International Journal of Emerging Issues in Islamic Studies, Vol. 6 No. 1 (2026) https://doi.org/10.31098/ijeiis.v6i1.4122

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Article Review

Green Banking in the Era of Sustainable Development: Insights from Gen Z

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Received : January 9, 2026	Revised : March 5, 2026	Accepted : April 17, 2026	Online : July 31, 2026

Abstract

The growing urgency of environmental challenges and the global Sustainable Development Goals (SDGs) has accelerated the development of green banking practices worldwide. In the context of Islamic finance, green banking is not merely an environmental initiative but is also grounded in Islamic ethical principles, particularly the concept of maqāṣid al-sharīʿah and the stewardship role of humans as khalīfah, which emphasize responsible financial intermediation, environmental protection, and public welfare (maslahah). This study examines how awareness and knowledge influence Generation Z's behavioral intention to adopt Islamic green banking products, with attitude acting as a mediating variable. An explanatory (hypothesis-testing) survey design was employed using Partial Least Squares–Structural Equation Modeling (PLS-SEM). Data were collected from [REV – blind review] 80 students at a private Islamic university in Indonesia who had completed coursework related to Islamic finance and sustainability. Measurement items were adapted from validated Theory of Planned Behavior (TPB) scales and assessed using a five-point Likert scale. The findings show that awareness and knowledge significantly influence attitude, while attitude significantly affects behavioral intention. However, the direct effects of awareness and knowledge on intention are not significant, indicating a full mediation effect of attitude.This study contributes to the Islamic green finance literature by empirically demonstrating that attitude serves as the key mediating mechanism linking awareness and knowledge to behavioral intention among Generation Z in adopting Islamic green banking.).

Keywords: *Islamic Green Banking, Behavioral Intention, Generation Z.*

INTRODUCTION

Sustainability has become a central global agenda amid escalating challenges related to climate change, environmental degradation, and socio-economic inequality. Since the adoption of the Sustainable Development Goals (SDGs) by the United Nations in 2015, countries worldwide, including Indonesia, have been encouraged to pursue development pathways that balance economic growth with environmental protection and social welfare. Within this context, the financial sector plays a strategic role because financing and investment decisions determine whether economic activities facilitate the transition toward a green economy or intensify environmental risks. From a risk management perspective, financial institutions are increasingly required to integrate environmental considerations into their decision-making processes, as environmental risks may translate into credit, operational, and reputational risks (Weber, 2012).

In response to these challenges, green banking has emerged as a banking approach that incorporates sustainability principles into financial policies, products, and operational practices. These include financing environmentally responsible projects, improving energy efficiency within banking operations, and promoting digital banking services that reduce environmental footprints. Previous studies indicate that the adoption of green banking varies across countries depending on policy frameworks, institutional readiness, and market responses (Khairunnessa et al., 2021).

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However, the success of green banking initiatives also depends on users' behavioral intentions and their psychological evaluation of sustainable financial services (Taneja & Ali, 2021). Furthermore, individual characteristics may influence both the adoption and continued use of green banking services (Malik & Singh, 2022).

Within the Islamic finance paradigm, sustainable financial practices are closely aligned with Islamic ethical principles, particularly *maqāṣid al-sharīʿah* (the objectives of Islamic law) and the concept of human stewardship (*khalīfah*), which emphasize responsible resource management, justice, and the protection of public welfare (*maṣlaḥah*). These principles position Islamic finance as conceptually compatible with environmental sustainability.

Indonesia provides a particularly relevant context for examining the adoption of Islamic green banking. According to national demographic statistics, Indonesia has the largest Muslim population in the world, with Muslims accounting for approximately 87% of the total population (Badan Pusat Statistik, 2023; Pew Research Center, 2022). This demographic composition reinforces the relevance of Islamic banking as a financial system that reflects the ethical and religious values of the majority of the population. At the policy level, Indonesia has also strengthened its sustainable finance framework through initiatives such as the Indonesia Sustainable Finance Taxonomy (*Taksonomi Keuangan Berkelanjutan Indonesia*—TKBI) issued by the Financial Services Authority (OJK, 2024). Despite these policy developments and the continued growth of Islamic banking assets, public adoption of Islamic sustainable financial services remains relatively limited, while Islamic financial literacy continues to face significant challenges (UMY, 2023).

This situation reflects a practice gap in which regulatory readiness and financial innovation have progressed more rapidly than public adoption of Islamic green banking services. Young consumers, particularly Generation Z (born between 1997 and 2012), represent a critical segment for the future development of sustainable finance because they are digitally connected and highly exposed to environmental information. Nevertheless, the sustainable consumer behavior literature suggests that awareness and knowledge do not necessarily translate directly into behavioral intention, as their influence often operates through psychological mechanisms such as attitudes and value evaluations (Muñoz-Céspedes et al., 2021). Research in sustainability contexts further demonstrates that individuals may possess high levels of environmental awareness while still exhibiting inconsistent behavioral commitment due to situational constraints and competing priorities (Jehtae et al., 2021).

Similarly, studies in the Islamic finance domain suggest that cognitive factors, such as financial literacy, contribute to financial decision-making intentions among young consumers (Rahmi et al., 2023). Research on green banking also indicates that attitudes toward sustainable banking services frequently serve as stronger predictors of behavioral intention than information exposure alone (Taneja & Ali, 2021). However, limited empirical evidence has examined how awareness and knowledge influence behavioral intention through attitudinal mechanisms, particularly in the context of Islamic green banking adoption among Generation Z.

To address this gap, this study adopts the Theory of Planned Behavior (TPB), which proposes that behavioral intention is determined by attitudes, subjective norms, and perceived behavioral control (Ajzen, 1991). Among these determinants, attitude is often regarded as the most immediate predictor of intention because it reflects individuals' overall evaluation of a particular behavior. Accordingly, this study examines how awareness and knowledge influence Generation Z's intention to adopt Islamic green banking through the mediating role of attitude. Specifically, the study investigates the extent to which awareness and knowledge shape attitudes toward Islamic green banking, examines the effect of attitude on behavioral intention, and evaluates whether attitude mediates the relationships between awareness, knowledge, and behavioral intention among

Generation Z.

This study contributes to the literature in three important ways. First, it extends the Theory of Planned Behavior by examining the mediating role of attitude in the adoption of Islamic green banking. Second, it provides contextual evidence on sustainable finance adoption within Indonesia's Islamic banking ecosystem. Third, it offers practical implications for Islamic banks, regulators, and educational institutions in designing communication strategies, sustainability campaigns, and financial literacy programs that encourage greater adoption of Islamic green banking services.

LITERATURE REVIEW

Green Banking Adoption: Policy Framework versus User Acceptance

Green banking has increasingly been recognized as a strategic approach to integrating sustainability principles into the financial sector. From an institutional perspective, environmental risk management has become an essential component of banking governance because environmental risks may evolve into credit, operational, and reputational risks if they are not adequately incorporated into financing decisions (Weber, 2012). In practice, green banking encompasses environmentally responsible lending, energy-efficient operations, and the digitalization of banking services to reduce environmental footprints.

Previous studies suggest that the development of green banking is strongly influenced by regulatory frameworks and institutional readiness. For example, Khairunnessa et al. (2021) argue that policy support and regulatory incentives play a critical role in encouraging financial institutions to adopt sustainable banking practices. Nevertheless, policy initiatives alone are insufficient to ensure successful implementation, as the long-term success of green banking ultimately depends on customers' willingness to adopt and continuously use sustainable financial services (Taneja & Ali, 2021).

Similarly, Malik and Singh (2022) demonstrate that individual characteristics and customer perceptions influence both the adoption and continued use of green banking services. These findings indicate that although regulatory frameworks create an enabling environment for green banking, user acceptance remains a critical determinant of its effectiveness.

Taken together, the existing literature reveals a gap between policy readiness and actual customer adoption, suggesting that behavioral mechanisms are needed to explain why individuals choose to adopt, or decline to adopt, green banking services. This perspective underscores the importance of behavioral theories in explaining sustainable financial adoption.

Theory of Planned Behavior as the Behavioral Benchmark

This study adopts the Theory of Planned Behavior (TPB) as the primary theoretical framework for explaining behavioral intention toward Islamic green banking adoption. According to Ajzen (1991), behavioral intention is determined by three principal factors: attitude, subjective norms, and perceived behavioral control. Among these constructs, attitude is frequently regarded as the most immediate predictor of behavioral intention because it reflects an individual's overall evaluation of performing a particular behavior.

Empirical evidence in sustainable banking contexts supports the central role of attitude in shaping behavioral intention. Taneja and Ali (2021), for example, found that favorable attitudes toward environmentally responsible banking significantly increase customers' intentions to adopt sustainable financial services. Likewise, studies on green financial behavior indicate that individuals are more likely to adopt environmentally friendly financial products when they perceive such products as beneficial and consistent with their personal values.

Although TPB also incorporates subjective norms and perceived behavioral control, the present study focuses specifically on the attitudinal mechanism to examine how cognitive factors are transformed into evaluative judgments that subsequently influence behavioral intention. This parsimonious approach is consistent with previous studies identifying attitude as the strongest predictor of sustainable financial behavior.

In this study, *Islamic green banking* refers to environmentally responsible banking practices implemented by Islamic financial institutions in accordance with Sharīʿah principles. These practices include ethical screening of financing activities, support for environmentally sustainable projects, and governance systems that reflect Islamic ethical values. Accordingly, TPB provides an appropriate theoretical framework for explaining how attitudes toward Islamic green banking shape individuals' intentions to adopt sustainable financial services.

Cognitive Antecedents: Awareness and Knowledge

Within behavioral research, cognitive factors such as awareness and knowledge are widely recognized as important antecedents of behavioral intention. Financial literacy and knowledge enable individuals to understand financial products, evaluate their potential benefits, and make more informed financial decisions (OECD, 2022). However, research on sustainable behavior suggests that knowledge does not always translate directly into behavioral intention. Instead, its influence often operates indirectly through evaluative mechanisms such as attitudes (Muñoz-Céspedes et al., 2021).

Similarly, awareness of environmental issues may serve as an initial catalyst that increases individuals' sensitivity toward sustainability concerns. Nevertheless, awareness alone does not necessarily lead to behavioral change. Studies examining green behavior among younger generations indicate that individuals may exhibit high levels of environmental awareness while demonstrating inconsistent behavioral commitment due to situational constraints and competing priorities (Jehtae et al., 2021).

These findings suggest that awareness and knowledge influence behavior through a process of value congruence, whereby individuals evaluate whether a particular behavior aligns with their personal beliefs and values. When awareness and knowledge are internalized as positive evaluative beliefs, they are more likely to foster favorable attitudes toward sustainable practices. Consequently, awareness and knowledge are expected to influence behavioral intention primarily through their capacity to shape positive attitudes toward Islamic green banking.

Islamic Values and Sustainability: Value Congruence and Attitude Formation

Within Islamic economics, sustainability is closely associated with ethical responsibility and the promotion of public welfare. Islamic ethical principles emphasize justice (*ʿadl*), balance (*tawāzun*), and public benefit (*maṣlaḥah*), all of which are conceptually aligned with environmental sustainability.

Recent studies suggest that Islamic ethical values can significantly influence individuals' attitudes toward sustainable financial practices. For instance, Rani et al. (2025) demonstrate that ethical legitimacy and value congruence strengthen public acceptance of environmentally responsible financial policies. Likewise, research on sustainable financial behavior within Islamic contexts indicates that framing sustainability as part of Islamic ethical responsibility encourages more favorable attitudes toward sustainable financial initiatives.

This perspective suggests that Islamic ethical values reinforce the evaluative mechanism linking awareness and knowledge to attitude, particularly among Muslim consumers who perceive sustainable financial practices as being consistent with Islamic teachings. Consequently, integrating Islamic ethical values into sustainability narratives may strengthen the attitudinal pathway through which cognitive factors influence behavioral intention.

Hypotheses Development

Based on the preceding discussion, the following hypotheses are proposed:
H1: Awareness positively influences attitudes toward Islamic green banking.
H2: Knowledge positively influences attitudes toward Islamic green banking.
H3: Attitude positively influences behavioral intention to adopt Islamic green banking.

To provide a more rigorous assessment of the proposed mediation mechanism, this study also examines whether awareness and knowledge exert direct effects on behavioral intention in addition to their indirect effects through attitude.
H4: Attitude mediates the relationship between awareness and behavioral intention.
H5: Attitude mediates the relationship between knowledge and behavioral intention.

RESEARCH METHOD

This study employs an explanatory (hypothesis-testing) cross-sectional survey design using a quantitative approach to examine the behavioral mechanisms underlying Generation Z's intention to adopt Islamic green banking. The explanatory design is appropriate because the study tests causal relationships among variables and examines mediation effects within a structural model based on the Theory of Planned Behavior (TPB). Descriptive analysis is used only to present respondent characteristics, while the main objective is to test the hypothesized relationships between awareness, knowledge, attitude, and behavioral intention.

To ensure methodological transparency and replicability, the research process followed six sequential stages:

1. Instrument development and adaptation based on validated scales related to the Theory of Planned Behavior, green banking awareness, and financial literacy.
2. Participant recruitment and informed consent, where eligible respondents were invited to participate voluntarily.
3. Data screening, including checking for incomplete responses, missing data, and potential outliers.
4. Measurement model evaluation, including validity and reliability tests of the constructs.

Data were collected online through Google Forms between August and October 2025, ensuring accessibility for respondents and consistency in data collection procedures. The population of this study consists of undergraduate students enrolled in the Management Study Program at the Faculty of Economics and Business. A purposive sampling technique was employed to ensure that respondents possessed relevant knowledge related to Islamic finance and sustainability issues. The sampling criteria were:

1. Active undergraduate students in the Management Study Program.
2. Aged between 18–25 years, representing Generation Z.
3. Have completed relevant courses related to Islamic banking or Islamic financial management.
4. Have been exposed to information about green banking through lectures, social media, or other sources.
5. Data were collected via Google Forms. A total of 80 valid responses were analyzed.

Table 1. Respondents' Characteristics

Category	Sub-category	Frequency	Percentage
Gender	Male	30	37.50%

Category	Sub-category	Frequency	Percentage
	Female	50	62.50%
Age	18–21 years	44	55.00%
	22–25 years	36	45.00%
Courses completed	Islamic Financial Management	22	27.50%
	Islamic & Conventional Banking + Islamic Financial Management	58	72.50%

The sample size is considered adequate for PLS-SEM analysis, which is suitable for studies with relatively small samples and prediction-oriented models (Hair et al., 2017; Sarstedt et al., 2022). Following the commonly used "10-times rule", the minimum sample size should be at least ten times the maximum number of structural paths pointing at an endogenous construct. In this model, the endogenous construct Attitude receives two paths (Awareness and Knowledge), resulting in a minimum requirement of 20 observations. Therefore, the sample size of 80 respondents exceeds the recommended minimum threshold. Nevertheless, the findings should be interpreted with caution, as the purposive sample is limited to students from one institution and may not fully represent the broader Generation Z population in Indonesia.

Data were collected using a structured questionnaire consisting of reflective measurement items measured on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). The questionnaire included four main constructs:

Table 2. Instrument

Variable (Code)	Operational Definition
Awareness (AWR)	The extent to which respondents recognize and care about the environmental impacts of financial activities and understand that banks, particularly Islamic banks, can contribute to sustainability through financing, investment, and operational practices.
Knowledge (KNO)	The level of respondents' understanding of Islamic banking principles and the concept of green banking within Islamic finance, including perceived benefits of sustainable banking products and familiarity with examples of implementation in Indonesia.
Attitude (ATT)	Respondents' overall evaluative judgment (positive–negative) toward Islamic green banking, reflecting perceived importance of green practices, comfort in use, congruence with Islamic values, and appreciation of banks' pro-environmental policies.
Behavioral Intention (BI)	Respondents' propensity and willingness to adopt Islamic green banking, indicated by intention to use, seek information, recommend, open an account, and switch to more environmentally friendly Islamic banking services.

The measurement items were adapted from established instruments used in previous studies on sustainable financial behavior and the Theory of Planned Behavior (Ajzen, 1991; Taneja & Ali, 2021; OECD, 2022). The questionnaire was administered in Indonesian to ensure respondent comprehension. Screening questions were included at the beginning of the questionnaire to confirm that respondents met the sampling criteria before proceeding with the survey.

The measurement model was evaluated using several established criteria for PLS-SEM analysis (Hair et al., 2017; Sarstedt et al., 2022):

1. Indicator reliability: outer loadings ≥ 0.70
2. Convergent validity: Average Variance Extracted (AVE) ≥ 0.50
3. Internal consistency reliability: Cronbach's Alpha and Composite Reliability ≥ 0.70
4. Discriminant validity: assessed using the Fornell–Larcker criterion and HTMT ratio (<0.85).

Indicators with loadings below the recommended threshold were evaluated and retained only if theoretically justified. Since the data were collected from a single self-reported questionnaire, several procedural and statistical approaches were used to minimize common method bias (CMB). Procedurally, anonymity and voluntary participation were emphasized to reduce evaluation bias. Statistically, Harman's single-factor test and full collinearity VIF assessment were applied to ensure that common method variance did not significantly affect the results. Structural model estimation and mediation testing using Partial Least Squares Structural Equation Modeling (PLS-SEM).

Data Analysis Technique

Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS version 4. PLS-SEM was selected because it is suitable for prediction-oriented research, mediation testing, and models involving reflective constructs (Hair et al., 2017; Sarstedt et al., 2022). The analysis procedure involved two main stages:

1. Measurement Model Evaluation

   The measurement model was assessed to ensure construct validity and reliability using outer loadings, AVE, composite reliability, Cronbach's alpha, and discriminant validity tests.

2. Structural Model Evaluation
   - The structural model was evaluated using:
   - Path coefficients (β)
   - Bootstrapping procedure (5,000 resamples)
   - t-statistics and p-values ($\alpha = 0.05$)

To provide a more comprehensive assessment of the model, several additional indicators were reported:

- Coefficient of determination (R^2) to evaluate explanatory power
- Effect size (f^2) to assess the relative contribution of each predictor
- Predictive relevance (Q^2) using blindfolding procedures
- Standardized Root Mean Square Residual (SRMR) as an approximate model fit indicator.

Mediation effects were evaluated by examining the bootstrapped indirect effects and confidence intervals, allowing the study to determine whether the relationships between awareness, knowledge, and behavioral intention operate through the mediating role of attitude.

FINDINGS AND DISCUSSION

This section reports the results of the study in relation to the four research questions: whether awareness influences attitudes toward Islamic green banking; whether knowledge influences attitudes; whether attitude influences behavioral intention; and whether attitude mediates the relationship between awareness, knowledge, and behavioral intention. Consistent with the explanatory design and PLS-SEM procedure described in the Method section, the results are presented in four stages: respondent profile, measurement model evaluation, structural model assessment, and mediation analysis.

The measurement model was first assessed to ensure that the indicators adequately captured the four reflective constructs: Awareness (AWR), Knowledge (KNO), Attitude (ATT), and Behavioral Intention (BI). As summarized in this graph:

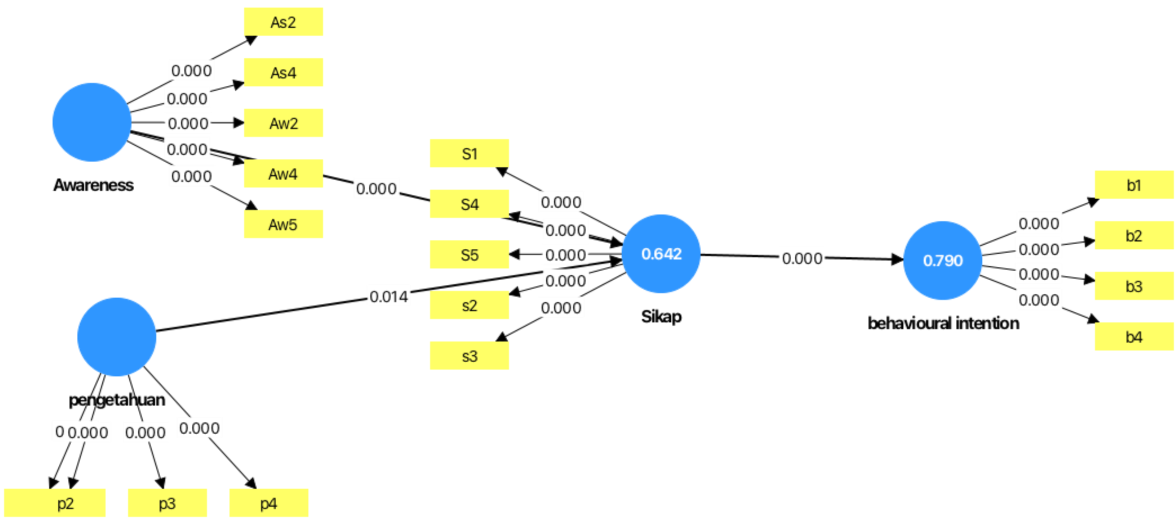

Figure 1. Bootstrapping Results of the Structural Model

- Awareness → Attitude (p-value = 0.000)
- Knowledge → Attitude (p-value = 0.014)
- Attitude → Behavioral Intention (p-value = 0.000)

The PLS-SEM results indicate that the three main paths in the model are statistically significant: Awareness → Attitude ($p < 0.001$), Knowledge → Attitude ($p = 0.014$), and Attitude → Behavioral Intention ($p < 0.001$). In contrast, the direct paths from Awareness to Behavioral Intention and from Knowledge to Behavioral Intention are not statistically significant ($p > 0.05$). This pattern confirms a full mediation effect, indicating that the influence of awareness and knowledge on the intention to adopt Islamic green banking operates through attitude. Consistent with these findings, Figure 1 (the PLS-SEM structural model) illustrates significant paths from Awareness and Knowledge to Attitude, and from Attitude to Behavioral Intention, whereas the direct paths from Awareness and Knowledge to Behavioral Intention are non-significant. In other words, among Generation Z respondents, intention formation is driven more strongly by an evaluative route (attitude) than by direct cognitive effects. This finding also supports the argument presented in the Introduction that green banking adoption cannot be explained solely by service availability and policy support but is strongly influenced by users' psychological evaluations of a service's worthiness and value congruence (Khairunnessa et al., 2021; Malik & Singh, 2022).

Discriminant validity was established using both the Fornell–Larcker criterion and the Heterotrait–Monotrait Ratio (HTMT), with all HTMT values falling below the recommended threshold of 0.85. To assess the potential influence of common method bias resulting from the single-source, self-reported survey design, Harman's single-factor test and full collinearity variance inflation factors (VIFs) were also examined. Overall, these findings indicate that the measurement model demonstrates satisfactory reliability and validity, providing a sound basis for testing the structural relationships among awareness, knowledge, attitude, and behavioral intention.

The structural model was subsequently evaluated using the significance values obtained from the PLS-SEM analysis. The results indicate that awareness significantly influences attitude ($p < 0.001$), thereby supporting H1 and answering Research Question 1 (RQ1). Likewise, knowledge significantly influences attitude ($p = 0.014$), supporting H2 and addressing Research Question 2 (RQ2). Furthermore, attitude significantly influences behavioral intention ($p < 0.001$), supporting H3 and answering Research Question 3 (RQ3). These findings confirm that all three hypothesized primary relationships in the model are statistically significant.

For transparency, this study also examined the direct effects of awareness and knowledge on behavioral intention. The results indicate that neither direct relationship is statistically significant ($p > 0.05$). This pattern suggests that the influence of awareness and knowledge on behavioral intention operates primarily through attitude, consistent with a full mediation effect.

The findings provide clear answers to the study's research questions. First, awareness significantly shapes attitudes toward Islamic green banking, suggesting that environmental sensitivity and recognition of the role of banking in promoting sustainability contribute to more favorable evaluations of Islamic green financial services. Second, knowledge also significantly influences attitude, indicating that a stronger understanding of Islamic banking principles and green banking practices leads to more positive evaluations. Third, attitude significantly predicts behavioral intention, confirming that the intention to adopt Islamic green banking is formed primarily through evaluative judgment rather than cognitive exposure alone. Fourth, attitude fully mediates the effects of awareness and knowledge on behavioral intention, indicating that cognitive factors become behaviorally meaningful only after they are internalized into favorable attitudes.

The significant effect of attitude on behavioral intention is consistent with the Theory of Planned Behavior (Ajzen, 1991), which identifies attitude as a proximal determinant of intention. This finding is also consistent with previous studies on green banking, which have shown that favorable evaluations of sustainable banking services are associated with stronger adoption intentions (Taneja & Ali, 2021). In the present study, this attitudinal pathway is particularly important because the model focuses on the internal evaluative mechanism through which sustainability-related beliefs are translated into behavioral intention. These findings reinforce the argument presented in the literature that user acceptance is a critical determinant of green banking adoption, beyond policy readiness and service availability (Khairunnessa et al., 2021; Malik & Singh, 2022).

The significant effects of awareness and knowledge on attitude are also consistent with previous studies suggesting that cognitive antecedents contribute to sustainable financial behavior through evaluative processes rather than through direct intention formation (Muñoz-Céspedes et al., 2021). Among Generation Z, this mechanism is particularly plausible because high exposure to environmental information does not necessarily translate into consistent behavioral commitment (Jehtae et al., 2021). In this context, the findings support the argument that awareness and knowledge function as cognitive inputs, but their influence depends on whether they are transformed into positive, value-based evaluations of Islamic green banking.

The findings also reinforce the Islamic values perspective developed in the Introduction and Literature Review. In this study, Islamic green banking is defined as environmentally responsible banking practices implemented by Islamic financial institutions in accordance with Sharīʿah governance and ethical screening principles. The full mediation effect suggests that awareness and knowledge alone are insufficient to influence behavioral intention directly. Instead, they become influential when respondents perceive Islamic green banking as being congruent with Islamic ethical values, such as *maṣlaḥah*, stewardship (*khalīfah*), and responsible resource management. This interpretation is consistent with previous studies showing that value congruence and ethical legitimacy strengthen positive attitudes toward sustainable financial practices within Islamic contexts (Rani, 2025).

An important finding of this study is that the direct effects of awareness and knowledge on behavioral intention are not statistically significant. Although this result is theoretically consistent with the mediation framework proposed in the study, it remains noteworthy because several previous studies have reported direct or partially mediated relationships between cognitive factors and behavioral intention. Several explanations may account for this finding. First, the relatively homogeneous sample, consisting of students with similar academic backgrounds who had completed coursework related to Islamic finance, may have reduced the variability of awareness and knowledge, thereby weakening their direct statistical effects on behavioral intention. Second, respondents may have shared relatively similar pro-sustainability norms, causing attitude to emerge as the primary differentiating factor. Third, omitted TPB variables, such as subjective norms and perceived behavioral control, may further explain behavioral intention beyond the attitudinal pathway. Finally, although both procedural and statistical remedies were applied, self-reported data may still be subject to social desirability bias and other common method tendencies. Future research should examine these alternative explanations using larger and more heterogeneous samples, incorporating additional TPB constructs, and comparing student and non-student populations.

From a practical perspective, the findings suggest that initiatives aimed at increasing the adoption of Islamic green banking among young consumers should not focus solely on disseminating information. Although awareness campaigns and financial education remain essential, their effectiveness depends largely on their ability to foster favorable attitudes. Accordingly, Islamic banks, regulators, and educational institutions should communicate Islamic green banking not merely as a technical or environmentally friendly financial product but as a value-congruent practice rooted in Islamic ethical principles and the promotion of public welfare. Communication strategies that emphasize Islamic stewardship (*khalīfah*), social responsibility, and measurable environmental impact may therefore be more effective in strengthening behavioral intention among Generation Z.

CONCLUSION

This study examined how awareness and knowledge influence Generation Z's behavioral intention to adopt Islamic green banking, with attitude serving as a mediating variable. The findings show that awareness and knowledge significantly influence attitude, and attitude significantly influences behavioral intention. In contrast, the direct effects of awareness and knowledge on behavioral intention are not significant, indicating that attitude functions as a full mediator in the relationship between cognitive factors and intention. These results suggest that among Generation Z, awareness and knowledge do not directly translate into adoption intention unless they are first internalized into a favorable evaluative judgment toward Islamic green banking.

The study makes a theoretical contribution by refining the application of the Theory of Planned Behavior (TPB) in the context of Islamic green banking. More specifically, the findings show that awareness and knowledge function as distal cognitive antecedents, while attitude acts as the proximal mechanism through which these antecedents shape behavioral intention. In this sense, the study supports a full mediation specification of attitude in the Islamic green banking context, extending prior TPB-based research that often treats awareness and knowledge as either direct predictors or mixed predictors of intention.

The study also contributes contextually by linking Islamic finance, sustainability, and Generation Z behavior within Indonesia's evolving sustainable finance landscape. By showing that positive intention emerges when Islamic green banking is perceived as congruent with Islamic ethical values such as maslahah, stewardship, and responsible resource management, the findings strengthen the argument that sustainable financial behavior in Islamic contexts is shaped not only by information exposure, but also by value congruence and ethical internalization.

At the same time, the study identifies important boundary conditions for interpreting the model. The findings are based on a relatively homogeneous sample of university students and a parsimonious TPB specification that excludes subjective norms and perceived behavioral control. Therefore, while the study strengthens the attitudinal mechanism in explaining intention, future research is needed to test whether the same full mediation pattern holds across broader populations and more comprehensive TPB models.

From a practical perspective, the findings imply that increasing Islamic green banking adoption should go beyond information provision and focus on attitude formation. Based on this, several actionable recommendations can be proposed:

1. Islamic banks should design communication campaigns that emphasize measurable green outcomes, customer relevance, and Islamic ethical framing such as maslahah and stewardship, so that awareness and knowledge can be converted into favorable attitudes.
2. Universities and higher education institutions should integrate Islamic sustainability ethics into Islamic finance and banking courses through experiential learning, case studies, and project-based assignments that connect green banking with real-life environmental responsibility.
3. Regulators, particularly OJK, should strengthen public-facing communication by standardizing clear and accessible green banking labels and information, aligned with the sustainable finance taxonomy, to reduce confusion and strengthen trust among young consumers.
4. Islamic banking product teams and digital service developers should improve digital onboarding and service interfaces by highlighting the sustainability features, transparency indicators, and ethical value propositions of Islamic green banking products.
5. Educational and public awareness campaigns targeting Generation Z should focus not only on increasing literacy, but also on building positive evaluations of Islamic green banking as a relevant, credible, and value-consistent financial choice.

Overall, this study demonstrates that the key challenge in promoting Islamic green banking among Generation Z is not merely making young consumers aware or informed, but ensuring that such awareness and knowledge are transformed into a positive attitude. In this way, the study advances theoretical understanding of the cognitive–attitudinal mechanism underlying sustainable financial behavior and offers practical direction for strengthening the adoption of Islamic green banking in Indonesia.

LIMITATION & FURTHER RESEARCH

Despite offering important empirical contributions, this study has several limitations that must be acknowledged:

- The sample size was relatively small (80 respondents) and focused exclusively on students from the Faculty of Economics and Business at Universitas Islam Bandung, which limits the generalizability of the findings to the broader Generation Z population across Indonesia. Future research should involve a larger and more diverse sample from various universities and regions.
- The cross-sectional approach restricts the understanding of changes in attitudes and behavioral intentions over time. Longitudinal studies are recommended to gain deeper insights into the stability or evolution of behavioral intentions.
- The variables included in the model were limited to awareness, knowledge, attitude, and intention. Key social factors such as subjective norm and perceived behavioral control, as

outlined in the full Theory of Planned Behavior (TPB), were not included. Future studies should consider expanding the model to enhance its explanatory power.

- Using a questionnaire as the sole data collection tool may introduce perception bias. Triangulation with qualitative methods such as interviews or focus group discussions (FGDs) would provide a more holistic understanding.

Recommendations for Future Research

- Involve respondents from various institutions and backgrounds to strengthen external validity.
- Develop a mixed-methods approach to better capture the cognitive, affective, and social dimensions in the formation of behavioral intention.
- Explore the role of religiosity, social norms, and the digital ecosystem in promoting the adoption of Sharia-based green banking among the Muslim youth segment.

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