institutions potentially powerful agents for cultivating environmental behaviour necessary for climate adaptation and mitigation (Erwinsyah, 2022; Nasir & Rijal, 2021; Sa'id et al., 2024). However, whether religious environmental teachings and campus sustainability policies actually produce lasting behavioural change remains unclear. Understanding how religious values, institutional policies, and climate awareness truly relate to environmental action provides essential evidence for developing effective interventions. Without this knowledge, faith-based universities risk continuing approaches that assume theological principles and campus programs automatically shape behaviour, when the actual mechanisms may operate quite differently among digitally native Gen Z students navigating climate crisis through their own lived experiences, peer networks, and media consumption rather than through traditional institutional authority.

2. Theoretical Review

Religiosity is not a single trait but a multidimensional construct that can include belief, practice, religious experience, identity, and moral salience. Because empirical studies linking religiosity to environmental behaviour have produced mixed results, it is important to clarify what aspect of religiosity is being captured and through which mechanism it is expected to matter. In this study, religiosity is treated primarily as an ethical and interpretive frame that may shape climate related awareness and motivation, while recognising that everyday behaviour may still depend on behavioural infrastructure such as convenience, situational cues, and institutional implementation.

This study integrates three complementary perspectives to examine how religious values, institutional contexts, and individual agency shape environmental behaviour among Generation Z students. The Theory of Planned Behaviour (TPB) serves as the primary analytical framework (Maulana et al., 2024a). TPB holds that behaviour is driven by intention, which is influenced by attitudes, subjective norms, and perceived behavioural control. In environmental research, it has been widely used to explain how beliefs about climate impacts shape attitudes, how social pressures encourage or discourage ecological action, and how perceived capability affects whether intentions become behaviour (Yuriev et al., 2020). In this study, TPB is used to analyse how students' climate beliefs and campus norms relate to pro-climate behaviour and whether climate change awareness functions as a mediating mechanism between religiosity, institutional policy, and ecological practices. In this study, TPB is used as a sensitising framework to interpret how beliefs and perceived norms relate to behaviour, rather than as a fully operationalised TPB model with all canonical constructs measured explicitly

To address the limits of TPB's focus on individual cognition, this study also draws on Bourdieu's notion of habitus and Archer's structure–agency approach (Schirato & Danaher, 2002). This perspective is useful for explaining the awareness gap, because sustainable practices often require repeated routines that compete with convenience-based dispositions learned outside formal instruction. It also helps explain why students may endorse stewardship narratives while reproducing everyday consumption habits that are socially normalised. Habitus is understood as a set of durable dispositions formed through socialisation that structure perception and action(Bourdieu, 1977), in faith-based universities, students' environmental habitus is shaped by family religious backgrounds, institutional culture, and participation in spiritual communities, influencing how they view nature, consumption, and responsibility (Schirato & Danaher, 2020) and helping to explain why those who affirm stewardship teachings may still reproduce unsustainable practices acquired in contexts where the environment was not prioritised. Complementing this, Archer conceptualises religious doctrines and university policies as pre-existing structures that provide rules, resources, and cultural schemas, while recognising students' reflexive capacity to evaluate these messages, judge their relevance, and decide whether to act on them, a perspective that is particularly useful for understanding how digitally literate Gen Z students negotiate tensions between religious teachings, peer norms oriented toward convenience, uneven policy implementation, and their own direct experiences of environmental change (Archer, 1995). For digitally literate Gen Z students, religious and institutional messages are evaluated alongside peer norms and online information environments, which can dilute institutional authority even in faith-based settings

Within this framework, religiosity and institutional environmental policy are conceptualised as upstream influences that may shape climate change awareness by providing moral framing, normative cues, and opportunities for engagement. Climate change awareness is treated as a proximal mechanism that can support pro environmental behaviour, while recognising that the conversion of awareness into sustained practice depends on behavioural infrastructure, convenience, and the consistency of policy implementation. This conceptualisation allows the study to test not only whether religiosity and policy matter, but also under what conditions they fail to translate into daily ecological habits. Analytically, the study distinguishes between religiosity as moral vocabulary and religiosity as behavioural driver, and tests whether institutional policy functions primarily as an awareness amplifier rather than a direct producer of durable habit.

3. Method

3.1. Research Design

This study employs a convergent mixed-methods design (Creswell, 2014), in which quantitative and qualitative data are collected concurrently, analysed independently, and then integrated to provide a comprehensive understanding of the research problem. Unlike sequential designs where one strand informs the other, the convergent approach treats both quantitative and qualitative data as equally important and complementary sources of evidence that are merged during interpretation to validate, expand, and enrich findings (Moseholm & Fetters, 2017). The rationale for adopting this design lies in the complexity of understanding pro-climate behaviour among Gen Z students, which cannot be fully captured through statistical relationships alone. While the quantitative strand identifies the strength and significance of relationships between religiosity, institutional environmental policy, climate change awareness, and pro-climate behaviour, the qualitative strand reveals the mechanisms, contextual factors, and lived experiences that explain why these relationships emerge or fail to emerge in practice. Convergent integration was preferred over sequential explanatory or exploratory mixed methods designs because the study did not aim to build instruments from qualitative findings or to explain a single unexpected quantitative result after the fact. Instead, it aimed to test theoretically specified pathways while simultaneously capturing lived mechanisms that could account for weak or non-significant relationships, particularly the potential decoupling between religious framing, institutional messages, and daily ecological habits among Gen Z students. Collecting both strands concurrently also reduced time-related contextual shifts across the data collection period and strengthened triangulation during interpretation.

3.2. Research Setting and Participants

The study was conducted at two universities in Bandung, Indonesia, an Islamic university and a Catholic university. These institutions were purposively selected to represent distinct religious-institutional contexts, allowing for comparative analysis of how different faith-based environments shape environmental awareness and behaviour. The target population consisted of Generation Z students aged 18–25 years who were actively enrolled during the 2024 academic year. For the quantitative strand, a total of 300 students participated (150 from each university), selected through stratified random sampling across faculties to ensure representational diversity. For the qualitative strand, 6 students were purposively selected based on their extreme or theoretically interesting scores on religiosity and institutional environmental policy scales, ensuring information-rich cases that could provide deeper insight into the quantitative patterns. Inclusion criteria were undergraduate students aged 18–25 who were actively enrolled during the data collection period and provided informed consent. Responses were excluded if participants were outside the target age range, were not active students, or showed substantial missing data or low-quality response patterns (for example, identical answers across all items or implausibly rapid completion). After screening, only complete and valid cases were retained for PLS-SEM analysis. Because the study uses a cross-sectional design, the estimated relationships are interpreted as associations rather than causal effects.

3.3. Data Collection

A self-administered structured questionnaire was developed based on validated instruments from prior literature. The questionnaire consisted of four main sections measuring religiosity (4 items), institutional environmental policy (4 items), climate change awareness (4 items),

and pro-climate behaviour (4 items). Religiosity was operationalised as a concise measure of religious salience and value-based orientation relevant to environmental responsibility rather than as a full multidimensional assessment of belief, practice, and religious experience. This parsimonious operationalisation was selected to reduce respondent burden and to fit the structural model, but it may not capture all dimensions through which religiosity could shape behaviour. This measurement boundary is therefore acknowledged in interpretation. All items were measured using a 5-point Likert scale, ranging from "strongly disagree" to "agree strongly". The questionnaire was piloted with 30 students to assess its clarity and reliability before being distributed on a full scale. Data collection took place over four weeks through both online and in-person administration to maximise response rates, with informed consent obtained from all participants.

Table 1. Operational Definitions of Research Constructs

Construct	Theoretical Framework	Operational Definition	Sample Item	Items
Religiosity (REL)	Multidimensional religiosity within TPB as a source of values and subjective influence.	Students' religious practices, beliefs, and motivations that relate to care for the environment.	"My religious beliefs encourage me to be responsible for environmental problems."	4
Institutional Environmental Policy (IEP)	Campus-level norms and structures that shape opportunities and expectations for behaviour.	The extent to which campus policies, programmes, and culture support pro-environmental behaviour.	"My campus clearly implements policies that support environmentally friendly behaviour."	4
Climate Change Awareness (CCA)	Cognitive and affective awareness as precursors of behaviour in environmental psychology.	Students' understanding of climate causes/impacts and their sense of urgency about climate change.	"I believe that climate change is a serious and urgent problem."	4
Pro-climate Behaviour (BEH)	TPB-based pro-environmental behaviour (action, intention, and perceived control).	Students' actual ecological actions and their perceived ability to contribute to climate solutions.	"I actively try to reduce my environmental impact through my daily habits."	4

Source: Author's compilation based on the literature review

Semi-structured interviews were conducted concurrently to explore the meanings, experiences, and contextual factors underlying the quantitative patterns. The interview protocol probed how students develop climate change awareness, the role of religious values in shaping environmental attitudes and behaviours, the perceived influence of campus policies and institutional culture, and the barriers and facilitators to translating awareness into sustained pro-climate behaviour. Interviews lasted between 45 and 60 minutes, were conducted in Indonesian, audio-recorded with participants' consent, transcribed verbatim, and translated into English for analysis. Member checking was conducted by sharing preliminary interpretations with selected participants for validation. Items were adapted to the Indonesian student context and reviewed for content validity prior to the pilot test

3.4. Data Analysis

Quantitative data were analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM) via SmartPLS 4 software (Ringle et al., 2022). PLS-SEM was chosen due to its robustness with smaller sample sizes, non-normal distributions, and complex models involving both direct and indirect effects (Hair & Alamer, 2022). The measurement model was first assessed through outer loadings, composite reliability, Cronbach's alpha, and average variance extracted (AVE), with discriminant validity evaluated using both the Fornell-Larcker criterion and the Heterotrait-Monotrait (HTMT) ratio. The structural model was then tested by examining path coefficients, t-values, and p-values derived from 5,000 bootstrapping samples, along with coefficients of determination (R^2) and effect sizes (f^2). A multi-group analysis was conducted to compare path coefficients between islamic and catholic university students, examining whether institutional context moderates the relationships in the model (Hair & Alamer, 2022). Given the cross-sectional nature of the data, bootstrapped path estimates are treated as predictive associations rather than evidence of temporal causality.

Qualitative data were analysed using thematic analysis following Braun and Clarke's (Braun & Clarke, 2006) six-phase framework: familiarisation, initial coding, theme generation, theme review, theme refinement, and report writing. The analysis was both deductive (guided by the study's constructs) and inductive (allowing emergent themes to surface). Following the convergent design, quantitative and qualitative findings were merged during interpretation using a joint display matrix. This matrix aligned statistical results with corresponding qualitative themes to identify areas of convergence, divergence, and complementarity. Integration occurred through confirmation (qualitative themes supporting quantitative findings), expansion (qualitative insights that elaborated on mechanisms not captured statistically), and discordance (cases where qualitative evidence revealed nuances or contradictions not evident in the quantitative data). Through this integrated analysis, the study achieved a richer, more holistic understanding of how religiosity, institutional policies, and climate awareness interact to shape pro-environmental behaviour among Gen Z students in distinct religious-institutional contexts.

Ethical approval was obtained from the institutional review boards of both universities. Participants were informed about the study's purpose, voluntary nature, and their right to withdraw at any time without consequences. Confidentiality was maintained by anonymising all data, and pseudonyms were used in qualitative reporting.

4. Results

4.1. Quantitative Result

4.1.1. Measurement Model Evaluation

The quality of the measurement model was first assessed through reliability, convergent validity, and discriminant validity tests (Leguina, 2015). Table 1 reports the outer loadings, composite reliability (CR), Cronbach's alpha (CA), and average variance extracted (AVE) for each latent construct.

Table 2. Evaluation Measurement Model

Construct	Item	Outer Loading	Composite Reliability	Cronbach's Alpha	Average Variance Extracted
Religiosity (REL)	REL1	0.88	0.91	0.87	0.72
	REL2	0.84			
	REL3	0.93			
	REL4	0.77			
Institutional Environmental Policy (IEP)	IEP1	0.82	0.90	0.87	0.71
	IEP2	0.86			
	IEP3	0.87			
	IEP4	0.81			
Climate Change Awareness (CCA)	CCA1	0.78	0.88	0.82	0.66
	CCA2	0.82			
	CCA3	0.79			
	CCA4	0.83			
Pro-climate Behavior (BEH)	BEH1	0.82	0.89	0.83	0.69
	BEH2	0.85			
	BEH3	0.87			
	BEH4	0.80			

Source: Authors' research findings.

The measurement model demonstrates satisfactory reliability and convergent validity across constructs. Composite reliability and Cronbach's alpha meet accepted thresholds, and average variance extracted indicates adequate convergent validity. Indicator loadings are generally acceptable, with any borderline items retained only when theoretically justified and when construct reliability remains robust. Discriminant validity is supported based on established criteria (see Table 2 for reliability and convergent validity, and Table 3 for discriminant validity). Where one or two indicators show marginal loadings, they are retained

due to theoretical relevance and because overall construct reliability and validity remain acceptable

Table 3. Discriminant Validity (HTMT) and Fornell–Larcker Criterion

Construct	√AVE	REL	IEP	CCA	BEH
REL	0.849	—	0.52	0.46	0.41
IEP	0.843	0.52	—	0.48	0.39
CCA	0.812	0.46	0.48	—	0.55
BEH	0.831	0.41	0.39	0.55	—

Source: Authors' research findings.

4.1.2. Structural Model Evaluation

After establishing the adequacy of the measurement model, the structural model was examined to test the hypothesized relationships among constructs. Table 3 presents the standardized path coefficients (β), t-values, and p-values.

Table 4. Structural Model Results

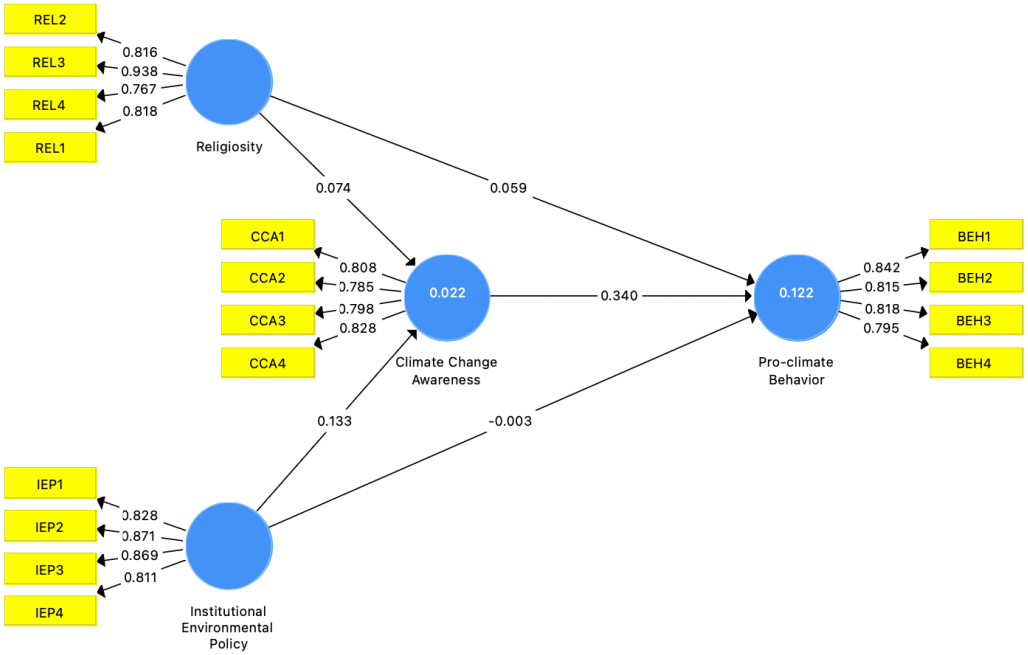
Relationship	β-Path Coefficient	t-value	p-value	Sig.
Climate Change Awareness → Pro-climate Behavior	0.340	6.662	0.000	Yes
Institutional Environmental Policy → Climate Change Awareness	0.133	2.223	0.027	Yes
Institutional Environmental Policy → Pro-climate Behavior	−0.003	0.042	0.966	No
Religiosity → Climate Change Awareness	0.074	0.903	0.367	No
Religiosity → Pro-climate Behavior	0.059	0.816	0.415	No

Note: Structural paths are significant at p < 0.05 or p < 0.001 based on 5,000-sample bootstrapping. All t-values exceed the 1.96 threshold for 95% confidence.

Source: Authors' research findings.

The analysis indicates that Climate Change Awareness exerts a positive and statistically significant effect on Pro-climate Behavior. Institutional Environmental Policy has a positive and significant impact on Climate Change Awareness. By contrast, the direct paths from Institutional Environmental Policy to Pro-climate, from Religiosity to Climate Change Awareness, and from Religiosity to Pro-climate are not statistically significant.

Figure 1. Structural Path Diagram



Source: Authors' research findings.

As shown in Figure 1, these results suggest that Climate Change Awareness is the main proximal predictor of Pro-climate Behaviour in the model, while Institutional Environmental Policy contributes indirectly through its effect on awareness. Religiosity does not show a statistically significant direct association with either awareness or behavioural outcomes in this sample.

4.1.3. Multi-Group Analysis (MGA)

To examine whether the structural relationships differ across institutional contexts, a multi-group analysis was conducted comparing students from the Islamic university and the Catholic university. Table 5 reports the path coefficients for each group, the differences between them, and the corresponding MGA p-values.

Table 5. Multi-Group Analysis (MGA) Islamic vs Catholic University

Structural Path	IU (β)	CU (β)	Difference	p-value
Climate Change Awareness -> Pro-climate Behavior	0.337	0.353	-0.016	0.873
Institutional Environmental -> Climate Change Awarenes	0.127	0.167	-0.040	0.775
Institutional Environmental -> Pro-climate Behavior	-0.034	0.045	-0.079	0.563
Religiosity -> Climate Change Awareness	0.122	0.020	0.102	0.538
Religiosity -> Pro-climate Behavior	0.047	0.077	-0.030	0.835

Note: IU = Islamic University, CU = Catholic University

Source: Authors' research findings.

Multi-group analysis indicates no substantive differences in the main structural relationships between the Islamic and Catholic university samples. Path coefficients follow the same general pattern across groups, with awareness consistently associated with behaviour and with religiosity and policy showing limited direct behavioural effects. These results suggest cross-faith convergence in behavioural mechanisms within the studied Gen Z student context (see Table MG for MGA results).

4.2. Qualitative Result

4.2.1. Formation of Climate Awareness Through Multiple Channels

Interview findings reveal that students at both universities develop climate awareness primarily through a combination of direct observation and continuous exposure to digital media, rather than formal instruction. Respondents consistently described how experiencing irregular weather patterns firsthand makes climate change feel immediate and tangible. A Catholic University student illustrated this by explaining how Bandung's recent climate volatility (sudden shifts from extreme heat to heavy flooding) coincides with her social media feeds showing forest fires and severe weather events across Indonesia and globally. This convergence of local physical changes and digital information transforms climate change from "just a theory mentioned once in class" into a visible daily reality. For Catholic University students, social media platforms serve as the primary source of information on environmental issues. Multiple respondents indicated they learn more about climate change through Instagram, TikTok, and online news than through formal lectures or church activities. One student noted that short videos and infographics featuring concrete examples, simple statistics, and visual comparisons create lasting impressions far more effectively than brief classroom announcements or written materials. The algorithmic curation of visually engaging climate content on these platforms plays a significant role in building and sustaining their awareness.

Islamic University students similarly emphasized media exposure but placed additional importance on direct observation in their home communities and participation in campus or community activities. A respondent from Garut described how shifting rainfall patterns have disrupted traditional farming schedules in her village, forcing farmers to abandon established planting cycles. After witnessing failed and delayed harvests firsthand and hearing family members' frustrations, she began connecting these local agricultural disruptions to broader climate change issues through materials encountered in youth trainings and online seminars. This process helped her recognize climate change as "a serious problem that affects real people, not only a topic in the news."

Even students without active involvement in environmental organizations reported developing a basic understanding of climate through casual media consumption and everyday conversations. Some mentioned encountering flood or landslide reports while watching television with friends in boarding houses, while others described passively absorbing news while completing assignments. Several references to climate-related content were shared in family or student messaging groups. Collectively, these accounts demonstrate that climate awareness among students at both universities emerges from the intersection of lived environmental changes, community experiences, and repeated digital exposure, rather than through systematic formal coursework or structured religious instruction.

4.2.2. Religion as Moral Reference but Limited Behavioural Driver

Interview findings reveal that while religious values shape how students discuss environmental issues, they function primarily as broad moral frameworks rather than direct drivers of climate awareness or behaviour. Catholic University students recalled church teachings about stewardship of creation and protecting God's world, though they typically characterised these messages as brief and abstract. One student explained that, despite reading a summary of a papal document that describes environmental destruction as a social sin, her actual concern stems predominantly from observable changes. She noted that her awareness "does not come only from that teaching, it becomes much stronger when I see the weather changing in Bandung and when my Instagram keeps showing news about fires and floods, so in the end I feel climate change more from what I experience and what I see online than from what I hear in church." Religious language thus provides ethical vocabulary, yet the immediate triggers for awareness originate outside religious contexts. Another Catholic University student described Sunday homilies that occasionally address creation care, particularly on Environment Day, but emphasised that such messages typically last only a few minutes without practical follow-up. He characterised the instruction to protect God's creation as necessary yet overly general, lacking clear connections to specific climate-related actions, such as reducing plastic consumption, modifying transportation choices, or adjusting consumption patterns. Consequently, his daily environmental behaviour responds more to habit, convenience, and available infrastructure than to explicit religious guidance. These accounts suggest that while religion fosters a general conviction that environmental care is morally correct, it does not independently provide detailed frameworks for climate-related practices.

Islamic University students more frequently and explicitly connected environmental concerns to Islamic concepts, particularly the notion of humans as khalifah (stewards) on earth and prohibitions against causing harm. Several respondents reported that Quranic verses about avoiding destruction on earth make environmental problems feel serious and faith-connected. However, they acknowledged that this understanding does not automatically generate consistent behaviour. One student stated that despite knowing Islam teaches moderation and conservation, he still occasionally uses excess water during ablution and continues accepting plastic packaging when ordering food because it remains the most convenient option. Another student active in an environmental youth movement explained that Islamic teachings provide her with responsibility and meaning, while the concrete daily actions she takes (composing food waste, walking short distances) derive from activist training and field experience rather than religious instruction. Overall, interviews indicate that religious values at both universities serve as supportive moral backgrounds, while specific climate-related behaviours are shaped more directly by lived experience, social context, and practical opportunities than by religious teaching alone.

4.2.3. Institutional Environmental Policy and Its Limited Behavioural Impact

Interview data show that environmental policies at both universities are visible to students and help raise awareness, but they don't lead to lasting pro-environmental behaviour. Catholic University students mentioned various programs like recycling campaigns, paperless practices, and tree-planting events. One student recalled joining a recycling competition and said the activity "made me more aware of how much waste I produce, and for a few weeks I tried to separate my trash more carefully," but this habit stopped after she returned to her boarding house, where there were no waste-sorting facilities. Students often described these programs as useful reminders rather than tools for long-term change, noting that their influence fades once the organised activities end.

Islamic University students reported more extensive campus policies, including waste-sorting stations in every faculty, bans on single-use plastic at campus events, and partnerships

with environmental organisations. One student said that monitored waste-sorting systems "make me more conscious about where I throw things because someone will check it," although she admitted that this sense of responsibility rarely continues outside of campus. Another student described the "Green Ambassador" program as helpful for building habits temporarily because monitoring waste management in her faculty created accountability, but she noted that environmental behaviour becomes stronger "when there is an event, competition, or monitoring, but without these external structures, the motivation fades and daily routines take over."

The data clearly show a gap between what students know about the environment and how they actually behave. A Catholic University student said she tries to buy fewer clothes after learning about the fashion industry's emissions but admitted that "when there is no other practical choice or when something is needed quickly, I still end up buying it." Similarly, an Islamic University student explained that he knows riding a motorbike for short distances increases emissions, but on hot days, he still rides because "the heat makes me feel like walking is not realistic." He added that although he understands the need to reduce waste, he still accepts plastic packaging when buying food because vendors provide it as the standard option.

Students from both universities highlighted infrastructure issues that hinder policy compliance from becoming a permanent habit. One Catholic University student said that, despite understanding the campus message to reduce single-use plastic, he continued to buy bottled drinks because the nearest refill station was too far from his classes. An Islamic University student explained that she had tried to follow the paperless policy but found that some administrative processes still required physical documents. Students also doubted whether their individual actions mattered, with one Catholic University student saying, "If only I change, it doesn't feel like it will make a difference," which weakened her motivation to behave more responsibly. Across both universities, interviews show that while environmental policies raise awareness and encourage temporary compliance, they have a limited impact on long-term behavior when convenience, facilities, daily routines, and beliefs about collective impact don't consistently support the intended changes.

4.3. Integration of Quantitative and Qualitative Findings

The integration of quantitative and qualitative findings provides a consolidated view of how the main constructs relate to one another across both strands of evidence. While the quantitative analysis identifies statistically significant and non-significant relationships, the qualitative interviews clarify how students experience these relationships in everyday contexts. The joint table below aligns both strands to show areas of convergence.

Table 6. Joint Display Matrix: Integration of Quantitative and Qualitative Findings

Construct	Quantitative	Qualitative Findings	Interpretive Synthesis
Religiosity → CCA	Not significant (β = 0.074, p = 0.367)	Religion mentioned only as general guidance; awareness formed mainly through reality and media.	Religion provides background values but does not shape climate awareness.
Religiosity → BEH	Not significant (β = 0.059, p = 0.415)	Students know religious messages, but daily behavior follows convenience, not doctrine.	Religious values do not translate into environmental behavior.
IEP → CCA	Significant (β = 0.133, p = 0.027)	Campus programs increase exposure and attention to environmental issues.	Institutional cues effectively raise awareness.
IEP → BEH	Not significant (β = −0.003, p = 0.966)	Behavior improves only during structured events; habits fade outside campus.	Policies increase awareness but not sustained behavior.
CCA → BEH	Significant (β = 0.340, p < 0.001)	Students with higher awareness attempt more pro-environment actions.	Awareness functions as the main behavioral driver.

Source: Authors' research findings.

The integrated evidence shows a consistent pattern across both strands. Climate Change Awareness appears as the key driver of pro-climate behaviour, while institutional policies mainly work by increasing this awareness rather than directly changing habits. Religiosity remains a broad moral background with little direct influence on awareness or behaviour. The

similarity of student accounts at Islamic and Catholic universities also supports the non-significant group differences found in the quantitative multi-group analysis.

5. Discussion

5.1. Climate Change Awareness as Central Mediator

This study offers three central findings. First, climate change awareness emerges as the most consistent proximal predictor of pro-environmental behaviour among Gen Z students. Second, institutional environmental policy is positively associated with awareness, yet it shows limited direct behavioural impact, indicating a policy-to-awareness pathway that does not automatically translate into routine ecological habits. Third, religiosity does not exhibit a significant direct association with either awareness or behaviour within the estimated model, and the core structural relationships do not differ meaningfully between the Islamic and Catholic university contexts. Together, these patterns suggest that moral and institutional framing may shape cognitive orientation, while sustained behaviour depends more strongly on everyday behavioural infrastructure and the wider information environments shaping Gen Z attention.

Theoretically, the findings refine debates on religion and environmental behaviour by distinguishing between religiosity as moral vocabulary and religiosity as behavioural driver. In faith-based settings, religious narratives can provide ethical language for stewardship and reinforce a sense of moral approval, but this does not necessarily generate the situational cues, costs, and routines needed for sustained behavioural change. This distinction helps explain why religiosity may correlate with pro-environmental attitudes in some studies yet fail to predict everyday practices when habits are governed by convenience, infrastructure, and perceived efficacy. In this sense, the study advances existing discussions by identifying boundary conditions under which religious framing is insufficient to produce durable ecological habits, particularly among Gen Z students.

The result reveals that Climate Change Awareness functions as the central mediator in shaping pro-climate behaviour among Gen Z students, confirming that students with a deeper understanding of climate causes, consequences, and urgency are substantially more likely to engage in pro-environmental actions. However, this awareness develops primarily through direct experiential encounters with environmental change and continuous exposure to digital media, rather than through religious teachings or formal campus education. This pattern fundamentally challenges both TPB's assumption that institutional subjective norms (such as religious teachings and campus policies) effectively shape attitudes and faith-based universities' presumption that theological frameworks create a distinctive environmental consciousness. Instead, the findings align with Bourdieu's concept of habitus formation through lived experience: students' environmental dispositions emerge from what they directly observe and repeatedly encounter in their information environments, not from abstract institutional messaging that remains disconnected from their everyday practices. Bourdieu's framework illuminates why experiential pathways prove more powerful than religious or institutional instruction: habitus is formed through repeated, embodied practices and sensory experiences, rather than through occasional, abstract teachings. Archer's structure-agency framework further clarifies that students reflexively recognise gaps between abstract religious messaging and concrete climate information they encounter through experiential and digital channels, exercising agency by prioritising information sources that provide immediate, visual, and scientifically framed understanding over theological abstractions emphasising gradual environmental decline and intergenerational responsibility.

Students at both universities consistently reported developing climate understanding through witnessing tangible environmental disruptions in their immediate surroundings. Bandung's erratic weather patterns, sudden floods, and extreme heat made climate change feel immediate and personally relevant, while social media amplified these local observations with viral content about forest fires and global disasters. This convergence of direct observation and algorithmically curated digital content created, as one student described, a transformation from "just a theory mentioned once in class" to "a visible daily reality." Students develop environmental consciousness through what they physically feel (heat, floods) and visually consume (Instagram climate content), creating durable dispositions that shape their ongoing attention to environmental issues. Religious teachings about stewardship or creation care, delivered infrequently in sermons without sustained reinforcement, cannot compete with the constant flow of climate information students encounter through lived disruption and digital immersion.

Table 7. Institutional Expectations vs. Student Reality

Awareness Source	Institutional Assumption	Student Reality	Frequency/ Impact	Temporal Framing
Religious Teachings	Primary driver through khalifah/creation care theology	Background moral vocabulary with minimal influence	Occasional sermons, not sustained	Long-term stewardship across generations
Campus Environmental Policies	Shape awareness through programs and campaigns	Situational awareness during events only	Event-dependent, temporary	Episodic initiatives
Formal Classroom Instruction	Systematic knowledge building	"Theory mentioned once in class"	Minimal, abstract	Academic detachment
Direct Environmental Experience	Not explicitly considered	Primary awareness trigger	Daily, visceral (floods, heat, erratic weather)	Immediate crisis response
Digital Media (Instagram, TikTok)	Not part of institutional strategy	Dominant information source	Continuous algorithmic curation	Real-time disaster coverage
Peer Networks & Social Norms	Expected to reinforce campus values	Validate digital/experiential learning instead	Constant informal exchanges	Present-focused concerns

Source: Authors' research findings.

Table 7 reveals a fundamental mismatch between how institutions expect Gen Z students to develop climate awareness and how awareness actually forms from the students' perspective based on the interviews. Institutions assume that religious teachings, campus policies, and formal instruction serve as primary drivers, yet students report that these sources provide only occasional, abstract messaging that remains disconnected from their lived experiences. Instead, awareness develops through daily exposure to direct environmental disruptions (Bandung's floods and extreme heat) and continuous consumption of algorithmically curated climate content on social media platforms. The temporal framing differs critically: religious teachings emphasise gradual, intergenerational stewardship obligations, while students respond to immediate, visible crises requiring urgent action. The dominance of experiential and digital sources, both characterised by immediacy, visual impact, and emotional resonance, explains why abstract theological principles and episodic campus programs cannot compete in forming the environmental habitus that structures students' ongoing attention to climate issues.

The disconnect between religious teachings and climate awareness manifests clearly in students' accounts. Students articulate religious environmental principles, yet these frameworks function merely as "moral vocabulary" rather than substantive drivers of awareness. One Catholic student acknowledged that although she had read papal documents on environmental destruction, her actual concern arises from observable weather changes and social media content rather than religious instruction. This pattern emerged consistently across both universities: students know what their faith traditions teach about environmental responsibility, can discuss these concepts when asked, yet their genuine climate consciousness forms through entirely different channels. The religious teachings remain intellectually acknowledged but emotionally and practically disconnected from the visceral experiences and visual content that actually shape their environmental awareness.

Campus environmental policies demonstrated similarly limited influence on awareness formation. Students recalled participating in recycling competitions, waste-sorting programs, and Green Ambassador initiatives, acknowledging that these activities had temporarily heightened their awareness of environmental issues. However, this awareness proved situational rather than sustained. One student explained that serving as a Green Ambassador made her "more conscious about where I throw things because someone will check it," but this heightened attention disappeared once the monitoring ended. Another described how a campus recycling competition increased her waste awareness "for a few weeks," but the consciousness faded after she returned to her boarding house, where no facilities existed. The programs successfully created moments of environmental engagement, but these remained isolated events rather than transformative experiences that fundamentally reshaped how students understand or prioritise climate issues in their daily lives.

The low impact of both religious and institutional pathways to awareness reflects a deeper, generational shift in how environmental consciousness is formed. Gen Z students operate within information ecologies dominated by digital platforms and peer networks rather than traditional institutional authorities. When asked how they learned about climate change, students spontaneously discussed Instagram posts featuring disasters, Youtube videos explaining environmental impacts, and conversations with friends who shared climate-related content online. Religious sermons and campus lectures were mentioned only when specifically prompted, and even then, described as brief, forgettable, or irrelevant compared to the constant stream of climate information encountered through digital media. This generational characteristic means that traditional approaches to environmental education fundamentally misunderstand the channels through which contemporary young adults develop awareness.

For faith-based universities, these findings demand reconceptualising environmental education to bridge the temporal and experiential gap between institutional messaging and student reality. Religious institutions present ecological care as a gradual moral obligation, emphasising intergenerational stewardship, while students respond to immediate crises, demanding urgent action. Students need to understand that the floods they experience and the climate content they consume are manifestations of fundamental patterns in how human societies interact with natural systems, and that religious stewardship teachings provide frameworks for understanding their role in these relationships. This requires moving beyond occasional sermons or episodic campus events toward integrated educational experiences where students directly observe human-nature interdependencies and reflect on how their daily behaviours participate in long-term ecological processes. The challenge is creating conditions where students internalise these connections, communicating through experiential and digital channels that genuinely shape Gen Z consciousness rather than relying on traditional institutional authority that no longer resonates with how this generation actually learns about and understands the environmental crisis.

5.2. The Awareness-Behaviour Gap: Why Knowing Does Not Lead to Sustained Doing

The strong statistical relationship between Climate Change Awareness and Pro-climate Behaviour suggests that understanding climate change leads to environmental action. However, qualitative evidence reveals a critical implementation gap that numbers alone cannot capture. Students consistently reported being aware of climate issues but failing to act on that awareness. They understand the causes and consequences of climate change, express genuine concern, and acknowledge the need for change; yet their daily practices frequently contradict these beliefs. This disconnect reveals a fundamental problem: awareness is necessary for behaviour change, but it is far from sufficient.

Behavioural compliance at both universities occurs primarily during structured events and disappears once those events end. Students described participating actively in campus recycling programs and waste-sorting initiatives while they were monitored, then abandoning these practices immediately afterwards. One student became more conscious about waste during a campus competition and tried separating trash carefully for several weeks, but stopped completely after returning to her boarding house, where there were no facilities for sorting. Another explained that waste-sorting stations and peer monitoring during the Green Ambassador program created temporary accountability, but once the monitoring ended, old habits returned. The pattern is clear: behaviour improves when structures demand it and fades when those structures are absent.

Table 8 illustrates the systematic pattern underlying the awareness-behaviour gap across both universities: students possess high climate awareness and understand the environmental importance of specific behaviours, yet infrastructure barriers consistently prevent sustained action. The table reveals that the primary obstacle is not cognitive (a lack of knowledge) or attitudinal (a lack of concern), but rather structural. In each case, students articulated a clear understanding of environmental problems and expressed a genuine commitment to pro-environmental values, yet their actual behaviour responded to material conditions rather than to conscious intentions. The refill station is located too far from classes, the administrative system still requires paper, the absence of waste-sorting facilities at off-campus housing, and vendors defaulting to plastic packaging all demonstrate how physical and social environments determine behaviour regardless of awareness levels. This pattern confirms that environmental action depends fundamentally on whether institutions provide enabling infrastructure that makes sustainable choices convenient, accessible, and socially normalised, rather than on individuals' environmental consciousness alone.

Table 8. Infrastructure Barriers to Sustained Pro-Environmental Behaviour

Pro-Environmental Behaviour	Awareness Level	Infrastructure Barrier	Behavioural Outcome
Reducing single-use plastic	High	Refill stations too far from classes	Continued purchase of bottled drinks
Paperless administration	High	Some processes still require physical documents	Inconsistent compliance
Sustainable transportation	High	No facilities for walking in extreme heat	Continued motorbike use for short distances
Waste sorting	High	No sorting facilities at boarding houses	Behaviour ceased after campus event ended
Reducing food packaging	High	Vendors provide plastic as standard option	Continued acceptance of plastic packaging
Sustainable fashion	High	Limited accessible alternatives	Continued purchase when needed quickly

Source: Authors' research findings.

The primary barrier to sustained behaviour is not a lack of awareness, but a lack of infrastructure. Students repeatedly pointed to practical obstacles that make pro-environmental choices difficult or impossible. A Catholic University student explained that despite understanding the campus message to reduce single-use plastic, he continued buying bottled drinks because the nearest refill station was too far from his classes. An Islamic University student attempted to follow the paperless policy but found that some administrative processes still required physical documents. Another student knows riding a motorbike for short distances increases emissions but does so anyway on hot days because "the heat makes walking unrealistic." These accounts show that even highly aware students cannot maintain pro-environmental behaviour when the physical and social environment does not support it. Convenience consistently trumps conviction in students' daily decision-making. Students recognise the importance of reducing plastic use, but often accept plastic packaging when vendors provide it as the standard option. They understand the fashion industry's emissions but still buy new clothes when "there is no other practical choice or when something is needed quickly." They recognise the environmental cost of food delivery but continue ordering because it is easier than cooking or walking to restaurants. The interviews reveal that behaviour responds to habit, immediate comfort, and available options rather than to abstract environmental knowledge. When sustainable choices require extra effort, time, or discomfort, awareness alone cannot overcome the pull of convenience.

Students' sense of limited individual efficacy further undermines the translation of awareness into action. Multiple respondents expressed doubt about whether their personal behaviour matters, with one stating directly that "if only I change, it doesn't feel like it will make a difference." This perception of inefficacy weakens motivation even among students with high climate awareness. They view environmental problems as collective crises that require systemic solutions, which makes individual actions feel symbolically meaningful but practically insignificant. Without visible evidence that their choices contribute to meaningful change or that others around them are making similar efforts, students struggle to sustain behaviours that require personal sacrifice. The awareness-behaviour gap thus reflects not ignorance or apathy, but a rational response to structural constraints and collective action problems.

This gap between knowing and doing reveals that environmental behaviour is not primarily a function of individual consciousness but of the material and social contexts in which individuals operate. Bourdieu's idea of habitus explains this pattern: sustainable behaviour requires reshaping durable dispositions through repeated practice within enabling environments, not merely changing conscious attitudes. Awareness creates a cognitive foundation for recognising environmental problems, but actual behaviour depends on whether the social field provides material conditions (infrastructure, convenience) and symbolic rewards (peer recognition, social normalisation) that make ecological choices feel natural rather than effortful. The strong statistical relationship between awareness and behaviour likely reflects that students with higher awareness make occasional pro-environmental choices when circumstances allow, not that they have fundamentally transformed the habitus governing their daily practices. Students revert to convenience-driven habits because they were socialised in environments where environmental considerations were not integrated into daily routines or

social expectations. These findings indicate that awareness-focused interventions alone are insufficient. Instead, systemic changes are needed to restructure the social environment itself, so that sustainable behaviour becomes the accessible, supported, and normalised choice rather than an effortful exception requiring continuous conscious effort against established habits.

5.3. The Universality of Gen Z: No Religious-Institutional Context Effects

The multi-group analysis comparing Islamic and Catholic University students revealed no significant differences in any structural paths, contradicting the hypothesis that religious-institutional context would moderate environmental engagement. This finding indicates that Gen Z environmental behaviour operates through universal mechanisms that transcend denominational boundaries. Students at both universities develop climate consciousness through similar channels: direct observation of environmental disruption and exposure to digital media. Heat waves, floods, and erratic weather affect all students equally, while social media platforms like Instagram and TikTok, as well as online news, deliver the same climate-related content regardless of one's religious background (Lu et al., 2025). The climate discourse on these platforms frames the environmental crisis in scientific and political terms rather than theological ones, creating a shared secular understanding where students invoke ecosystems and survival rather than divine creation or religious duty (Harjatanaya et al., 2025). Indonesian Gen Z students across both contexts demonstrate a consistent pattern where religion provides abstract moral vocabulary but fails to shape actual learning processes or daily behavioural decisions.

The convergence across religious contexts reveals a fundamental characteristic of this generation: they understand religious environmental principles intellectually but struggle to implement them practically because those values remain disconnected from the forces that actually shape their behaviour. Students can articulate their religious views on stewardship, yet when making daily choices about plastic use, transportation, or consumption, these theological frameworks have less influence. Their behaviours and perspectives about the environment are produced primarily by the immediate environment, peer interactions, social media consumption, and convenience considerations. The infrastructure constraints that prevent sustained behaviour operate identically in both settings: boarding houses without waste-sorting facilities, limited refill stations, reliance on motorbikes in hot weather, and vendors providing plastic as a default. Whether Muslim or Catholic, students face the same practical obstacles, express the same doubts about individual efficacy, and revert to the same convenience-driven habits once monitoring ceases. Material conditions and structural barriers shape behaviour far more powerfully than theological principles.

This reality highlights a critical flaw in how faith-based universities approach environmental engagement: campus policies cannot serve as isolated interventions disconnected from religious education and experiential learning. Archer's structure-agency framework reveals that universities often treat students as passive recipients of structural influences (such as religious teachings and campus policies) rather than as reflexive agents who actively evaluate and respond to institutional messages based on their perceived relevance to their lived circumstances. Universities assume that stating religious environmental principles and installing recycling bins will automatically produce behaviour change, but this approach fails because it ignores students' reflexive capacities to assess whether institutional structures actually address their concerns and provide meaningful opportunities for action.

Religious institutions need to become more adaptive, recognising that Gen Z students reflexively prioritise information and experiences that connect to their immediate realities and future stakes. This requires moving beyond abstract moral teachings to creating a visceral, experiential understanding of how environmental destruction threatens students' own futures. Programs must compel students to feel environmental consequences directly, witness communities already suffering from climate impacts, and understand environmental protection as personally beneficial rather than merely morally correct. Archer's framework suggests that students will engage their agency toward pro-environmental behaviour only when structural conditions (institutional policies, religious education) align with their reflexive evaluation of what matters for their wellbeing and futures, bridging the gap between abstract institutional messaging and students' lived concerns about climate impacts they can see, feel, and understand as directly affecting their lives.

Effective intervention requires faith-based institutions to embed religious environmental values within the actual contexts where students make daily decisions. Traditional moral education, delivered through sermons or classroom lectures, reaches students intellectually but

fails to influence the dominant forces shaping their behaviour: peer norms, social media, and ingrained habits. Universities must engage the channels that genuinely influence Gen Z by creating compelling social media content about religious environmental responsibility, supporting peer-led sustainability initiatives that normalise ecological behaviour within student networks, and designing campus environments where sustainable choices become the easy default option. Religious environmental education must also connect abstract theological principles to concrete personal stakes, showing students not only that faith traditions value creation but that environmental destruction will directly harm their economic prospects, health, food security, and quality of life. This shift means moving from teaching moral obligations to demonstrating clear self-interest in environmental protection. Influencing this generation requires more than better theology or additional campus policies. It demands a fundamental reconceptualisation of how religious institutions create meaningful connections between faith, personal well-being, and ecological action for young people who navigate the climate crisis primarily through screens, peer networks, and immediate physical experiences rather than through traditional religious instruction.

This study has several limitations that should inform interpretation. First, the cross-sectional design does not allow causal inference or temporal ordering among policy perceptions, awareness, and behaviour. Second, key variables are measured through self-reports, which may introduce social desirability bias, particularly in moralised domains such as religion and environmental responsibility. Third, the operationalisation of religiosity is intentionally parsimonious and may not capture multidimensional aspects such as practice intensity, communal enforcement, or eco-theological salience. Fourth, the sample is limited to two faith-based universities, which supports analytic comparison but constrains generalisability to other institutional types and regions. Finally, the qualitative strand, while valuable for mechanism explanation, is based on a small number of interviews and should be read as interpretive support rather than population-level representation.

6. Conclusions

This study examined how religiosity, institutional policies, and climate awareness shape pro-environmental behaviour among Generation Z students at Islamic and Catholic universities in Indonesia. The findings challenge conventional assumptions about faith-based environmental education: while climate awareness strongly predicts pro-environmental behaviour, this awareness develops primarily through direct experiences with environmental disruptions and digital media rather than through religious teachings or campus programs. Religious values and institutional policies show limited direct influence on behaviour, functioning more as background frameworks than active drivers of ecological action. Students can articulate Islamic concepts of khalifah or Catholic creation care theology yet struggle to translate these principles into daily practices constrained by convenience, infrastructure gaps, and perceived inefficacy. Most strikingly, no differences emerged between Islamic and Catholic students, revealing that universal generational factors (lived climate impacts, social media exposure, peer norms, and structural barriers) overwhelm denominational distinctions in shaping environmental engagement.

These findings demand that faith-based universities fundamentally reconceptualise their approach. Religious environmental education can no longer rely on traditional methods of transmitting theological principles through sermons and lectures disconnected from students lived realities. Instead, universities must create experiential programs that actively involve students in environmental protection, forming habits through repeated practice rather than abstract instruction. This means integrating religious environmental values into concrete, sustained activities where students directly witness environmental degradation, participate in restoration efforts, and experience the tangible connections between ecological health and their own well-being. Islamic universities should move beyond teaching khalifah as abstract stewardship duty to creating programs where students practice being stewards through community environmental projects, sustainable campus operations they help manage, and partnerships with communities facing climate impacts. Catholic universities should translate creation care from theological doctrine into lived practice through immersive experiences connecting faith to ecological action. Both must leverage the digital channels where Gen Z actually forms awareness, creating compelling social media content, peer-led initiatives, and campus infrastructure that makes sustainable behaviour the easy, supported, and normalised choice. Religious environmental ethics must be seen not as traditional moral teachings separate from daily life, but as practical frameworks deeply integrated into how

students understand their relationship with nature, their responsibilities to communities, and their participation in long-term human flourishing that depends on ecological health.

Future research should employ longitudinal designs tracking how repeated participation in experiential environmental programs shapes lasting behavioural change, testing whether sustained engagement transforms temporary compliance into internalised habits. Studies should compare different pedagogical approaches (traditional instruction versus experiential learning, isolated campus events versus integrated semester-long involvement) to identify which methods effectively bridge the gap between religious environmental values and daily ecological practices. The central insight is clear: faith-based universities must stop assuming that communicating theological environmental wisdom will automatically produce behaviour change. Instead, they must become spaces where religious environmental values are enacted, experienced, and embodied through sustained practice, creating the structural conditions and social environments where Gen Z students can develop not just awareness but lived habits of ecological responsibility that align religious faith with environmental action in ways that feel personally meaningful, socially supported, and practically achievable in their everyday lives..

7. Conflicts of Interest

The author(s) declared no conflict of interest.

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