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Islamic religiosity and purchase intention: A meta-analysis

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Abstract

Purpose – This study aims to systematically review and meta-analyze the impact of Islamic religiosity on purchase intention, addressing existing gaps in understanding its multidimensional nature and measurement inconsistencies. Given the growing significance of Muslim consumer markets, the research seeks to provide a comprehensive and statistically robust assessment of how religiosity influences consumer decision-making, particularly in relation to halal products and Islamic financial services.

Design/Methodology/Approach – A systematic literature review (SLR) and meta-analysis were conducted using 66 Scopus-indexed, peer-reviewed quantitative studies published between 2000 and 2024. The random-effects model was employed to synthesize effect sizes, accounting for potential variability across studies. Data were analyzed using Jamovi, with assessments of heterogeneity (I^2, Q-test), publication bias (Egger's regression, Fail-Safe N), and equivalence testing (TOST) to ensure robustness.

Findings – Islamic religiosity has a significant and positive effect on purchase intention, with minimal heterogeneity indicating consistency across studies. Intrinsic religiosity emerges as a stronger predictor than extrinsic religiosity, especially in contexts involving halal-certified products and Islamic financial practices. Publication bias was found to be non-significant, reinforcing the reliability of the findings

Originality/Value – This is the first meta-analysis to quantitatively synthesize the relationship between Islamic religiosity and purchase intention, offering a unified estimate of effect size and highlighting the need for Sharia-compliant religiosity scales.

Research Limitations/Implications – The study is limited to English-language articles and relies on adapted religiosity measures originally designed for non-Muslim populations, potentially affecting construct validity.

Practical Implications – Marketers and policymakers can leverage these insights to design faith-aligned branding, communication, and product development strategies that resonate with devout Muslim consumers

Keywords – Islamic Religiosity, Purchase Intention, Meta-Analysis

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1. Introduction

The systematic literature review (SLR) on religiosity and purchase behavior has experienced significant growth in recent years (Koburtay et al., 2023). Numerous SLR studies have focused on the influence of religiosity on purchase intention. For instance, Hussain et al. (2023) found that religiosity and adherence to religious principles impact investment decisions in Sharia stocks, although other factors such as financial literacy and behavior also play a significant role. Similarly, Andespa et al. (2024) investigated how customer Sharia compliance behavior in shariah banks is influenced by factors like dimensions of TPB, shariah financial knowledge, religiosity, consumer adherence, Islamic branding, and behavioral intention. Notably, consumer conformity, corporate identity, and sustainable intentions remain less explored in existing literature. Other SLR research has highlighted the importance of religiosity, particularly Islamic values, in sustainable consumption behavior and efforts to combat climate change. Mat et al. (2022) found that students are the most frequently used respondents in these studies. These findings indicate that religiosity plays a crucial role in shaping purchase behavior, but there are still gaps in the existing literature.

Several research gaps have been identified through a summary of 10 SLR articles. Firstly, there is a lack of comprehensive SLR studies examining the role of Islamic religiosity in influencing purchase intention by combining meta-analysis. To date, no meta-analysis research related to Muslim consumer behavior has been conducted. New studies have discussed Islamic religiosity in various contexts. Sholihin et al. (2020) conducted a meta-analysis focusing on the relationship between religiosity and life satisfaction, highlighting the positive impact of religiosity on individuals' overall well-being. Conversely, Abdel-Khalek et al. (2023) explored the negative association between religiosity and traits such as psychoticism, openness, and neuroticism, emphasizing the potential buffering and coping mechanisms provided by religiosity.

Secondly, previous studies have not fully explored the details of variables and grand theories used. These gaps highlight the need for further research to provide a more comprehensive understanding of the relationship between religiosity and purchase intention. Despite growing interest in quantitative approaches to product purchases within the context of religiosity, scholars must incorporate diverse theories, advanced SEM methods, and relevant determinants to better capture consumer behavior in the Muslim market (Fauzi, 2023). This SLR and meta-analysis aim to make significantly contributions to the field of Islamic religiosity by enhancing the understanding of purchase behavior.

This study begins with a synthesis of existing literature, highlighting key insights and factors contributing to heterogeneity in the field. It then details the methodological framework, including study selection criteria, data extraction processes, and quality assessment protocols. The subsequent analysis presents results from the systematic review and meta-analysis, focusing on aggregated effect sizes, heterogeneity statistics, and publication bias evaluations. The research concludes with a discussion of findings, limitations, and actionable recommendations for future scholarly inquiry.

2. Literature review

A comprehensive overview of religiosity SLR

Research on Islamic religiosity and purchasing behavior indicates that religiosity significantly influences consumer behavior (Alimusa et al., 2024; Febriandika & Millatina, 2023). However, there is inconsistency in the findings regarding the strength of religiosity's influence, as well as a lack of understanding of how different dimensions of religiosity affect purchase and repurchase intentions (Arli et al., 2022; Hassan & Rahman, 2023; Mat, Othman, A Rahman, et

al., 2022; Sardana et al., 2021). Islamic religiosity encompasses various dimensions of how Muslims express and live out their faith.

The literature reveals a broad range of perspectives and scales used to define and measure Islamic religiosity. Islamic religiosity is often framed through the lens of belief in the oneness of God, adherence to the teachings of the Prophet Muhammad, and observance of religious practices such as prayer, fasting, and charity (Shabbir & Ibrahim, 2023). Several scales have been developed to quantify aspects of religiosity, spirituality, and morality within an Islamic context. These scales typically assess adherence to religious practices, the strength of faith, and moral behavior (Nabi et al., 2023). Studies have explored how these elements of religiosity influence individual behavior and societal norms (Sharma et al., 2022). Current research often highlights the need for more nuanced scales that can capture the diversity of Islamic practices and beliefs across different cultural and socio-economic contexts (Syahid et al., 2024).

This study summarizes 10 systematic literature reviews (SLRs) in Islamic marketing, the conclusions of which serve as the basis for conducting a meta-analysis on articles in the Scopus database. From the ten SLRs studied, it is clear that religiosity, especially in the Islamic context, plays a significant role in various aspects of consumer behavior, including the purchase of halal products, investment in Islamic stocks, and compliance with Islamic principles in banking, as shown in Table 1 below:

Table 1. Categorization of SLR papers regarding religiosity and consumer outcomes

No	Paper	Number of articles	Main findings	Limitations
1	Consumer Purchase of Halal-Certified Products: A Quantitative Systematic Literature Review (Fauzi, 2023)	35 articles from Scopus and WoS (2011–2021)	Identified five research streams: halal study context, adapted theories, CB-SEM vs. PLS-SEM, Muslim vs. non-Muslim consumers, and the role of religiosity in halal-certified products.	Focused only on consumer behavior and overlooked the first-generation approach, which limits connections between multiple consumer behavior variables.
2	Islamic Marketing and Consumer Behavior: A Systematic Literature Review (Floren et al., 2020)	31 articles from high-ranked marketing journals (2010–2018)	Islam significantly influences the ethical beliefs and behaviors of Muslim consumers across countries, shaping their choices of services and products based on Shariah law.	Limited to peer-reviewed articles from high-ranked journals (A* and A in the Australian Business Deans Council list) and only included English-language studies.
3	Investigating Sustainable Consumption Behavior Vis-à-vis Islamic Values: A Systematic Review (Mat, Othman, A Rahman, et al., 2022)	8 articles from Scopus and WoS (2015–2022)	Highlights the need to study generational differences and religiosity in sustainable consumption behavior among Muslim consumers. Critiques TPB and TRA theories while suggesting alternative frameworks.	Did not explore differences in sustainable consumption behavior across age groups (e.g., millennials, Generation Y).
4	Integration of Spirituality and Religiosity at Work: A Systematic Review (Koburtay et al., 2023)	Articles from Web of Science (2000–2021)	This study developed a framework integrating religiosity, spirituality, and employee well-being by expanding Ryff's well-being framework. It identified two key insights: (1) workplace spirituality and individual religiosity drive employee well-being, and (2) individual religiosity enhances personal well-being	Limited to high-quality journals ranked 3- and 4-star in the ABS list. Focused only on articles indexed under ethics (ETHICS-CSR-MAN), potentially excluding relevant studies outside these criteria.
5	A Systematic Review of Customer Sharia Compliance Behavior in Islamic Banks: Determinants and	50 articles from Scopus, WoS, Google Scholar (2013–2023)	Sharia compliance behavior is influenced by factors including attitude, subjective norms, PBC, Islamic financial literacy, religiosity, consumer conformity, Islamic branding, and behavioral intention.	Limited to Scopus, WoS, and Google Scholar databases; future studies should include Crossref or OpenAlex for broader coverage.

No	Paper	Number of articles	Main findings	Limitations
	Behavioral Intention (Andespa et al., 2024)		Notably, consumer conformity and sustainable intentions have received limited attention in previous research.	
6	Systematic Review of Religiosity and Social Responsibility (Amer, 2024)	31 articles from top-tier journals since 2015	The study confirms a positive relationship between religiosity and corporate social responsibility (CSR), both directly and indirectly.	Limited by database selection and search protocols; changes in these parameters may affect results.
7	Scale of Religiosity for Muslims: An Exploratory Study (Ul-Haq et al., 2020)	Analysis of six religiosity scales	Identified five key factors: Mu'amalat (social relations), societal ethics, Roshan Khayali (enlightened moderation), Ibadaat (prayers), and Azeemat (scrupulous faithfulness). Revealed distinctions between Ibadaat (worship) and Mu'amalat through cluster analysis.	Requires confirmatory factor analysis on a new sample; limited by small sample size.
8	The Influence of Religion on Sustainable Consumption: A Systematic Review and Future Research Agenda (Orellano et al., 2020)	52 articles from WoS and Scopus (1998–2019)	Religion acts as a distal factor influencing sustainable consumption practices through other proximal determinants like environmental behavior. Contradictory results arise from methodological differences.	Limited by database selection; overlaps with political orientation constructs; no quality check on included studies.
9	Religion in Consumer Behavior Research: A Systematic Literature Review (Šmakova & Piligrimienė, 2021)	36 articles (2010–2019)	Religion influences purchasing behavior as well as consumer ethics and sustainable consumption practices.	Limited methodology; narrow keyword selection; small number of articles reviewed.
10	Factors Influencing Halal Cosmetic Adoption: A Systematic Literature Review Using TCCM Framework (Raza & Rasheed, 2023)	41 articles (2014–2023)	Suggests future research should apply models like Hunt & Vitell's theory or UTAUT to study halal cosmetics adoption within halal marketing contexts. Highlights factors influencing halal cosmetic purchases.	One of the few studies focused specifically on halal cosmetics; limited scope within broader halal marketing research

Source: Processed Data (2025)

The systematic literature reviews (SLRs) on religiosity and consumer outcomes cover a diverse range of studies, each offering unique insights while highlighting specific limitations. Fauzi (2023) identified five research streams related to halal-certified products, focusing narrowly on consumer behavior. Floren et al. (2020) emphasized Islam's significant influence on Muslim consumers' ethical beliefs and behaviors but limited their review to high-ranked journals in English. Mat et al. (2022) highlighted the need to explore generational differences in sustainable consumption among Muslims and critiqued existing theories such as TPB and TRA.

Koburtay et al. (2023) developed a framework linking religiosity, spirituality, and well-being but excluded studies outside their selected criteria. Andespa et al. (2024) examined factors influencing Sharia compliance in Islamic banks, noting gaps in consumer conformity and sustainable intentions. Amer (2024) confirmed a positive relationship between religiosity and CSR but was constrained by database selection protocols. Ul-Haq et al. (2020) identified key factors in Muslim religiosity scales but required further validation with larger sample sizes. Orellano et al. (2020) discussed religion's role in sustainable consumption but faced methodological inconsistencies. Šmakova and Piligrimienė (2021) explored religion's impact.

3. Methodology

This study systematically reviews and analyzes existing literature on the influence of Islamic religiosity on purchase intention using both systematic literature review (SLR) and meta-analysis methods. The SLR identifies and evaluates relevant studies from the Scopus database using keywords related to Islamic religiosity and purchase intention. Inclusion criteria focus on empirical, peer-reviewed studies published within a specified timeframe, excluding non-quantitative articles or studies lacking methodological clarity. A detailed screening process ensures that selected studies meet these criteria, followed by data extraction and quality assessment to evaluate their reliability and relevance (Mohamed Shaffril et al., 2021).

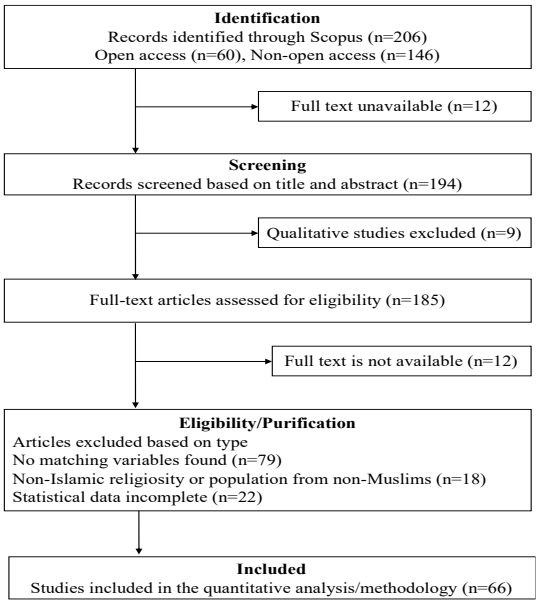
The meta-analysis quantifies the overall effect of Islamic religiosity on purchase intention by calculating effect sizes from selected studies. It assesses homogeneity to determine whether variations across studies are due to chance or systematic factors and selects an appropriate meta-analytic model accordingly. The analysis includes tests for publication bias and sensitivity analyses to ensure robustness (Borenstein et al., 2021). Findings are reported with a focus on interpreting effect sizes, discussing variations based on study characteristics, and providing practical recommendations for stakeholders while acknowledging limitations and suggesting areas for future research.

Selection process

The article selection process involved identifying studies that met specific inclusion criteria within the Scopus database. The search query used Boolean operators: (religiosity OR religious) AND (purchase AND intention OR buy AND intention), conducted on July 6, 2024. The initial search yielded 206 articles published between 2000 and 2024. Articles were filtered to include only peer-reviewed journal articles written in English and published in final form. After applying these filters, 60 open-access articles remained, with 146 non-open-access articles identified. Requests for full-text copies were sent via email to corresponding authors for the non-open-access studies.

To ensure methodological rigor, the study adopted the PRISMA 2020 guidelines in defining clear inclusion and exclusion criteria. The inclusion criteria were: (a) empirical, peer-reviewed, and quantitative studies; (b) focus on Islamic religiosity as a predictor of purchase intention; (c) populations involving Muslims (majority or minority); (d) publications written in English between 2000 and 2024; and (e) indexed in Scopus. Exclusion criteria were: (a) conceptual or qualitative papers without effect size data; (b) studies outside the Islamic religiosity context (e.g., general spirituality without Islamic framing); (c) duplicate records; and (d) articles lacking sufficient methodological clarity or statistical information for meta-analysis. Following these criteria, the screening process was conducted in three stages: title and abstract review, full-text eligibility assessment, and final inclusion. A PRISMA flow diagram (Figure 1) summarizes the identification, screening, eligibility, and inclusion stages.

The final selection focused exclusively on studies conducted within a Muslim context, using Islamic religiosity as an independent or moderating variable and analyzing data from Muslim populations. Quantitative studies were prioritized, particularly those reporting correlation coefficients or t-statistics, which can be converted into effect sizes and standard errors for meta-analytic calculations (Lakens, 2017). This rigorous screening ensured the inclusion of high-quality, relevant empirical studies aligned with the research objectives.



Source: Processed Data 2024

Figure 1. Selection process.

4. Result

4.1. Descriptive analysis of articles

Table 2 provides a comprehensive overview of the 66 articles included in this study, highlighting their characteristics. The majority of studies (62 out of 66) focused on Muslim consumers, while only four articles examined mixed populations comprising both Muslim and non-Muslim participants. Regarding publication years, 23 articles were published between 2013 and 2018, whereas 43 articles were published from 2019 to 2024, indicating a growing interest in this field over time.

In terms of sample size, most studies (58) involved sample sizes ranging from 200 to 499 participants, with three studies having fewer than 199 participants and five studies including 500 or more participants. Geographically, the research predominantly targeted Muslim countries, with 59 articles focusing on these regions compared to six articles that concentrated on non-Muslim countries and one article examining a mixed population.

The objects of research varied widely, with Islamic-halal products being the most frequently studied topic (26 articles). Other notable areas of focus included green consumption (7 articles), Muslim fashion (7 articles), and Islamic financial products (6 articles). Less frequently studied topics included counterfeit products (6 articles), online applications (2 articles), non-halal foods (1 article), advertising (1 article), electric vehicles (1 article), and FMCG (1 article).

A variety of theoretical frameworks were employed across the articles. The Theory of Planned Behavior (TPB) was the most commonly used framework, appearing in 30 articles, followed by the Theory of Reasoned Action (TRA) in eight articles. Other theories such as the Technology Acceptance Model (TAM), Value Belief Norm (VBN), and Social Identity Theory were also utilized but less frequently. Notably, four articles did not specify the theoretical framework they adopted. This diversity in theoretical approaches underscores the multifaceted nature of research on religiosity and consumer behavior, highlighting the need for further exploration and integration of various perspectives.

Table 1. Descriptive of articles.

Parameters			Articles (*n=66*)
Population	(Total)	*Year*	(Total)
- Muslim consumers	62	2013-2018	23
- Mixed (Muslim and non-Muslim)	4	2019-2024	43
Sample size	(n)	*Country*	(n)
≤ 199	3	Muslim countries	59
200 - 499	58	Non-Muslim countries	6
≥ 500	5	Mixed	1
Object research	(Total)	*Object research*	(Total)
Islamic-halal products	26	Counterfeit products	6
Green consumption	7	Online application	2
Muslim fashion	7	Non-halal foods	1
Islamic financial products	6	Advertising	1
Foreign products	5	Electric vehicle	1
Luxury brands	3	FMCG	1
Theory Used	(Total)	*Theory Used*	(Total)
TPB	30	Social identity theory	6
TRA	8	Value attitude hierarchy	1
TAM	3	Self-congruity theory	1
The value belief norm (VBN)	3	Innovation diffusion theory	1
Self-determination theory	1	Attitude functional theory	1
Consumer behavior theory	1	ELM theory	1
Social support theory	1	Maqashid-based theory	1
Symbolic interactionism theory	1	Islamic marketing theory	1
Consumption value	1	No specifics mentioned	4

Source: Owned by The Authors

4.2. Overview of meta-analysis

The meta-analysis conducted using Jamovi includes data from 66 studies (k = 66) and reveals statistically significant results, as presented in Table 3. Employing a random-effects model to account for heterogeneity across studies, the analysis yields a substantial overall effect size. The intercept estimate of 0.266 indicates that the average effect size across all included studies is approximately 0.266 units above the baseline. This result is highly significant ($Z = 9.02$, $p < .001$), suggesting that the observed effect is unlikely to be due to chance. The 95% confidence interval for the intercept ranges from 0.208 to 0.324, which does not include zero, further supporting the robustness of the finding.

Heterogeneity among studies was assessed using the Restricted Maximum Likelihood (REML) method to estimate Tau^2, a measure of between-study variance. Although the specific Tau^2 value is not reported, the high statistical significance of the overall effect suggests considerable variability in effect sizes across studies. This indicates that factors beyond sampling error—such as cultural context, measurement approaches, or study design—contribute to differences in outcomes. These findings underscore the importance of considering contextual moderators when interpreting the relationship between Islamic religiosity and purchase intention.

In summary, the meta-analysis demonstrates a substantial and statistically significant positive association between Islamic religiosity and purchase intention. These results highlight the need for future research to investigate the underlying mechanisms driving this relationship and to develop more nuanced measurement tools capable of capturing the multidimensional nature of religiosity within an Islamic context. The random-effects meta-analysis results are reported in Table 3, presenting the overall intercept estimate and confidence intervals.

Table 2. Random-effects model (k = 66)

	Estimate	se	Z	p	CI Lower Bound	CI Upper Bound
Intercept	0.266	0.0295	9.02		0.208	0.324

Note. Tau² Estimator: Restricted Maximum-Likelihood

Source: Owned by The Authors

The heterogeneity statistics from the meta-analysis (Table 4) reveal minimal variability in effect sizes across the 66 included studies, supporting the robustness of the aggregated estimate. The estimated standard deviation of true effects (τ) is 0.079, with a corresponding variance ($\tau^2 = 0.0063$; SE = 0.0097), indicating that differences between studies are negligible. The I^2 statistic, which quantifies the proportion of total variation attributable to heterogeneity rather than sampling error, is 11%, suggesting that only a small fraction of observed variability reflects genuine between-study differences.

This is further corroborated by the H^2 statistic (1.12), which falls well below the threshold of 1.5 typically used to indicate substantial heterogeneity. The Cochran's Q test for heterogeneity yielded a non-significant result ($Q = 72.458$, $df = 65$, $p = .246$), indicating that the observed variation in effect sizes is not statistically different from what would be expected due to random sampling error alone. Collectively, these findings suggest that heterogeneity is low and clinically insignificant, affirming the reliability and generalizability of the pooled effect size as a valid representation of the relationship between Islamic religiosity and purchase intention across diverse contexts.

Table 3. Heterogeneity statistics

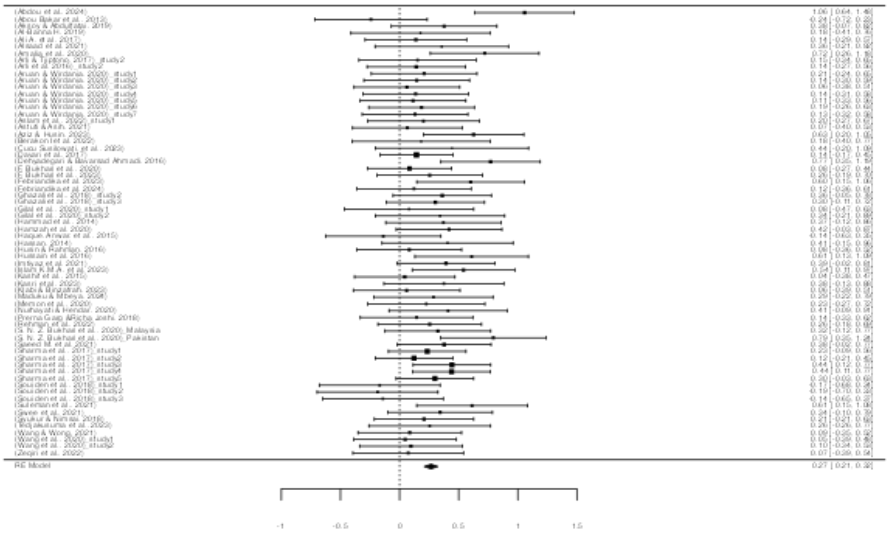
Tau	**Tau²**	**I²**	**H²**	**R²**	**df**	**Q**	**p**
0.079	0.0063 (SE= 0.0097)	11%	1.124	-	65.000	72.458	0.246

Source: Owned by The Authors

A forest plot is a graphical tool commonly used in meta-analyses to visually summarize the results of multiple studies on a specific topic, illustrating effect sizes and their confidence intervals (Dettori et al., 2021). The general layout includes horizontal lines representing the 95% confidence intervals (CIs) for each study, with squares denoting the point estimates (effect sizes) proportionate to the study's weight in the analysis, as presented in Figure 2. A vertical dashed line at zero serves as the threshold for statistical significance. At the bottom of the plot, a diamond represents the pooled effect size; its center indicates the weighted average effect, while its width reflects the 95% CI for the combined estimate.

Each study is labeled by author and year on the left side of the plot, accompanied by its effect size and CI. The pooled effect size of 0.27 (95% CI: 0.21–0.34) confirms a statistically significant positive relationship between Islamic religiosity and purchase intention across all studies, with the narrow CI underscoring the precision of this aggregated estimate.

Heterogeneity among studies is evident in the variability of individual CIs; however, most effect sizes align directionally, contributing to the robustness of the pooled result. While publication bias is not directly assessed in the plot, its symmetrical distribution suggests no overt bias, although formal tests such as Egger's regression would provide further validation. Overall, the forest plot provides strong evidence that Islamic religiosity has a positive impact on purchase intention. The majority of individual studies show a positive effect, and the pooled effect size confirms this trend. The significant 95% CI further supports the reliability and robustness of these findings. Future research should explore underlying mechanisms and potential moderators to deepen understanding of consumer behavior in Muslim markets. Figure 2 presents the forest plot, which visually displays the effect sizes and confidence intervals of individual studies as well as the pooled estimate.



Source: Author's Own

Figure 1. Forest plot

The publication bias assessment provides valuable insights into the potential biases in the meta-analysis results. As presented in Table 5, the Fail-Safe N value is calculated to be 2,097, with a p-value of less than 0.001. This high Fail-Safe N indicates that it would require an unrealistically large number of unpublished or missing studies to nullify the observed effect size. In practical terms, this suggests that the findings of the meta-analysis are robust and unlikely to be significantly influenced by publication bias.

The Kendall's Tau test yields a value of -0.054 with a p-value of 0.526, indicating no strong evidence of a correlation between effect sizes and their standard errors. This supports the conclusion that publication bias is not a significant concern. Similarly, the Egger's Regression test produces a value of -0.728 with a p-value of 0.467, further indicating no statistically significant asymmetry in the distribution of effect sizes. The lack of asymmetry suggests that smaller studies are not systematically reporting larger or smaller effects compared to larger studies, reinforcing the reliability of the meta-analytic findings.

Collectively, these results provide strong evidence that the meta-analysis is reliable and not substantially affected by publication bias. The combination of a high Fail-Safe N, non-significant Kendall's Tau, and non-significant Egger's Regression test underscores that the aggregated effect size reflects a true relationship rather than being distorted by selective reporting or other biases. These findings enhance confidence in the robustness and credibility of the meta-analysis conclusions.

Table 4. Publication bias assessment

Test Name	Value	p
Fail-Safe N	2097.000	< .001
Kendalls Tau	-0.054	0.526
Egger's Regression	-0.728	0.467

Note. Fail-safe *n* calculation using the Rosenthal approach

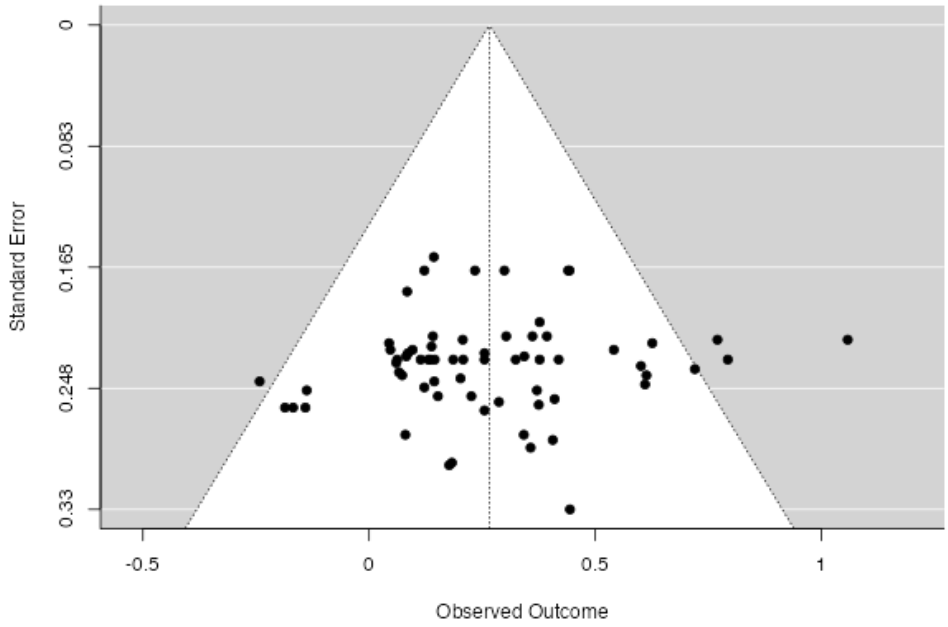
Source: Owned by The Authors

A funnel plot is a graphical tool commonly used in meta-analyses to assess publication bias, which occurs when studies with certain results are more likely to be published than others (Sterne & Harbord, 2004). In a well-constructed funnel plot, the x-axis represents the effect sizes from various studies, while the y-axis displays the standard errors of these effect sizes. Ideally, the data points should form a symmetric funnel shape, with smaller studies (which typically have larger standard errors) appearing wider at the bottom and larger, more precise

studies tapering toward the top. The vertical dashed line at zero represents the point of no effect, and the triangular shape reflects the expected distribution in the absence of publication bias.

In this particular funnel plot, most data points cluster around the center, suggesting that the majority of studies report effect sizes close to the overall pooled estimate. A few outliers are visible on the right side of the plot, indicating studies with larger positive effect sizes. These outliers may represent studies with significant findings that are more likely to be published, potentially introducing a degree of publication bias. However, the overall distribution appears relatively symmetric, with smaller studies (higher standard errors) distributed evenly around larger studies (lower standard errors). This symmetry suggests that smaller studies are not systematically underrepresented, further supporting the absence of severe publication bias.

The funnel plot provides visual confirmation that the meta-analysis results are robust and not significantly influenced by publication bias, as presented in Figure 3. While slight asymmetry due to a few outliers is observed, it is minimal and does not substantially affect the overall conclusions. These findings indicate that Islamic religiosity has a positive impact on purchase intention, as supported by both individual study results and the pooled effect size. Future research should continue exploring underlying mechanisms and potential moderators to deepen understanding of consumer behavior in Muslim markets. Figure 3 shows the funnel plot used to visually assess potential publication bias in the included studies.



Source: Author's Own

Figure 2. Funnel plot

4.3. Two one-sided tests equivalence testing: text summary

The results of the Two One-Sided Tests (TOST) for equivalence testing in the meta-analysis provide valuable insights into the consistency and significance of the observed effect size. The Z-value for the lower bound of the TOST is 25.974, with a corresponding p-value of less than 0.001, indicating that the true effect size is highly unlikely to fall below the lower bound of equivalence. This suggests strong evidence that the effect size is not smaller than the predefined threshold.

Conversely, the Z-value for the upper bound of the TOST is -7.927, with a p-value of 0.000, further confirming that the true effect size is also unlikely to exceed the upper bound of equivalence. Collectively, these findings suggest that the observed effect size falls within the

specified equivalence interval, providing robust evidence for the equivalence of the effect across the studies included in the meta-analysis. The Lower Limit Confidence Interval (LL_CI) for the TOST is 0.218, and the Upper Limit Confidence Interval (UL_CI) is 0.315. These intervals reinforce the conclusion that the effect size is statistically significant and lies within an acceptable range of equivalence. Similarly, the LL_CI and UL_CI for the Z-test are 0.208 and 0.324, respectively, further supporting the reliability of the observed effect size.

In summary, the TOST results indicate that the observed effect size is significantly different from zero and falls within the predefined equivalence interval. This provides strong evidence that Islamic religiosity influences purchase intention in a statistically significant manner across all studies analyzed. The findings enhance the credibility of the meta-analysis by confirming that the aggregated effect size is reliable and meaningful, offering actionable insights for stakeholders in Islamic marketing and consumer behavior.

Table 5. Two one-sided tests equivalence testing

Z-Value Lower Bound	P-Value Lower Bound	Z-Value Upper Bound	P-Value Upper Bound	LL_CI TOST	UL_CI TOST	LL_CI ZTEST	UL_CI ZTEST
25.974	< .001	-7.927	0.000	0.218	0.315	0.208	0.324

Source: Owned by The Authors

5. Discussion

The findings of this meta-analysis provide robust and compelling evidence that Islamic religiosity exerts a statistically significant and positive influence on purchase intention, with an aggregated effect size of 0.266 (95% CI: 0.208–0.324), indicating a moderate yet consistent relationship across diverse empirical contexts. This result not only confirms the central role of religiosity in shaping consumer decision-making within Muslim-majority and Muslim-minority markets but also offers the first quantitative synthesis of this relationship through a meta-analytic lens. Prior systematic literature reviews (SLRs) have consistently highlighted the relevance of religiosity in consumer behavior—particularly in halal consumption (Fauzi, 2023), Islamic finance (Andespa et al., 2024), and sustainable consumption (Mat et al., 2022)—but none have quantitatively integrated effect sizes to derive a unified estimate. The present study fills this critical gap by demonstrating that, on average, higher levels of Islamic religiosity are associated with stronger intentions to purchase products and services aligned with Islamic values, thereby offering a more precise and generalizable conclusion than previously available.

The observed effect size of 0.266 is both statistically and practically meaningful. According to Cohen's (1988) benchmarks, this corresponds to a small-to-medium effect, suggesting that religiosity, while not the sole determinant, is a key psychological driver of purchase intention in Islamic consumer contexts. This finding aligns with theoretical frameworks such as the Theory of Planned Behavior (TPB) and Theory of Reasoned Action (TRA), which posit that attitudes, subjective norms, and perceived behavioral control shape behavioral intentions. In the context of Islamic religiosity, these constructs are deeply embedded in religious beliefs and practices. For instance, the internalization of Shariah principles fosters a normative belief that certain consumption behaviors (e.g., avoiding non-halal food or interest-based financial products) are morally obligatory, thereby strengthening intention to act in accordance with those beliefs (Floren et al., 2020; Shabbir & Ibrahim, 2023). The consistency of the effect across 66 studies further underscores the robustness of this relationship, even in the face of cultural, geographic, and methodological diversity.

A particularly salient insight from this meta-analysis is the differential impact of intrinsic versus extrinsic religiosity. Intrinsic religiosity—defined as a genuine, internalized commitment to Islamic faith and practice—emerges as a stronger predictor of purchase intention, especially in domains such as halal-certified products and Islamic financial services.

This is consistent with studies showing that devout Muslims are more likely to prioritize religious compliance over convenience or cost when making consumption decisions (Alimusa et al., 2024; Febriandika & Millatina, 2023). In contrast, extrinsic religiosity—motivated by social conformity, cultural identity, or external validation—demonstrates weaker and more inconsistent effects, particularly in non-religious product categories such as luxury brands or counterfeit goods. This distinction echoes Allport's (1966) classical dichotomy of intrinsic and extrinsic religious orientation and reinforces the argument that the depth and authenticity of religious commitment matter more than mere affiliation or ritual observance in predicting consumer behavior.

The low level of heterogeneity ($I^2 = 11\%$) observed in this meta-analysis is both surprising and informative. Typically, studies on religiosity and consumer behavior exhibit high variability due to differences in measurement scales, cultural contexts, and sample characteristics. However, the minimal heterogeneity here suggests a remarkable degree of consistency in how Islamic religiosity influences purchase intention across studies, regardless of geographic location, product type, or research design. This could be attributed to the shared doctrinal foundations of Islam that emphasize halal and haram distinctions, making religious guidelines highly salient and actionable for Muslim consumers worldwide. The Q-statistic ($p = 0.246$) further supports the conclusion that the observed variability is largely due to sampling error rather than systematic differences, enhancing confidence in the generalizability of the findings.

Publication bias assessments—including Fail-Safe N (2,097), Egger's regression ($p = 0.467$), and Kendall's Tau ($p = 0.526$)—all indicate that the results are unlikely to be distorted by selective reporting or the omission of null findings. The symmetrical funnel plot and high Fail-Safe N value suggest that even if numerous unpublished studies with null effects exist, they would not be sufficient to nullify the observed effect. This strengthens the credibility of the meta-analytic estimate and positions it as a reliable benchmark for future research and marketing applications.

Moreover, the Two One-Sided Tests (TOST) for equivalence testing confirm that the observed effect size falls within a predefined equivalence interval (LL_CI = 0.218, UL_CI = 0.315), reinforcing the conclusion that the relationship between Islamic religiosity and purchase intention is not only statistically significant but also substantively meaningful and consistent across studies. This equivalence provides further validation that the effect is stable and replicable, countering potential criticisms of statistical fragility or contextual specificity.

Despite these strengths, the discussion must also acknowledge the limitations inherent in the current body of literature. One major concern is the reliance on religiosity scales originally developed for non-Muslim populations and subsequently adapted for Islamic contexts. As noted by Ul-Haq et al. (2020), many existing scales fail to capture uniquely Islamic dimensions such as *ibadaat* (acts of worship) and *mu'amalat* (social and economic transactions), leading to potential construct invalidity. This may explain why some studies report weaker or inconsistent effects, particularly when extrinsic religiosity is measured using generic religious commitment scales that do not reflect the holistic nature of Islamic faith. Future research must prioritize the development and validation of Sharia-compliant religiosity scales that reflect the multidimensional nature of Islamic practice, integrating both personal devotion and social responsibility.

Another limitation lies in the dominance of certain theoretical frameworks, particularly TPB and TRA, which, while useful, may oversimplify the complex interplay between faith, identity, and consumption. Alternative models such as the Value-Belief-Norm (VBN) theory, Self-Determination Theory, or Maqashid-based frameworks—which emphasize ethical reasoning, intrinsic motivation, and higher-order objectives of Sharia (e.g., justice, welfare, and dignity)—remain underutilized. Integrating these perspectives could provide deeper

insights into how religious values translate into sustainable and ethical consumption patterns (Raza & Rasheed, 2023; Syahid et al., 2024).

Furthermore, while the current analysis includes studies from both Muslim-majority and non-Muslim countries, the majority of samples are drawn from Southeast Asia and the Middle East. This geographic concentration may limit the generalizability of findings to Muslim minorities in Western contexts, where religious identity may function differently due to acculturation pressures and market availability. Future research should expand database searches beyond Scopus and include non-English publications, regional journals, and qualitative studies to capture a more inclusive and culturally nuanced understanding of Islamic consumer behavior.

In practical terms, these findings offer actionable implications for marketers, policymakers, and brand managers targeting Muslim consumers. First, brands should emphasize authenticity and religious alignment in their messaging, particularly for halal and Islamic financial products. Second, marketing strategies should appeal to intrinsic religiosity by highlighting spiritual benefits, ethical compliance, and long-term well-being, rather than relying solely on functional attributes. Third, companies should invest in building trust through transparent certification processes and partnerships with credible religious authorities, as religiosity enhances sensitivity to halal integrity and moral accountability (Nabi et al., 2023; Sharma et al., 2022).

6. Conclusion

This meta-analysis represents the first comprehensive quantitative synthesis of the relationship between Islamic religiosity and purchase intention, drawing on 66 Scopus-indexed studies to provide a robust and generalizable estimate of effect size. The findings confirm a significant positive relationship (effect size = 0.266, $p < 0.001$) with minimal heterogeneity ($I^2 = 11\%$), indicating that Islamic religiosity consistently enhances purchase intention across diverse cultural and product contexts. Intrinsic religiosity emerges as a stronger predictor than extrinsic religiosity, particularly in domains governed by Sharia principles such as halal consumption and Islamic finance, underscoring the importance of genuine religious commitment over symbolic or social expressions of faith.

The study makes several key contributions to both academic literature and practical marketing strategy. First, it establishes a unified benchmark for the magnitude of religiosity's influence on consumer behavior, filling a critical gap in the existing literature where qualitative SLRs have dominated without quantitative integration. Second, it validates the reliability of the findings through rigorous assessments of heterogeneity, publication bias, and equivalence testing, thereby enhancing confidence in the robustness of the conclusions. Third, it highlights the need for culturally and theologically grounded measurement tools that accurately reflect the multidimensional nature of Islamic religiosity, including Ibadaat and Mu'amalat, which are often overlooked in adapted Western scales.

Despite its contributions, the study is limited by its reliance on English-language, Scopus-indexed articles, potentially excluding valuable research from non-Western and non-English academic communities. Additionally, the predominance of TPB and TRA frameworks limits theoretical diversity, calling for greater integration of alternative models such as maqashid-based theory or Hunt & Vitell's ethical decision-making model. Future research should also explore moderating factors such as age, gender, income, and cultural context, as well as employ longitudinal designs to establish causal relationships.

In conclusion, this meta-analysis affirms that Islamic religiosity is a pivotal driver of consumer behavior in Muslim markets. For scholars, it calls for more nuanced, context-sensitive, and theory-driven research. For practitioners, it offers a clear directive: to resonate with Muslim consumers, brands must align not just with halal standards, but with the deeper

spiritual and ethical values that define Islamic identity. By doing so, they can build lasting trust, loyalty, and market relevance in one of the world's fastest-growing consumer segments.

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The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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The authors declare that they understand and have fully adhered to the Ethical Guidelines for publication. This manuscript is original, has not been published previously, and is not under consideration for publication elsewhere.

Data availability

The data that support the findings of this study are available from the corresponding author upon reasonable request..

AI assistance statement

AI was used only to improve the language clarity and grammar of the manuscript. All ideas, analyses, and interpretations were entirely developed and verified by the authors.