

Social Media, E-Commerce, and the Online Purchase-Decision Process among Indonesian Generation Z University Students: An Exploratory Maqāṣid-Inspired Analysis

Jasri^{1*} and Rafiqa Hastharita²

¹Department of Sharia Economic Law (Mu'amalah), Faculty of Islamic Studies, Universitas Muhammadiyah Makassar, Makassar, 90221, Indonesia

²Department of Accounting Education, Faculty of Economics and Business, Universitas Negeri Makassar, Makassar, 90222, Indonesia

ABSTRACT

Purpose – Guided by the Stimulus-Organism-Response (S-O-R) framework, this study examines how social-media and e-commerce shopping functions relate to the online purchase-decision process among Indonesian Generation Z university students. It also explores a maqāṣid-inspired ethical consumption index (MECI) as a predictor and potential moderator.

Design/methodology/approach – The study re-analyzed an archived item-level dataset, retaining the first 288 chronological responses and removing six duplicates, resulting in N = 282. Measurement diagnostics included KMO, Bartlett's test, parallel analysis, exploratory factor analysis, reliability, HTMT, and Harman's single-factor test. Hierarchical regression used mean-centered predictors and HC3 robust inference.

Findings/Results – Parallel analysis supported one-factor structures for Social Media, E-Commerce, and the purchase-decision process, while MECI showed two factors. Social Media was positively associated with the purchase-decision process ($B = 0.390$, $p = 0.004$), whereas E-Commerce was marginal ($B = 0.183$, $p = 0.058$). Adding MECI increased R^2 from 0.298 to 0.475 ($\Delta R^2 = 0.177$, $p < 0.001$), with a positive association ($B = 0.461$, $p < 0.001$). However, interaction effects were negligible and nonsignificant ($\Delta R^2 = 0.0002$, $p = 0.950$), indicating no moderation by MECI.

Originality/Value – This study contributes by using empirically diagnosed composites and an exploratory ethical index rather than assuming unvalidated latent constructs. It integrates digital-channel effects and maqāṣid-inspired ethics within an S-O-R framework while treating ethical moderation as an empirical rather than predetermined theoretical role.

ARTICLE INFO

Keywords:

Social Media, E-Commerce, Online Purchase-Decision Process, Maqāṣid-Inspired Ethical Consumption, S-O-R

Article Information:

Received: 20/07/2026

Revise: 15/08/2026

Accepted: 05/09/2026

ISSN:

2985-3168 (Online)

2985-3222 (Print)

*Corresponding Author at:

Department of Sharia Economic Law (Mu'amalah), Faculty of Islamic Studies, Universitas Muhammadiyah Makassar, Jl. Sultan Alauddin No. 259, Makassar 90221, Indonesia

E-mail addresses: jasri@unismuh.ac.id (Jasri)

The work is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International \(CC BY-SA 4.0\)](https://creativecommons.org/licenses/by-sa/4.0/)



1. Introduction

Digital retail increasingly integrates product discovery, peer communication, information search, persuasion, and transaction functions within the same online journey. For university-age Generation Z users, social-media feeds, influencer content, live shopping, reviews, platform recommendations, ratings, and embedded transactions can operate as decision cues rather than as separate stages of shopping (Achmad et al., 2024; Le & Ngoc, 2024; Ngo et al., 2023; Roy et al., 2025; Tseng et al., 2025). This integration makes it important to distinguish the digital channel through which cues are encountered from the psychological and evaluative processes through which consumers respond to them.

The dependent measure requires a cautious process-based interpretation. The archived six outcome items do not measure sudden urge, loss of control, purchase speed, or post-purchase regret. They instead cover need recognition, pre-purchase information search, response to product content, price evaluation, transaction convenience, and repurchase tendency. Impulse buying remains an adjacent literature involving unplanned action, affective urgency, and reduced deliberation, rather than a synonym for a broad online decision process (Iyer et al., 2020; Chetoui & El Bouzidi, 2023; Hoang & Khoa, 2022; Babolian Hendijani & Jaszus, 2025; Pallavi et al., 2025; Veronica et al., 2025). Recent platform-specific studies likewise model e-impulsive buying as a distinct outcome (Ngo et al., 2024; Kaur et al., 2026). The outcome is therefore labeled the Online Purchase-Decision Process Composite (OPDPC), a broad observed composite rather than a standard latent construct.

A second issue concerns the predictor measures. The Social Media (SM) and E-Commerce (EC) item sets contain several parallel functions - price advantage, product search, reviews, advertising exposure, and seller-related information - delivered through different channels. They are therefore treated here as channel-specific shopping-function composites rather than as fully validated and sharply distinct latent constructs. This distinction is important because comparing standardized coefficients as if SM and EC were psychologically independent constructs could overstate what the measurement model supports.

The Islamic-ethics measure also requires caution. Its six items combine halal attention, perceived benefit, avoidance of harmful or prohibited goods, resistance to unnecessary purchasing, and procedural fairness. These domains are relevant to Islamic consumption ethics, but they do not constitute a validated *maqāṣid al-sharīʿah* scale or systematic coverage of the classical five necessities. The measure is therefore renamed the *Maqāṣid-Inspired Ethical Consumption Index* (MECI), explicitly signaling an exploratory index rather than a validated latent orientation (Pradana et al., 2024; Yudha et al., 2025).

To integrate these elements theoretically, the study adopts the Stimulus-Organism-Response (S-O-R) framework as its principal lens. SM and EC are treated as observed digital stimuli, whereas OPDPC represents the observed response. Organism-stage evaluations - such as need assessment, usefulness, price appraisal, trust, halalness, perceived harm, and moral obligation - are theoretically relevant but were not directly measured. Recent digital-consumption and Islamic-consumer studies provide substantive support for these evaluative processes without converting them into measured mediators in the present model.

S-O-R is selected because the archived measures are organized around environmental shopping cues and an observed purchase-process response, rather than around the belief-intention architecture required by the Theory of Planned Behavior or the media-needs structure emphasized by Uses and Gratifications Theory. The framework is therefore used conservatively: it provides a coherent explanation for why channel-based digital cues can be

associated with purchasing responses, while the unobserved organism stage is not statistically imputed. This distinction also prevents the ethical index from being treated as a measured psychological mediator when the questionnaire did not contain direct measures of moral obligation, perceived behavioral control, self-control, or need-versus-want appraisal. In this sense, the theoretical revision narrows rather than expands the causal claims of the study.

The study makes four substantive contributions. First, it reconstructs the measurement structure from archived item-level data rather than relying only on reliability statistics. Second, it defines the sampling frame as a purposively recruited university-student sample rather than a nationally representative Indonesian Generation Z population. Third, it reports a complete hierarchical regression with centering, model-change statistics, interaction diagnostics, and heteroscedasticity-robust inference. Fourth, it reframes the Islamic-ethics measure as an exploratory maqāsid-inspired index and distinguishes its lower-order association from the unsupported interaction tests.

2. Literature Review and Hypothesis Development

2.1 Stimulus-Organism-Response as the guiding framework

The S-O-R framework originates in environmental psychology, where environmental stimuli are theorized to influence internal organismic states and subsequent approach-avoidance responses (Mehrabian & Russell, 1974). Its application to online retailing was subsequently formalized by Eroglu et al. (2001), who conceptualized virtual-store cues as stimuli that operate through cognitive and affective states to shape shopping responses. The S-O-R framework therefore distinguishes environmental stimuli from internal organismic processing and behavioral responses. In digital commerce, interface cues, social communication, reviews, advertising, seller information, and transaction features can function as stimuli whose effects depend on users' cognitive and affective evaluations. S-O-R has been applied to social-commerce, live-shopping, and Muslim consumer settings to explain how digital or product cues are translated into purchase-related responses (Indriastuti et al., 2024; Nugraha et al., 2024; Wan Mustaffa & Wan Ismail, 2025; Yuniarti et al., 2026).

The present dataset does not directly measure a full organism stage. Accordingly, S-O-R is used as a guiding theoretical architecture rather than as a fully estimated mediation model. SM and EC represent channel-specific digital stimuli; OPDPC is the observed response composite; and MECI represents a pre-existing ethical-evaluative index that may be associated with the response and may, in principle, condition the interpretation of digital stimuli. The unmeasured organism mechanisms are treated as future theoretical extensions, not as empirical findings.

The distinction between stimulus and organism is particularly important for interpreting the overlap between SM and EC. Several archived items refer to comparable shopping functions - price information, product search, reviews, advertising, and seller cues - but they locate those functions in different digital environments. Under S-O-R, this pattern is more defensibly interpreted as exposure to functionally similar stimuli through different channels than as evidence of two completely independent psychological dispositions. Social-media environments add peer communication, social presence, influencer cues, and conversational seller contact, whereas e-commerce environments more explicitly organize ratings, store signals, search, and transaction infrastructure. The revised model therefore asks whether these channel-specific composites are associated with the purchase-decision process after

accounting for their overlap, rather than claiming that they are already validated latent dimensions of digital consumption.

The response side of the model is also bounded. OPDPC covers several points in an online purchasing sequence, from recognizing a need and searching for information to price evaluation, transaction convenience, and repeat purchasing. These stages can be theoretically connected as parts of a decision process, but they are not assumed to be interchangeable manifestations of a single narrow psychological state. The factor analysis is therefore used to evaluate whether the archived items show sufficient empirical coherence for a composite analysis, while the terminology continues to acknowledge their process heterogeneity. This combination of theoretical and measurement caution directly addresses the risk of giving a broad composite the stronger status of a standardized consumer-behavior construct.

2.2 Social-media shopping functions and the purchase-decision process

Social media can increase product visibility and provide peer communication, reviews, descriptions, advertising, influencer cues, and direct seller communication. These functions may reduce information uncertainty while also increasing persuasive exposure. Research among Generation Z links social-media communication, social support, influencer credibility, and social-commerce interactivity with purchase intentions and behavioral responses (Ates et al., 2024; Le & Ngoc, 2024; Muhammad et al., 2024; Porsan et al., 2024; Tseng et al., 2025). Live-stream and social-presence studies likewise show that interactive social environments can influence purchasing, although impulse-buying outcomes in that literature should not be conflated with the present process composite (Anatasia et al., 2025; Andika et al., 2025; Costa Pacheco et al., 2025; Ngo et al., 2023).

Because the archived SM items capture both informational and persuasive shopping functions, the expected relationship concerns the broader online purchase-decision process rather than impulsivity.

Within an S-O-R interpretation, the association of social-media shopping functions with OPDPC may plausibly involve several organism-stage evaluations, although these mechanisms were not directly measured in the present study. Reviews and product descriptions can support cognitive appraisal; peer communication and social presence can shape trust and perceived social relevance; advertising and influencer content can increase salience and affective engagement; and seller chat can reduce uncertainty before purchase. These pathways point in the same broad direction - greater engagement with the purchase-decision process - but they need not produce impulsivity. A consumer may respond to a social-media cue by gathering more information, comparing price, or postponing purchase just as plausibly as by purchasing immediately. The present hypothesis is therefore limited to a positive association with the broad process composite.

H1. The Social Media channel-function composite is positively associated with the online purchase-decision process composite (OPDPC).

2.3 E-commerce shopping functions and the purchase-decision process

E-commerce platforms organize product search, price comparison, reviews, ratings, seller signals, payment access, and transaction convenience. Website quality, trust, perceived risk, logistics service, online reviews, and shopping experience can influence purchase and repurchase outcomes among Generation Z (Chee-Hua et al., 2024; Cuc et al., 2025; Le et al., 2025; An Ngo et al., 2025; Orelskaia et al., 2025; Zhou & Hudin, 2025). Mobile-commerce

convenience, effort expectancy, online-shopping motives, and distribution capability further illustrate how platform functionality can shape decision processes (Al Halbusi et al., 2022; Koch et al., 2020; Moreno et al., 2023; Wicaksono et al., 2022).

The EC composite therefore represents channel-specific platform functions, not a latent measure of urgency or frictionless impulsivity.

The distinction from social media is consequently one of channel emphasis rather than complete functional separation. E-commerce platforms typically formalize product search, store ratings, reviews, payment access, and transaction completion, while social media more visibly embeds shopping within communication and content streams. For a student sample that routinely moves between social platforms and marketplaces, these environments may form a connected shopping journey: discovery can occur on social media, verification on an e-commerce platform, and purchase through whichever channel offers greater convenience or trust. This behavioral reality helps explain why empirical overlap between SM and EC is expected and why the revised analysis treats discriminant evidence as a matter of degree rather than assuming perfectly independent predictors.

H2. The E-Commerce channel-function composite is positively associated with OPDPC.

2.4 MECI as an exploratory ethical index and boundary condition

MECI combines six ethically relevant considerations: halal status, usefulness or benefit, avoidance of prohibited or harmful products, restraint regarding unnecessary purchases, resistance to promotion-driven unnecessary buying, and procedural fairness when resolving product discrepancies. These domains overlap with Islamic consumer research on halal awareness, *maslahah*, religiosity, trust, value congruence, and self-regulatory purchasing behavior, but they should not be interpreted as a validated *maqāṣid* scale (Berakon et al., 2023; Sumarliah et al., 2021; Pradana et al., 2024; Jalees et al., 2024; Anwar, 2025; Bonang et al., 2025; Yudha et al., 2025).

Within an S-O-R interpretation, such an ethical index may influence the organism stage through need-versus-want evaluation, benefit assessment, halal awareness, harm avoidance, self-control, or moral obligation. Those mechanisms were not measured here. Consequently, moderation is no longer treated as the default theoretical role of *maqāṣid*-inspired ethics. The interaction terms are retained only as exploratory boundary-condition tests, while the lower-order MECI coefficient is reported transparently. Future work should directly test mediation or sequential evaluation rather than infer these pathways from a non-significant interaction.

A moderation hypothesis would require the ethical index to change how strongly a given digital stimulus is translated into the observed response. That possibility is theoretically conceivable, for example if ethical considerations reduce responsiveness to promotional cues that encourage unnecessary purchasing. Yet the same index could also operate in a more general way by shaping product screening, need evaluation, or acceptable transaction conduct regardless of whether the cue originates from social media or e-commerce. The latter pathway would appear statistically as a lower-order association or, in a more fully specified model, as an antecedent of measured organism-stage variables. The revised study therefore retains the interaction terms because they were part of the original analytical question, but it treats them as exploratory tests rather than privileged evidence about how *maqāṣid*-inspired ethics must function.

This reframing is also consistent with the content of the six ethical items. Attention to halalness and avoidance of prohibited or harmful goods relate to permissibility and harm avoidance; usefulness reflects benefit appraisal; restraint items concern unnecessary consumption; and procedural fairness concerns post-transaction conduct. These domains are ethically meaningful but not conceptually homogeneous enough to support broad claims about *maqāṣid al-sharī'ah* as a single latent moderator. The term index is therefore intentional: it preserves the empirical information contained in the archived items while reserving stronger claims of construct validity for future scale-development work involving expert review, pilot testing, factor confirmation, convergent and discriminant validity, and measurement invariance.

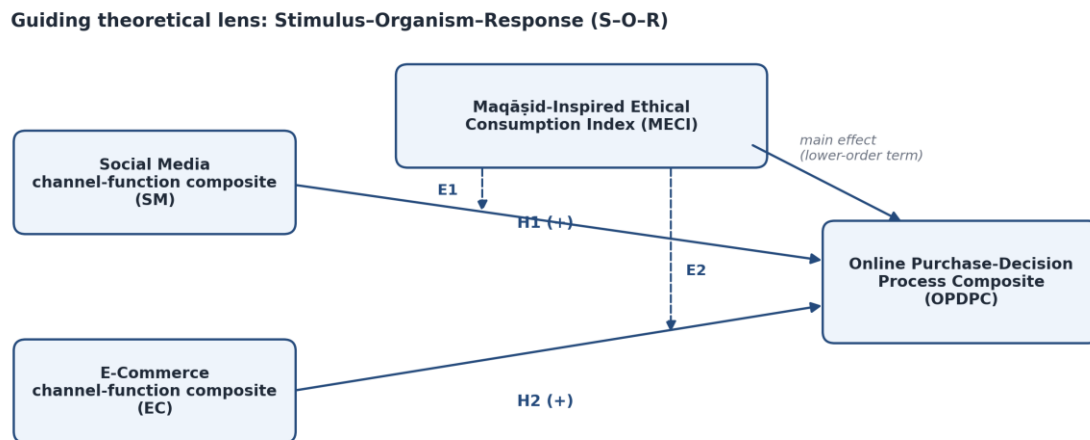
E1. Exploratory test: Does MECI alter the association between the SM composite and OPDPC?

E2. Exploratory test: Does MECI alter the association between the EC composite and OPDPC?

2.5 Analytical model

Figure 1 separates the tested regression structure from the broader S-O-R interpretation. Solid paths represent lower-order associations estimated in the hierarchical model; dashed paths represent exploratory interaction tests. Organism-stage processes are acknowledged theoretically but are not represented as measured mediators.

Figure 1. S-O-R-informed analytical model and exploratory ethical-index tests



Note. SM and EC represent the observed digital-channel composites, whereas OPDPC represents the observed response. Organism-stage variables such as trust, perceived benefit, halal awareness, self-control, and moral obligation were not directly measured and should be interpreted only as theoretically plausible mechanisms rather than tested mediators or demonstrated pathways. MECI was empirically evaluated as a lower-order predictor and through exploratory interaction tests.

3. Methodology

3.1 Research design and analytic sample reconstruction

This study uses a quantitative cross-sectional design and a re-analysis of the archived raw questionnaire. The Google Forms record and archived dataset ultimately contain 312

timestamped responses. However, the original submitted manuscript and the analysis on which its reported results were based documented a 288-response sample. Thus, the value of 288 was not selected during the present re-analysis; rather, it represents the earlier analytic snapshot underlying the originally submitted manuscript. To preserve comparability with that original analysis and to avoid retrospectively expanding the analytic sample after manuscript preparation, the present re-analysis was restricted to the first 288 chronologically recorded responses. Within this 288-record analytic snapshot, six later records exactly duplicated earlier records across all available demographic fields and all 24 Likert items when timestamp was ignored; the first occurrence was retained. The resulting primary analytic sample was therefore $N = 282$, with no missing responses on the 24 measurement items. The additional responses accumulated in the Google Forms archive after the original 288-response analytic snapshot were not incorporated into the primary re-analysis because they were not part of the dataset underlying the originally submitted results.

The primary analysis did not exclude respondents solely because they used invariant Likert response patterns, because the archive contained no respondent identifiers or attention-check items that would justify classifying such patterns as invalid. A sensitivity analysis excluding 28 zero-variance response profiles is reported separately to assess whether the substantive interaction findings depend on those cases.

3.2 Sampling frame and data collection

Participants were purposively recruited through student networks, social-media groups, and online communities. The archived questionnaire contains study-program and semester information for every retained respondent, indicating that the sample is a university-student sample rather than a probability sample of the Indonesian Generation Z population. The questionnaire did not preserve university name, province of residence, employment status, or income; therefore, national representativeness is not claimed.

Age was recorded in bands rather than as exact birth year. Most participants were aged 21–25 years (63.1%), and 72.3% were women. Because exact birth years were not available in the archived dataset, Generation Z cohort membership could not be independently verified for the two respondents in the 26–30-year age category. These characteristics define the empirical scope of the study and further limit generalization beyond similar digitally active university-student populations.

3.3 Measures and construct status

All 24 items used a five-point agreement scale (1 = strongly disagree to 5 = strongly agree). Six items were assigned to each study composite/index. Following re-examination of the measurement structure, the variables are described as study-specific composites or an exploratory index rather than as established latent constructs. Table 1 summarizes their operational content and interpretive boundaries.

Table 1. Construct operationalization and measurement boundaries

Measure	Operational content	Interpretive status / boundary
Social Media (SM)	Price advantage; product-search convenience; reviews/comments; product	Channel-specific shopping-function composite; not a validated latent construct and not a measure of social-

	descriptions; advertising media intensity or exposure; seller chat. impulsivity.
E-Commerce (EC)	Price advantage; product-search convenience; product reviews; follower signals; seller ratings; advertising exposure. Channel-specific platform-function composite; functionally overlaps with SM and is not a measure of checkout urgency or impulsivity.
Maqāṣid-Inspired Ethical Consumption Index (MECI)	Halal attention; benefit/usefulness; avoidance of harmful/prohibited goods; restraint toward unnecessary buying; resistance to promotion-driven unnecessary buying; procedural fairness. Exploratory ethical-consumption index inspired by maqāṣid principles; not a validated maqāṣid scale, general religiosity scale, or systematic measure of the five necessities.
Online Purchase-Decision Process Composite (OPDPC)	Need recognition; information search; response to product content; price evaluation; transaction convenience; repurchase tendency. Broad process composite; not a measure of purchase speed, sudden urge, loss of control, regret, waste, debt, or unethical consumption.

3.4 Measurement diagnostics

Measurement diagnostics were reconstructed from the item-level data. Sampling adequacy was assessed using the Kaiser-Meyer-Olkin (KMO) statistic and Bartlett's test of sphericity. Factor retention was evaluated with parallel analysis using 500 random correlation matrices and the 95th-percentile criterion. Exploratory factor analysis used maximum-likelihood factor extraction with varimax rotation. Reliability was summarized with Cronbach's alpha. Because SM and EC contain parallel functions, their empirical separation was also examined through joint exploratory analysis and the heterotrait-monotrait ratio (HTMT) calculated from item correlations.

Common method bias was examined preliminarily with Harman's single-factor procedure across all 24 items. This test cannot rule out common method variance, and no marker variable or social-desirability scale was included in the original questionnaire. The results are therefore interpreted only as a preliminary diagnostic, with social-desirability risk retained as an explicit limitation.

The measurement strategy was deliberately exploratory because the original instrument was not developed with a preserved validation dossier that would justify confirmatory modeling as if the factor structure were established a priori. Separate factor analyses were therefore used to evaluate within-composite coherence, while joint analyses were used to diagnose overlap across conceptually adjacent item sets. Parallel analysis was prioritized over the eigenvalue-greater-than-one rule for factor retention because it compares observed eigenvalues with those expected from random data. HTMT was treated as a diagnostic of empirical separation rather than as proof of discriminant validity in a fully specified latent measurement model.

3.5 Hierarchical regression and robustness procedures

Composite scores were calculated as the sum of the six constituent items. The hierarchical regression was reconstructed in three steps: Step 1 entered SM and EC; Step 2 added MECI as a lower-order predictor; Step 3 added SM × MECI and EC × MECI interaction terms. SM, EC, and MECI were mean-centered before the interactions were created. The model was specified as $OPDPC = \beta_0 + \beta_1SM_c + \beta_2EC_c + \beta_3MECI_c + \beta_4(SM_c \times MECI_c) + \beta_5(EC_c \times MECI_c) + \varepsilon$, following regression-based moderation principles (Hayes, 2022).

For each step, R^2 , adjusted R^2 , overall F, ΔR^2 , F-change, and significance of F-change were calculated. Tolerance and VIF were evaluated for the full centered interaction model. Breusch-Pagan tests indicated heteroscedasticity in Step 1 and the full model; therefore, coefficient inference is reported using HC3 heteroscedasticity-robust standard errors and confidence intervals. Conventional nested-model F-change statistics are reported alongside a robust joint Wald test for the two interaction terms.

4. Results and Discussion

4.1 Respondent profile

From the original 288-response analytic snapshot, 282 non-duplicate records were retained for the primary analysis after duplicate-record screening. Table 2 summarizes the demographic and academic characteristics of this analytical sample.

Table 2. Characteristics of the Analytical Sample (N = 282)

Characteristic	Category	n	%
Gender	Female	204	72.3
	Male	78	27.7
Age	≤20 years	102	36.2
	21–25 years	178	63.1
	26–30 years	2	0.7
Student status	University student	282	100.0
Semester	II	57	20.2
	IV	32	11.3
	V	1	0.4
	VI	186	66.0
	VII	4	1.4
	VIII	2	0.7

Note. University-student status was inferred from the presence of study-program and semester information in the archived questionnaire

The analytical sample was predominantly female (72.3%) and concentrated in the 21–25-year age group (63.1%). All analyzed records contained academic-program and semester information, indicating that the participants represented a university-student segment of Indonesian Generation Z. Accordingly, the findings should be interpreted as evidence from a

purposely recruited student-based sample rather than as statistically representative of the broader Indonesian Generation Z population.

Detailed study-program affiliation was not used as a predictor, control variable, moderator, or grouping variable in the statistical analyses and is therefore not presented in the main respondent-profile table. In addition, the archived questionnaire did not contain separate variables that would permit reliable reporting of province of residence, employment status, income, or broader geographic distribution. These characteristics therefore cannot be used to assess national representativeness and are acknowledged as limitations of the sampling frame.

4.2 Exploratory Measurement Diagnostics

The full 24-item correlation matrix was factorable (KMO = 0.874; Bartlett $\chi^2(276) = 2875.49$, $p < 0.001$). Parallel analysis retained three factors for the 24-item set rather than the four labels used in the original regression design. This result cautions against treating all four variables as cleanly established latent constructs. Scale-specific diagnostics are summarized in Table 3.

Table 3. Exploratory measurement diagnostics

Measure	KMO	Parallel-analysis factors	Factor-loading pattern	Cronbach α	Interpretation
SM	0.740	1	One-factor loadings: 0.407–0.639	0.740	Acceptable provisional channel-specific shopping-function composite
EC	0.793	1	One-factor loadings: 0.546–0.766	0.826	Acceptable provisional channel-specific platform-function composite
MECI	0.747	2	Factor 1: ME1–ME3 = 0.577–0.769; Factor 2: ME4–ME6 = 0.526–0.779	0.767	Multidimensional exploratory ethical index; not a unidimensional or validated maqāṣid scale
OPDPC	0.822	1	One-factor loadings: 0.424–0.787	0.815	Broad but empirically coherent purchase-decision process composite; retained as an observed composite rather than a standard latent construct

For OPDPC, KMO = 0.822 indicated adequate sampling adequacy, and parallel analysis retained one factor. The six items loaded between 0.424 and 0.787, with Cronbach's $\alpha = 0.815$. These results provide empirical support for using a summed OPDPC score in the present exploratory analysis. Nevertheless, the cautious process-composite terminology is retained because the items span conceptually distinct stages, from need recognition and information search to transaction convenience and repurchase, rather than interchangeable manifestations of a narrowly defined latent decision state.

SM and EC each showed a one-factor solution when analyzed separately. When their 12 items were analyzed jointly, parallel analysis retained two factors, but several parallel-function items cross-loaded rather than separating perfectly by channel. The SM-EC composite correlation was $r = 0.646$ and HTMT = 0.806. This provides evidence that respondents did not treat the two channel composites as identical, but the overlap is substantial enough that the revised discussion avoids strong claims that one coefficient represents a wholly distinct psychological construct from the other.

MECI did not behave as a unidimensional measure. Parallel analysis retained two factors. The first three items halalness, usefulness, and avoidance of harmful or prohibited goods formed one cluster, whereas the last three items need restraint, resistance to promotion-driven unnecessary purchasing, and procedural fairness formed a second cluster. This pattern supports treating MECI as an exploratory ethical-consumption index rather than as a validated unidimensional maqāṣid latent construct. Because MECI is used here as an exploratory index aggregating selected and conceptually related ethical-consumption domains rather than as a reflective unidimensional scale, the summed score was retained for the regression re-analysis to preserve the original substantive research question and the informational content of the archived instrument. Its multidimensionality is nevertheless treated as a substantive measurement limitation and precludes interpretation of the summed score as a validated or comprehensive measure of maqāṣid al-sharī‘ah. MECI also showed some ceiling compression, with 17.4% of respondents obtaining the maximum composite score, which further warrants caution when interpreting its associations with the other study variables.

Taken together, the measurement results support continued use of observed composites for the regression re-analysis, but not the stronger claim that the questionnaire establishes four clean latent constructs. OPDPC showed sufficient one-factor coherence for an exploratory summed score despite its broad process content. SM and EC were each coherent within channel but only partially separable when analyzed together. MECI showed the clearest multidimensional tendency. The regression results are therefore interpreted as associations among study-specific observed scores. This reporting choice is deliberately more conservative than relabeling the exploratory factor solution as a validated measurement model.

4.3 Composite associations, discriminant-overlap diagnostics, and common method check
Table 4. Pearson correlations (below diagonal) and HTMT diagnostics (above diagonal)

Measure	SM	EC	MECI	OPDPC
SM	—	0.806	0.535	0.656
EC	0.646	—	0.482	0.563
MECI	0.403	0.365	—	0.784
OPDPC	0.523	0.458	0.613	—

Harman's single-factor procedure indicated that the first unrotated factor accounted for 31.6% of total item variance. This does not indicate a dominant single method factor, but it does not eliminate common method variance. All constructs were measured from the same respondents, at the same time, using the same response format, and MECI is particularly susceptible to socially desirable responding.

4.4 Hierarchical regression

Table 5 presents the reconstructed three-step model. Step 1 explained 29.8% of OPDPC variance. Adding MECI in Step 2 increased R^2 by 0.177. Adding the two interaction terms in Step 3 increased R^2 by only 0.0002, with a non-significant F-change ($p = 0.950$).

Table 5. Hierarchical regression model summary

Step	Variables added	R^2	Adj. R^2	ΔR^2	F / F-change	p
1	SM, EC	0.298	0.293	—	F = 59.251	<0.001
2	+ MECI	0.475	0.470	0.177	F-change = 93.895	<0.001
3	+ SM×MECI, EC×MECI	0.476	0.466	0.0002	F-change = 0.051	0.950

Note. ΔR^2 values were calculated from unrounded R^2 estimates; displayed R^2 values are rounded.

In the full centered model, VIF values ranged from 1.272 to 1.879 and tolerance ranged from 0.532 to 0.786, providing no evidence of serious interaction-model multicollinearity. The robust joint Wald test for the two interaction terms was also non-significant ($\chi^2(2) = 0.016$, $p = 0.992$).

The hierarchical pattern is informative for the theoretical question. Step 2 produced a substantial increase in explained variance when MECI was entered as a lower-order term, whereas Step 3 produced virtually no incremental explanatory gain when the two interaction terms were added. Because the interaction block was tested after centering and because collinearity diagnostics were acceptable, the null interaction result is less plausibly attributed to the instability seen in the earlier uncentered specification. The robust joint test reaches the same conclusion as the conventional F-change test. Accordingly, the revised interpretation focuses on the contrast between the lower-order MECI association and the near-zero interaction block rather than on isolated p-values alone.

4.5 HC3-robust regression coefficients

Because heteroscedasticity was detected, hypothesis and exploratory-interaction decisions are based on HC3-robust inference (Table 6).

Table 6. Hierarchical regression coefficients with HC3 robust standard errors

Step	Predictor	B	HC3 SE	Std. β	p	95% robust CI
1	SM	0.390	0.137	0.390	0.004	[0.121, 0.659]
1	EC	0.183	0.096	0.206	0.058	[-0.006, 0.372]
2	SM	0.257	0.113	0.256	0.023	[0.036, 0.478]
2	EC	0.109	0.085	0.122	0.204	[-0.059, 0.276]
2	MECI	0.461	0.059	0.465	<0.001	[0.345, 0.578]
3	SM	0.255	0.116	0.255	0.028	[0.027, 0.483]
3	EC	0.110	0.097	0.124	0.257	[-0.080, 0.300]

3	MECI	0.461	0.062	0.465	<0.001	[0.339, 0.583]
3	SM×MECI	-0.0035	0.0297	-0.011	0.906	[-0.062, 0.055]
3	EC×MECI	0.0043	0.0383	0.015	0.910	[-0.071, 0.079]

H1 was supported under robust inference: the SM composite had a positive Step 1 association with OPDPC ($B = 0.390$, HC3 $p = 0.004$). H2 was not supported at the conventional 5% threshold under robust inference: the EC coefficient was positive but marginal in Step 1 ($B = 0.183$, HC3 $p = 0.058$). Accordingly, the analysis does not treat EC as a statistically secure independent correlate under the robust inference used here.

The lower-order MECI coefficient was positive and statistically clear in Steps 2 and 3 (Step 3 $B = 0.461$, HC3 $p < 0.001$). Because MECI was not designed or validated as a unidimensional latent construct and overlaps conceptually with evaluative aspects of OPDPC, this coefficient is interpreted as exploratory rather than as a causal or definitive maqāsid effect.

Neither exploratory interaction was supported. $SM \times MECI$ was $B = -0.0035$ (HC3 $p = 0.906$) and $EC \times MECI$ was $B = 0.0043$ (HC3 $p = 0.910$). Their confidence intervals were wide relative to the point estimates and crossed zero. The interaction block contributed essentially no additional explained variance. Accordingly, the data provide no evidence that MECI changes the strength of either the SM–OPDPC or EC–OPDPC association in this sample.

4.6 Response-quality sensitivity analysis

Twenty-eight retained respondents used the same Likert category across all 24 measurement items. Because no respondent identifiers, response-time thresholds, or attention-check evidence were available to establish that these invariant response patterns were invalid, these records were retained in the primary analysis. As a sensitivity check, the hierarchical model was re-estimated after excluding the 28 invariant-response profiles ($N = 254$), using the same mean-centering procedure and HC3 heteroscedasticity-robust inference applied in the primary analysis. The substantive findings remained unchanged. The $SM \times MECI$ interaction remained non-significant ($B = -0.0071$, HC3 $p = 0.809$, 95% CI $[-0.065, 0.051]$), as did the $EC \times MECI$ interaction ($B = 0.0022$, HC3 $p = 0.956$, 95% CI $[-0.074, 0.078]$). The lower-order MECI association remained positive and statistically significant ($B = 0.438$, HC3 $p < 0.001$). These results indicate that the absence of detectable moderation is not attributable solely to the retained invariant-response profiles.

4.7 Discussion

4.7.1 Digital stimuli and the broad purchase-decision process

The results support a narrow empirical conclusion. Social-media shopping functions were positively associated with the broad purchase-decision process composite under HC3 robust inference. This finding is consistent with social-commerce research in which peer communication, social presence, influencer credibility, reviews, and interactive content can shape product evaluation and purchase-related responses (Le & Ngoc, 2024; Roy et al., 2025; Tseng et al., 2025). The result should be understood as an association with a process composite, not evidence that social media causes impulsive or unethical consumption.

The EC coefficient remained positive but was not statistically secure under robust Step 1 inference. This result follows from the duplicate-screened analysis and heteroscedasticity-robust standard errors. E-commerce functions remain theoretically relevant - particularly

search, reviews, ratings, price information, logistics, and transaction convenience (Chee-Hua et al., 2024; Le et al., 2025; An Ngo et al., 2025; Zhou & Hudin, 2025) - but this dataset does not justify a strong independent-association claim after robust correction.

A direct comparison of the SM and EC standardized coefficients is not emphasized. SM and EC were distinguishable enough to support separate channel composites when examined individually, but their item functions overlap substantially ($r = 0.646$; HTMT = 0.806), and the joint exploratory structure showed cross-loadings. The coefficients therefore describe channel-specific associations within this dataset rather than cleanly separable latent causal mechanisms.

The stronger statistical robustness of the SM coefficient may nevertheless be understood cautiously in relation to the sample and item content. University students encounter products repeatedly within communication-oriented feeds where reviews, advertisements, peer reactions, short-form content, and seller interaction can occur before a deliberate marketplace search begins. Social media may therefore participate earlier and more continuously in the decision journey, increasing its covariance with need recognition, information search, and content response. By contrast, the EC items emphasize marketplace functions that may become salient after a product category or purchase need has already been identified. This interpretation is theoretically plausible and consistent with the S-O-R distinction between different stimulus environments, but it remains an explanation to be tested rather than a causal conclusion from the present cross-sectional data.

The overlap diagnostics also suggest that future research should avoid framing social media and e-commerce as mutually exclusive shopping worlds. A more realistic design could model an integrated cross-channel journey in which discovery, social validation, product verification, price comparison, payment, and repurchase occur across platforms. Such a design could distinguish channel exposure from function exposure and could test whether particular stimulus types - social proof, price cues, ratings, conversational support, or transaction convenience - are more important than the platform label itself. The present results motivate that refinement precisely because the archived measures combine channel and function in the same item sets.

4.7.2 Interpreting the Exploratory MECI Association

The most consequential finding is not moderation but the combination of a strong lower-order MECI association and essentially zero interaction terms. Adding MECI increased explained variance by 17.7 percentage points, whereas the two interactions added only 0.02 percentage points. This pattern establishes a lower-order association between the exploratory MECI score and OPDPC, but it does not demonstrate a general maqāṣid effect or identify a specific causal mechanism. The contrast between the substantial Step 2 increment and the near-zero Step 3 interaction block is consistent with the possibility that selected ethical-consumption considerations may operate through more proximal evaluative processes rather than through slope moderation. Such mechanisms, however, were not directly measured and remain hypotheses for future research.

At the same time, the MECI factor analysis prevents broad theoretical conclusions about maqāṣid al-sharīʿah. The six items formed two clusters, and the observed ceiling compression further reinforces the need for caution in interpreting MECI as a comprehensive or unidimensional measure of maqāṣid-inspired ethics. The index should therefore be

interpreted as an exploratory aggregation of selected Islamic ethical-consumption considerations, not as a validated *maqāsid* orientation. The strong lower-order association may reflect genuine ethical evaluation, shared evaluative content with OPDPC, response style, or social desirability; the present cross-sectional design cannot separate these explanations.

Within the S-O-R framework, a more plausible future model would place halal awareness, perceived benefit, need-versus-want evaluation, perceived harm, self-control, and moral obligation in the organism stage and test whether a validated Islamic ethical scale predicts those mechanisms. Such a model would directly evaluate mediation or sequential processing rather than assume moderation as the default role of ethical values.

The contrast between the Step 2 and Step 3 results is therefore a central theoretical implication rather than an inconvenient null finding. A value-based index need not alter the strength of every environmental stimulus to matter for purchasing. Ethical considerations may instead influence which products enter the consideration set, whether a purchase is judged beneficial or necessary, how financial restraint is exercised, or how a transaction problem is resolved. These processes occur closer to the organism stage than to the stimulus itself. Testing them directly would allow future research to determine whether *maqāsid*-inspired ethics operates through mediation, sequential evaluation, or context-dependent activation instead of assuming slope moderation as the default mechanism.

The present MECI findings also highlight why scale development should precede stronger theory testing. A future validated measure could separate dimensions such as permissibility and halal screening, *maslahah* and benefit evaluation, moderation and financial restraint, harm avoidance, and transactional fairness. Researchers could then examine whether particular dimensions have different roles in the S-O-R sequence. For example, halal screening may operate before product consideration, restraint may become salient at the point of promotion or checkout, and fairness may become relevant after fulfilment problems arise. A multidimensional design of this kind would be theoretically more informative than treating all ethical items as a single undifferentiated moderator.

4.7.3 Common method and sampling implications

Harman's first factor accounted for 31.6% of item variance, which does not suggest a single dominant common factor, but this diagnostic is limited. The same-source, same-time, same-scale design still creates common method risk, and MECI items concerning halalness, prohibited goods, restraint, and fairness are especially susceptible to socially desirable responding. The absence of a marker variable or social-desirability measure means that these biases cannot be statistically separated from substantive covariance.

External validity is limited by the sampling frame. The sample consists of purposively recruited university students and is predominantly female. Findings should therefore be generalized to similar digitally active student populations rather than to the Indonesian Generation Z population as a whole.

4.7.4 Practical implications within the limits of the model

The empirical model supports only modest practical claims. Social-media shopping functions appear closely connected to how students move through information, price, content, convenience, and repurchase considerations. Platforms and educators may therefore prioritize accurate product information, credible reviews, clear pricing, and critical digital-shopping literacy. The exploratory MECI association indicates that the selected ethical-consumption

domains represented in the index halalness, benefit, restraint, and fairness warrant further investigation in consumer-education research. However, specific interventions such as cooling-off prompts, disclosure rules, spending reminders, or organizational programs were not tested here and are treated only as future experimental questions rather than evidence-based recommendations from this dataset.

5. Conclusion

Using the S-O-R framework as a guiding lens and the archived item-level data, the study supports deliberately bounded claims. The outcome is best described as an online purchase-decision process composite, SM and EC are channel-specific shopping-function composites, and the Islamic ethics measure is an exploratory maqāṣid-inspired ethical consumption index rather than a validated maqāṣid scale.

In the reconstructed hierarchical analysis of 282 non-duplicate student records, SM was positively associated with OPDPC under HC3 robust inference, while the EC Step 1 coefficient was positive but marginal. MECI produced a strong exploratory lower-order association and a substantial increase in explained variance, but the two interaction terms contributed essentially no incremental variance and were statistically indistinguishable from zero. These findings support reporting MECI as an exploratory lower-order correlate of OPDPC while providing no evidence that it changes the strength of the SM–OPDPC or EC–OPDPC relationships. Whether MECI operates as an antecedent of more proximal evaluations remains an important question for future research.

The study's contribution is consequently methodological and theoretical as much as empirical: it demonstrates the importance of aligning construct labels with actual item content, diagnosing overlap before comparing digital predictors, and distinguishing an exploratory Islamic ethical index from a validated maqāṣid measurement scale.

6. Limitations and Future Research

Several limitations remain. First, the cross-sectional self-report design does not establish causal direction or temporal ordering. Second, the university-student sampling frame, gender imbalance, age-band rather than exact-birth-year information, and the absence of province, institution, employment, and income variables constrain external validity. Third, although EFA supported a one-factor OPDPC and separate one-factor solutions for SM and EC when examined individually, the full 24-item structure did not reproduce four clean latent constructs and the SM/EC joint analysis showed functional cross-loading. Fourth, MECI was explicitly multidimensional and should not be used as a validated maqāṣid scale.

Fifth, common method variance and social desirability remain plausible despite the non-dominant Harman first factor. Future studies should include marker variables or social-desirability scales, collect temporally separated or multi-source data, and where possible link self-reported ethical orientation to observed transaction behavior. Sixth, future measurement development should involve scholars of Islamic economics and fiqh muamalah, followed by content-validity assessment, pilot testing, CFA, convergent and discriminant validity, and measurement invariance across relevant demographic groups.

Finally, future S-O-R studies should explicitly measure organism-stage variables such as need evaluation, perceived benefit, halal awareness, perceived harm, self-control, trust, and moral obligation. Longitudinal or experimental designs can then test whether validated Islamic

ethical measures operate through mediation or sequential evaluation and whether specific platform cues activate or suppress those mechanisms. Financial literacy, materialism, fear of missing out, product category, and pay-later use may also be examined as separately measured covariates rather than inferred from broad composites.

Declaration of AI and AI-assisted technologies in the writing process (if author[s] utilize AI)

During the preparation and revision of this work, the authors used ChatGPT, developed by OpenAI, to assist with language refinement, sentence restructuring, manuscript organization, and the generation and checking of code used to re-analyze the authors' archived raw dataset. The authors independently verified the dataset, analytic specifications, numerical outputs, bibliographic information, interpretations, and final manuscript. The AI tool did not generate or alter research data, and all scholarly judgments and responsibility for the accuracy, integrity, and content of the publication remain with the authors.

Reference

- Achmad, N. A., Fitriansyah, F., Lesmana, L., & Yudaruddin, Y. (2024). The Impact of Social Media on Online Shopping Behavior of Gen Z Consumers In Time of Covid-19 Pandemic; The Moderating Role of Celebrity Endorsements. *WSEAS Transactions on Business and Economics*, 21, 266–279. <https://doi.org/10.37394/23207.2024.21.24>
- Al Halbusi, H., Al-Sulaiti, K., Abbas, J., & Al-Sulaiti, I. (2022). Assessing Factors Influencing Technology Adoption for Online Purchasing Amid COVID-19 in Qatar: Moderating Role of Word of Mouth. *Frontiers in Environmental Science*, 10. <https://doi.org/10.3389/fenvs.2022.942527>
- An Ngo, T. T., An, G. K., Dao, D. K., Nhu Nguyen, N. Q., Vy Nguyen, N. Y., & Phong, B. H. (2025). Roles of logistics service quality in shaping generation Z customers' repurchase intention and electronic word of mouth in E-commerce industry. *PLOS ONE*, 20(5 May). <https://doi.org/10.1371/journal.pone.0323962>
- Anatasia, V., Tannia, Susilo, S. R., Robert, A., Hartono, R., & Christy, I. (2025). The moderating role of big data attitudes in Gen Z TikTok live shopping decisions. In 2025 4th International Conference on Creative Communication and Innovative Technology (ICCIT). IEEE. <https://doi.org/10.1109/ICCIT65724.2025.11166724>
- Andika, A., Najmudin, M., Nasution, A. A., Anisah, T. N., Luthfiana, D. N., & Nadia, N. (2025). Enhancing Impulse Buying Among Generation Z Through Social Presence in E-Commerce Live Streaming. *TEM Journal*, 14(1), 236–250. <https://doi.org/10.18421/TEM141-22>
- Anwar, M. M. (2025). Halal fashion insights: understanding brand dynamics in consumer perception. *Journal of Islamic Marketing*, 16(8), 2294–2320. <https://doi.org/10.1108/JIMA-04-2024-0149>
- Ates, A., Sunar, H., & Erdem, B. (2024). The Generation Z's Trust in Digital Influencers on Unplanned Purchase Behavior. *Galactica Media: Journal of Media Studies*, 6(4), 350–373. <https://doi.org/10.46539/gmd.v6i4.499>

- Babolian Hendijani, R. B., & Jaszus, K. (2025). Exploring the economic impact of impulse buying in mobile commerce. In 2025 5th International Conference on Innovative Research in Applied Science, Engineering and Technology (IRASET). IEEE. <https://doi.org/10.1109/IRASET64571.2025.11008078>
- Berakon, I., Wibowo, M. G., Nurdany, A., & Aji, H. M. (2023). An expansion of the technology acceptance model applied to the halal tourism sector. *Journal of Islamic Marketing*, 14(1), 289–316. <https://doi.org/10.1108/JIMA-03-2021-0064>
- Bonang, D., Zaki, I., & Ratnasari, R. T. (2025). Muslim Gen Z's intention on Infaq and Sadaqah through online payment: an insight from Indonesia. *Journal of Islamic Accounting and Business Research*. <https://doi.org/10.1108/JIABR-01-2024-0025>
- Chee-Hua, C.-H., Wong, W. P.-M., Cham, T.-H., & Kumarusamy, R. (2024). Is online shopping a trick or treat? Understanding the perceptions of generation Z towards purchasing through tourism e-commerce platforms. *Asian Journal of Business Research*, 14(2), 1–24. <https://doi.org/10.14707/ajbr.240170>
- Chetoui, Y., & El Bouzidi, L. (2023). An investigation of the nexus between online impulsive buying and cognitive dissonance among Gen Z shoppers: Are female shoppers different? *Young Consumers*, 24(4), 406–426. <https://doi.org/10.1108/YC-06-2022-1548>
- Costa Pacheco, D., Moniz, A. I., da Dias Lopes da Silva, O., Nunes Caldeira, S., & Bigné, E. (2025). Impulsivity in Live Shopping: How Envy, Happiness, and Hedonic Consumption Influence Gen Z Purchases. *International Journal of Consumer Studies*, 49(5). <https://doi.org/10.1111/ijcs.70113>
- Cuc, L. T., Thuy, L. T., Truong, D. X., & van Phuong, N. (2025). The Impact of Online Product Reviews on Gen Z's Consumers' Purchase Intentions for Fashion Products in E-Commerce in Hanoi, Vietnam. *Architecture Image Studies*, 6(3), 1558–1575. <https://doi.org/10.62754/ais.v6i3.488>
- Eroglu, S. A., Machleit, K. A., & Davis, L. M. (2001). Atmospheric qualities of online retailing: A conceptual model and implications. *Journal of Business Research*, 54(2), 177–184. [https://doi.org/10.1016/S0148-2963\(99\)00087-9](https://doi.org/10.1016/S0148-2963(99)00087-9)
- Hayes, A. F. (2022). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (3rd ed.). The Guilford Press.
- Hoang, C. C., & Khoa, B. T. (2022). Impulse Buying Behavior of Generation Z customers in Social Commerce: Flow Theory Approach. *Journal of Logistics, Informatics and Service Science*, 9(4), 197–208. <https://doi.org/10.33168/LISS.2022.0413>
- Indriastuti, H., Hidayati, T., Martiyanti, D., Ayu, A. R. F., & Putit, L. (2024). How Real-Time Interactivity Influences Impulse Buying Behaviour in Generation Z's During Live Streaming Shopping: The Mediating Role of Perceived Enjoyment. *ECONOMICS - Innovative and Economics Research Journal*, 12(3), 279–291. <https://doi.org/10.2478/eoik-2024-0047>
- Iyer, G. R., Blut, M., Xiao, S. H., & Grewal, D. (2020). Impulse buying: A meta-analytic review. *Journal of the Academy of Marketing Science*, 48(3), 384–404. <https://doi.org/10.1007/s11747-019-00670-w>

- Jalees, T., Khan, S., Zaman, S. I., & Miao, M. (2024). The effect of religiosity, materialism and self-esteem on compulsive and impulsive buying behavior. *Journal of Islamic Marketing*, 15(11), 2697–2731. <https://doi.org/10.1108/JIMA-03-2022-0078>
- Kaur, A., Srivastava, A., Trivedi, S., Srivastava, P., & Dikshit, S. K. (2026). Buying at First Sight: Modelling the Determinants of UI on Generation Z's E-Impulsive Buying Behaviour. *International Review of Management and Marketing*, 16(1), 44–52. <https://doi.org/10.32479/irmm.21421>
- Koch, J., Frommeyer, B., & Schewe, G. (2020). Online shopping motives during the COVID-19 pandemic—lessons from the crisis. *Sustainability (Switzerland)*, 12(24), 1–20. <https://doi.org/10.3390/su122410247>
- Le, T. T., Phan, D. N., Ngo, T. T. T., & Le, N. T. (2025). Website quality's impact on Gen Z's eWOM behavior and online purchase intentions: the mediating role of trust in online shopping. *Asia Pacific Journal of Marketing and Logistics*, 1–21. <https://doi.org/10.1108/APJML-03-2025-0567>
- Le, T.-M. H., & Ngoc, B. M. (2024). Consumption-related social media peer communication and online shopping intention among Gen Z consumers: A moderated-serial mediation model. *Computers in Human Behavior*, 153. <https://doi.org/10.1016/j.chb.2023.108100>
- Mehrabian, A., & Russell, J. A. (1974). *An approach to environmental psychology*. MIT Press.
- Moreno, D. E. L., Matias, S. N. S., Bernales, Ma. B. S., Corales, M. L. R., Corpuz, J. C. G., & Panzo, J. C. S. (2023). *The Impact of Mobile-Commerce Application Characteristics on Customer's Perceived Experience and Spending Habits in the Philippines*. 20–25. <https://doi.org/10.1145/3633586.3633591>
- Muhammad, A. S., Adeshola, I., & Isiaku, L. (2024). A mixed study on the “wow” of impulse purchase on Instagram: insights from Gen-Z in a collectivistic environment. *Young Consumers*, 25(1), 128–148. <https://doi.org/10.1108/YC-04-2023-1728>
- Ngo, T. T. A., Bui, C. T., Chau, H. K. L., & Tran, N. P. N. (2023). “The effects of social media live streaming commerce on Vietnamese Generation Z consumers' purchase intention”. *Innovative Marketing*, 19(4), 269–283. [https://doi.org/10.21511/im.19\(4\).2023.22](https://doi.org/10.21511/im.19(4).2023.22)
- Ngo, T. T. A., Nguyen, H. L. T., Nguyen, H. P., Mai, H. T. A., Mai, T. H. T., & Hoang, P. L. (2024). A comprehensive study on factors influencing online impulse buying behavior: Evidence from Shopee video platform. *Heliyon*, 10(15). <https://doi.org/10.1016/j.heliyon.2024.e35743>
- Nugraha, Y. D., Suliyanto, S., Permana, R. M. T., & Hadiarti, D. (2024). Impulsive purchase behaviour of Z generation of Muslim women on TikTok shop: the application of S-O-R framework. *Journal of Islamic Marketing*, 15(2), 493–517. <https://doi.org/10.1108/JIMA-06-2022-0182>
- Orelskaia, A., Sithamparam, A. G., Ruiz de Garibay Ponce, D., & Ozarnov, R. V. (2025). Purchase intention towards products on wildberries: an empirical study among Gen Z in Russia with customer attitude as mediator. *Cogent Business and Management*, 12(1). <https://doi.org/10.1080/23311975.2025.2552934>

- Pallavi, M. S., Gonela, S., & Dikkatwar, R. (2025). Emotion-Driven Consumption in Digital Retail: A Review of Women's Online Shopping Experience. *International Journal of Accounting and Economics Studies*, 12(4), 184–197. <https://doi.org/10.14419/6srw6s61>
- Porsan, P. W., Surja, S., & Kurniawati, H. (2024). The impact of social media's live shopping feature on the behavioural responses of Indonesia's Generation Z. In 2024 International Conference on Intelligent Cybernetics Technology & Applications (ICICyTA) (pp. 720–725). IEEE. <https://doi.org/10.1109/ICICYTA64807.2024.10913375>
- Pradana, M., Rubiyanti, N., & Marimon, F. (2024). Measuring Indonesian young consumers' halal purchase intention of foreign-branded food products. *Humanities and Social Sciences Communications*, 11(1). <https://doi.org/10.1057/s41599-023-02559-0>
- Putra, A. A. J. (2026). The influence of financial literacy, hedonism lifestyle, paylater, impulse buying through risk perception. *Multidisciplinary Science Journal*, 8(5), 2026325. <https://doi.org/10.31893/multiscience.2026325>
- Roy, S. K., Sarkar, U., Khan, M. R., Pervin, M. T., & Ahad, A. A. (2025). Generation Z's Behavioral Factors Affecting Purchase Intention Through Social Media Portals: A Hybrid PLS-SEM and ANN Modeling Approach. *SAGE Open*, 15(3). <https://doi.org/10.1177/21582440251363319>
- Sumarlia, E., Khan, S. U., & Khan, I. U. (2021). Online hijab purchase intention: the influence of the Coronavirus outbreak. *Journal of Islamic Marketing*, 12(3), 598–621. <https://doi.org/10.1108/JIMA-09-2020-0302>
- Tseng, H.-T., Jia, S., Nisar, T. M., Hajli, N., & Shabbir, H. (2025). The study of social commerce in Generation Z context: the role of social support and privacy risk. *Information Technology and People*, 38(3), 1505–1525. <https://doi.org/10.1108/ITP-01-2022-0042>
- Veronica, W., Widjaja, A. E., Haryani, C. A., & Tarigan, R. E. (2025). Impulse buying behavior in mobile commerce: a partial least squares structural equation modeling analysis. *International Journal of Advances in Applied Sciences*, 14(3), 761–772. <https://doi.org/10.11591/ijaas.v14.i3.pp761-772>
- Wan Mustaffa, W. I., & Wan Ismail, W. R. (2025). Gen-Z online purchase intention of 0.0% alcohol beverages in Malaysia: a stimulus-organism-response perspective. *Journal of Islamic Marketing*, 16(11), 3173–3201. <https://doi.org/10.1108/JIMA-12-2024-0586>
- Wicaksono, A. P., Andajani, E., & Ardiansyahmiraja, B. (2022). Does Distribution Capability Have an Influence on Attitudes and Intentions Toward Online Purchasing? *Journal of Distribution Science*, 20(5), 13–22. <https://doi.org/10.15722/jds.20.05.202205.13>
- Yudha, A. T. R. C., Atiya, N., Faidah, A. R., Febriyanti, N., & Masrufah, N. (2025). Masalah value optimization in exploring Muslim consumption behavior: a study of impulse buying on ewallet users in East Java, Indonesia. *Journal of Islamic Marketing*, 16(9), 2514–2542. <https://doi.org/10.1108/JIMA-03-2024-0118>
- Yuniarti, Y., Johannes, Junaidi, & Octavia, A. (2026). Advancing the understanding of consumer behavior in social media marketing: An extended S-O-R perspective. *Multidisciplinary Science Journal*, 8(6), 2026247. <https://doi.org/10.31893/multiscience.2026247>

Zhou, S., & Hudin, N. S. (2025). How does in-store and online shopping experiences influence repurchase intentions in Shandong, China? Roles of perceived value, brand trust, and customer satisfaction. *PLOS ONE*, 20(8 August).
<https://doi.org/10.1371/journal.pone.0321485>