

CONSUMER IMPULSE BUYING IN LIVE STREAMING COMMERCE: THE ROLE OF PERCEIVED AUTHENTICITY AND SOCIAL PRESENCE

I Gusti Ayu Agung Istri Sari Dewi¹, I Made Aditya Pramatha²

^{1,2}Faculty of Economics and Business, Warmadewa University, Indonesia

Article Info:

Article History:

Received: 2026-07-05

Revised: 2026-08-01

Accepted: 2026-09-12

Keyword:

Perceived Authenticity, Social Presence, Impulse Buying, Live Streaming Commerce

Corresponding Author:

I Gusti Ayu Agung Istri Sari Dewi¹

agungsaridewi@warmadewa.ac.id

Paper Type:

Research Paper



Abstract:

Purpose: This study examines the effects of Perceived Authenticity and Social Presence on consumer Impulse Buying in live streaming commerce and evaluates whether Gender moderates these relationships.

Methodology: A quantitative survey was conducted with 203 consumers who had watched or purchased products through live streaming commerce. The model was analyzed using PLS-SEM in SmartPLS 4. Gender differences were examined separately through Measurement Invariance of Composite Models (MICOM) and permutation-based Multi-Group Analysis (MGA).

Findings: Perceived Authenticity positively affects Impulse Buying ($\beta = 0.164$; $p = 0.033$), while Social Presence has a stronger positive effect ($\beta = 0.543$; $p < 0.001$). Gender does not significantly moderate either relationship (H3: $p = 0.933$; H4: $p = 0.173$). Social Presence did not fully satisfy compositional invariance in MICOM Step 2, so the corresponding MGA result should be interpreted cautiously.

Implication: Live streaming strategies should prioritize real-time social interaction, host-viewer closeness, and personalized engagement while maintaining authentic and credible product communication. These mechanisms appear to operate relatively similarly across male and female consumers in this sample.

INTRODUCTION

The development of digital technology has driven significant changes in marketing strategies and consumer behavior. Digital marketing has become a key element for businesses seeking to reach consumers broadly, rapidly, and interactively, alongside the increasing use of e-commerce and social media platforms in everyday activities. Previous research by the authors indicates that digital marketing strategies based on social influence play an important role in shaping consumer responses. Influencer endorsements and affiliate marketing affect consumers' purchase intentions; however, these effects are not always direct and are strongly influenced by consumers' psychological conditions, such as brand awareness (Dewi & Purnamawati, 2025). These findings indicate that the effectiveness of digital marketing is determined not only by promotional strategies but also by how consumers perceive and process marketing stimuli. Nevertheless, the previous study focused on purchase intention and therefore did not fully explain consumers' actual purchasing behavior.

One form of digital marketing that has developed rapidly is live streaming commerce, which integrates product promotion, two-way communication, and real-time interaction between sellers and consumers. Digital transformation in Indonesia has accelerated social commerce through platforms such as TikTok and Shopee, significantly encouraging impulse buying, or spontaneous purchases made without prior planning (Herlina & Wilujeng, 2024). This phenomenon is driven by the distinctive characteristics of live streaming, particularly social presence, which creates a sense of the streamer's actual presence (Kapriani et al., 2025). In addition, perceived authenticity generated through direct product demonstrations in live streaming commerce can increase consumer trust (Okasavina et al., 2025).

Live streaming commerce introduces new dynamics into consumer decision-making. Direct interaction, real-time product demonstrations, and a strong sense of social presence may shape perceptions of marketing-content authenticity (perceived authenticity) and social closeness (social presence). These conditions may encourage impulse buying, namely spontaneous purchases made without prior planning. Although live streaming commerce has become increasingly widespread, empirical studies examining the psychological mechanisms underlying impulse buying in this context remain relatively limited, particularly in developing countries. Most previous studies have also been limited to samples dominated by female consumers. Gender is considered an important factor influencing impulsive purchasing behavior (Fitria et al., 2024). This study addresses this gap by

incorporating gender as a moderating variable to examine whether visual stimuli and social interaction in live streaming have different effects on male and female consumers when making impulsive purchasing decisions.

The urgency of this study is further reinforced by previous research that has largely focused on influencer endorsements, affiliate marketing, and purchase intention, thereby not fully explaining consumers' actual purchasing behavior. In addition, consumer responses to digital marketing stimuli are not homogeneous. Individual characteristics, such as gender, affect how consumers process information and respond to social cues in digital environments. Accordingly, this study investigates whether the strength of the effects of social presence and perceived authenticity on impulse-buying decisions differs between male and female consumers, thereby providing a more inclusive understanding for the design of digital marketing strategies.

This study adopts a quantitative approach to examine the effects of Perceived Authenticity and Social Presence on consumer Impulse Buying, with Gender used as a moderating variable. The hypotheses are formulated as follows:

H1: Perceived Authenticity has a positive effect on consumer Impulse Buying in the context of live streaming commerce.

H2: Social Presence has a positive effect on consumer Impulse Buying in the context of live streaming commerce.

H3: Gender moderates the effect of Perceived Authenticity on consumer Impulse Buying in live streaming commerce.

H4: Gender moderates the effect of Social Presence on consumer Impulse Buying in live streaming commerce.

METHODS

This study uses a quantitative survey approach to examine the causal relationships among perceived authenticity, social presence, and consumer impulse buying in the context of live streaming commerce, as well as the moderating role of gender. Data were collected through a structured questionnaire developed from the indicators of each research variable. Data analysis was conducted using Partial Least Squares–Structural Equation Modeling (PLS-SEM) with SmartPLS 4. The role of gender was tested separately through MICOM and Multi-Group Analysis (MGA); therefore, interaction terms for Gender $\times$ Perceived Authenticity and Gender $\times$ Social Presence were not constructed on the SmartPLS model canvas. Purposive sampling was employed because respondents were required to possess characteristics relevant to the objectives of the study. The respondent criteria were as follows:

- 1) Respondents were at least 17 years old.
- 2) Respondents had watched live streaming commerce on e-commerce or social media platforms such as TikTok and Shopee within the previous three months.
- 3) Respondents had made a purchase or had experience interacting during a live streaming session.
- 4) Respondents were willing to complete the questionnaire in full.

RESULTS AND DISCUSSION

Overall, the characteristics of the 203 respondents show that the sample was dominated by women (59.1%), while men accounted for 40.9%. The dominant age group was 18–24 years (65.0%), the most common educational attainment was senior high school/vocational high school (60.6%), and the dominant monthly income category was IDR 2–5 million (41.9%). Most respondents used TikTok Shop Live (76.8%), while 23.2% used Shopee Live. In terms of transaction intensity, most respondents made purchases through live streaming 1–2 times (42.9%) or 3–5 times (41.9%) during the previous six months. This profile indicates that the sample primarily represents young consumers who actively use social commerce and have actual experience conducting transactions through live streaming. These sample characteristics provide relevant context for testing the effects of Perceived Authenticity and Social Presence on Impulse Buying and provide sufficient observations for the male and female groups used in the Multi-Group Analysis (MGA).

Overview of Data Processing

The data were analyzed using Partial Least Squares–Structural Equation Modeling (PLS-SEM) with SmartPLS 4. The research model comprises three latent constructs: Perceived Authenticity (X1), Social Presence (X2), and Impulse Buying (Y). Each construct is measured by five reflective indicators, resulting in a total of 15 indicators. Gender is not included as a construct in the structural model; instead, it is used as a grouping variable in Multi-Group Analysis (MGA) to compare path coefficients between the male and female groups.

Based on the SmartPLS output, 203 observations were analyzed. All 15 indicators had scores ranging from 1 to 5, and no missing values were present in the indicator matrix used for estimation. Based on the gender coding in the original dataset, the 203 respondents consisted of 83 men and 120 women. Consequently, all observations could be used in the measurement-model evaluation, structural-model evaluation, bootstrapping, MICOM, and MGA stages.

Table 1. Summary of Data and Respondent Grouping

Component	Result
Number of valid observations	203 respondents
Number of indicators	15 indicators
Indicator score range	1–5
Missing values in the indicator matrix	0
Male	83 respondents (40.9%)
Female	120 respondents (59.1%)
Primary estimation method	PLS-SEM
Gender moderation testing	MICOM and Permutation MGA

Source: SmartPLS 4 output, processed data (2026).

PLS-SEM and Multi-Group Analysis Data-Processing Flow

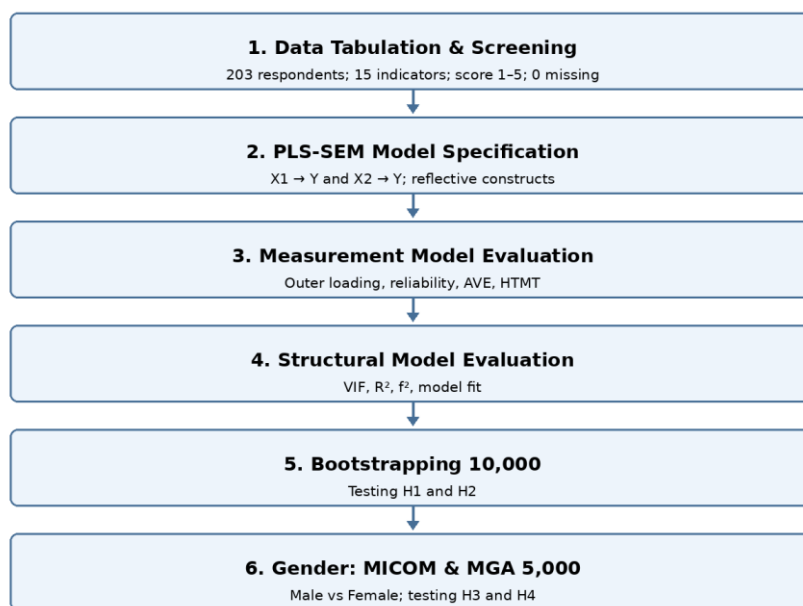


Figure 1. PLS-SEM and Multi-Group Analysis Data-Processing Flow

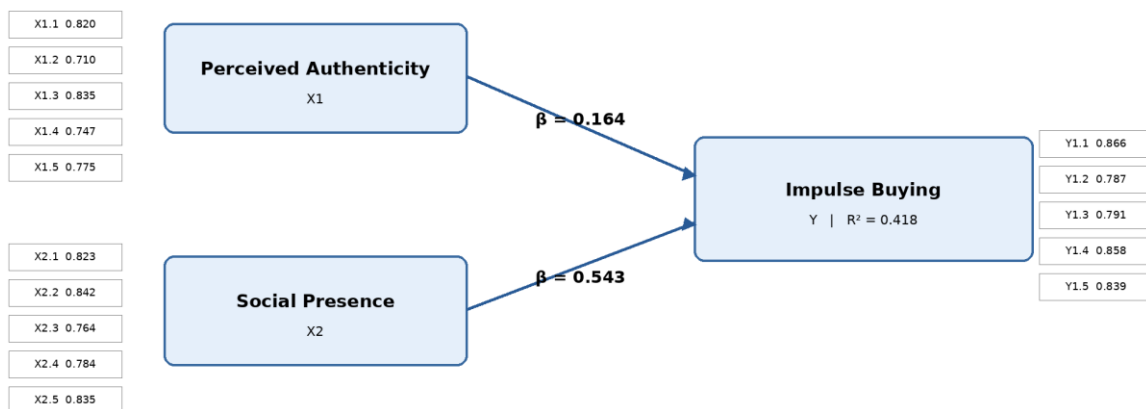
Source: Developed from SmartPLS 4 output (2026).

Figure 1 illustrates that data processing was conducted sequentially. The measurement model was evaluated first to establish construct validity and reliability. Once the measurement model was considered adequate, the analysis proceeded to the structural model and direct hypothesis testing through bootstrapping. The role of gender was tested separately through MICOM and MGA; therefore, interaction terms for Gender $\times$ Perceived Authenticity and Gender $\times$ Social Presence were not required on the SmartPLS canvas.

PLS-SEM Model Specification

The primary structural model tests two direct relationships: Perceived Authenticity $\rightarrow$ Impulse Buying and Social Presence $\rightarrow$ Impulse Buying. H1 tests whether Perceived Authenticity has a positive effect on Impulse Buying, whereas H2 tests whether Social Presence has a positive effect on Impulse Buying. H3 and H4 are not tested using moderation paths or interaction terms within the model; instead, they are evaluated by comparing path coefficients between the Male and Female groups using MGA.

Full-Sample PLS-SEM Model (n = 203)



Numbers on indicators = outer loadings; numbers on arrows = path coefficients

Figure 2. Full-Sample PLS-SEM Model Results

Source: Developed from SmartPLS 4 output (2026).

In the full-sample model, the path coefficient from Perceived Authenticity to Impulse Buying is 0.164, while the coefficient from Social Presence to Impulse Buying is 0.543. The R^2 value for Impulse Buying is 0.418, indicating that the two exogenous constructs jointly explain 41.8% of the variance in Impulse Buying. Before interpreting these path coefficients as hypothesis-test results, the quality of the measurement model was evaluated.

Measurement Model Evaluation (Outer Model)

Indicator Reliability through Outer Loadings

Indicator reliability was evaluated based on outer loading values. In PLS-SEM, loadings of approximately 0.70 or higher indicate that an indicator contributes adequately to the construct it is intended to reflect (Hair et al., 2022). The PLS-SEM Algorithm results show that all indicators have outer loadings above 0.70.

Table 2. Outer Loading Results

Indicator	Construct	Outer Loading	Assessment
X1.1	Perceived Authenticity	0.820	Valid
X1.2	Perceived Authenticity	0.710	Valid
X1.3	Perceived Authenticity	0.835	Valid
X1.4	Perceived Authenticity	0.747	Valid
X1.5	Perceived Authenticity	0.775	Valid
X2.1	Social Presence	0.823	Valid
X2.2	Social Presence	0.842	Valid
X2.3	Social Presence	0.764	Valid
X2.4	Social Presence	0.784	Valid
X2.5	Social Presence	0.835	Valid
Y1.1	Impulse Buying	0.866	Valid
Y1.2	Impulse Buying	0.787	Valid
Y1.3	Impulse Buying	0.791	Valid
Y1.4	Impulse Buying	0.858	Valid
Y1.5	Impulse Buying	0.839	Valid

Source: SmartPLS 4 output, processed data (2026).

The lowest loading is X1.2 at 0.710, while the highest is Y1.1 at 0.866. Because all values are at or above the 0.70 threshold, no indicator needs to be eliminated on the basis of outer loading. Bootstrapping results also show that all loadings are significant at $p < 0.001$, indicating that all indicators have statistically strong relationships with their respective constructs.

Internal Consistency and Convergent Validity

Construct internal consistency was evaluated using Cronbach's Alpha, composite reliability ρ_A , and composite reliability ρ_C . Convergent validity was assessed using Average Variance Extracted (AVE). The commonly applied criteria are reliability values above 0.70 and AVE values above 0.50.

Table 3. Construct Reliability and Convergent Validity

Construct	Cronbach's Alpha	ρ_A	ρ_C	AVE	Assessment
Impulse Buying (Y)	0.886	0.891	0.916	0.687	Meets criterion
Perceived Authenticity (X1)	0.837	0.844	0.885	0.607	Meets criterion
Social Presence (X2)	0.869	0.871	0.905	0.656	Meets criterion

Source: SmartPLS 4 output, processed data (2026).

All constructs satisfy the criteria for reliability and convergent validity. The ρ_C values range from 0.885 to 0.916, and all AVE values exceed 0.50. These results indicate that the indicators for each construct have good internal consistency and that each construct explains more than 50% of the variance in its indicators.

Discriminant Validity

Discriminant validity was assessed to ensure that each empirical construct is distinct from the other constructs. This study uses the Heterotrait-Monotrait Ratio (HTMT). An HTMT value below 0.85 indicates adequate construct separation under a relatively strict criterion.

Table 4. Heterotrait-Monotrait Ratio (HTMT) Results

Pasangan Construct	HTMT	Assessment
Perceived Authenticity ↔ Impulse Buying	0.533	Meets criterion

Social Presence ↔ Impulse Buying	0.714	Meets criterion
Social Presence ↔ Perceived Authenticity	0.638	Meets criterion

Source: SmartPLS 4 output, processed data (2026).

The HTMT values for all construct pairs are below 0.85. Accordingly, Perceived Authenticity, Social Presence, and Impulse Buying can be regarded as empirically distinct constructs. Based on the outer loadings, reliability, AVE, and HTMT results, the full-sample measurement model is adequate for further structural-model evaluation.

Structural Model Evaluation (Inner Model)

Collinearity Statistics (VIF)

Before interpreting the structural coefficients, multicollinearity was assessed using inner VIF values. Low VIF values indicate that the predictors do not exhibit problematic collinearity that could distort path-coefficient estimation.

Table 5. Inner-Model Collinearity Statistics

Predictor Relationship with Y	VIF	Assessment
Perceived Authenticity → Impulse Buying	1.423	No issue
Social Presence → Impulse Buying	1.423	No issue

Source: SmartPLS 4 output, processed data (2026).

Both VIF values are 1.423, well below the conservative threshold of 3.00. Thus, Perceived Authenticity and Social Presence can be included simultaneously in the model without evidence of meaningful collinearity.

Coefficient of Determination (R^2)

Table 6. Coefficient of Determination

Construct Endogen	R^2	Adjusted R^2	Interpretation
Impulse Buying (Y)	0.418	0.413	41.8% of the variance in Y is explained by X1 and X2

Source: SmartPLS 4 output, processed data (2026).

The R^2 value of 0.418 for Impulse Buying indicates that Perceived Authenticity and Social Presence jointly explain 41.8% of the variance in Impulse Buying. The remaining 58.2% is explained by factors not included in the research model. The Adjusted R^2 value of 0.413 indicates that the model's explanatory capability remains relatively stable after accounting for the number of predictors.

Effect Size (f^2)

Table 7. Effect Size (f^2)

Relationship	f^2	Interpretation
Perceived Authenticity → Impulse Buying	0.032	Small effect
Social Presence → Impulse Buying	0.356	Large effect

Source: SmartPLS 4 output, processed data (2026).

The f^2 value of 0.032 for Perceived Authenticity indicates a small relative contribution to the model's explanatory power for Impulse Buying. In contrast, Social Presence has an f^2 value of 0.356, which falls within the large-effect category. This finding indicates that Social Presence is substantively a more dominant predictor in the model than Perceived Authenticity.

Model Fit

Table 8. Summary of Model Fit

Measure	Value	Interpretation
SRMR	0.064	Below 0.08
d_ULS	0.488	Supplementary information

d_G	0.190	Supplementary information
Chi-square	216.700	Supplementary information
NFI	0.869	Supplementary; not used as the sole criterion

Source: SmartPLS 4 output, processed data (2026).

The SRMR value of 0.064 is below 0.08, indicating a relatively low average residual level. The NFI value of 0.869 is treated as supplementary information and is not used as the sole basis for assessing model adequacy. In the PLS-SEM context, primary emphasis remains on measurement-model quality, collinearity, the explanatory power of R^2 , effect sizes, and the significance and relevance of path coefficients.

Hypothesis Testing for H1 and H2 through Bootstrapping

The significance of the direct effects was tested using 10,000 bootstrap subsamples, a significance level of 0.05, and a two-tailed test. A positive-effect hypothesis was considered supported when the path coefficient was positive and the p-value was ≤ 0.05 . The 95% confidence interval was used as additional information to verify that the estimated interval did not cross zero.

Table 9. Bootstrapping Results and Tests of H1–H2

Hypothesis	Relationship	β	t-statistic	p-value	95% CI	Decision
H1	Perceived Authenticity $\rightarrow$ Impulse Buying	0.164	2.135	0.033	0.014 – 0.311	Supported
H2	Social Presence $\rightarrow$ Impulse Buying	0.543	8.817	< 0.001	0.424 – 0.665	Supported

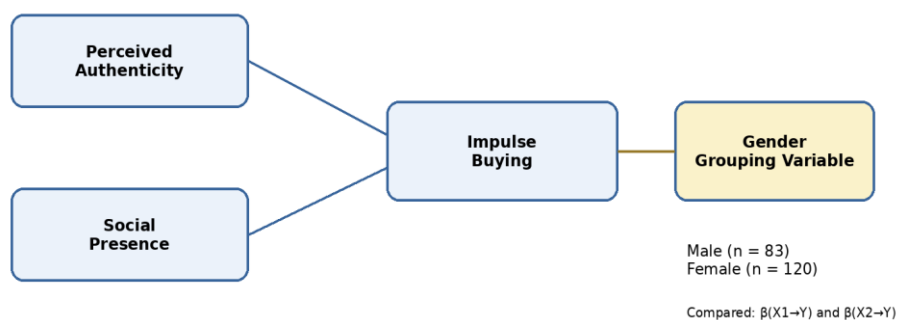
Source: SmartPLS 4 output, processed data (2026).

The H1 results show that Perceived Authenticity has a positive and significant effect on Impulse Buying ($\beta = 0.164$; $t = 2.135$; $p = 0.033$). The 95% confidence interval ranges from 0.014 to 0.311 and is entirely positive. Therefore, H1 is supported. This means that the more consumers perceive the host or presenter in a live stream as authentic, honest, and sincere, the greater their tendency to make spontaneous purchases. Although statistically significant, the effect size of Perceived Authenticity is relatively small, as indicated by $f^2 = 0.032$.

The H2 results show that Social Presence has a positive and significant effect on Impulse Buying ($\beta = 0.543$; $t = 8.817$; $p < 0.001$). The 95% confidence interval ranges from 0.424 to 0.665 and is entirely positive. Therefore, H2 is supported. The path coefficient and f^2 value of 0.356 indicate that Social Presence is a stronger predictor than Perceived Authenticity. The more consumers experience the presence of others, closeness to the host, interaction, and a personalized shopping experience during live streaming, the greater their tendency to make impulsive purchases.

Gender Moderation Testing through Multi-Group Analysis (MGA)

Gender Moderation Testing Design through MGA



Gender is not modeled as a construct/interaction term; moderation is tested through between-group path differences.

Figure 3. Gender-Moderation Testing Design through Multi-Group Analysis

Source: Developed from SmartPLS 4 output (2026).

H3 and H4 were tested using Multi-Group Analysis because Gender is a categorical variable. Accordingly, Gender was not modeled as a construct or interaction term in SmartPLS. The same model was estimated for two actual groups, Male ($n = 83$) and Female ($n = 120$), and the path coefficients were then compared. Before MGA interpretation, Measurement Invariance of Composite Models (MICOM) was conducted to assess measurement equivalence across groups (Henseler et al., 2016). For reporting consistency, group identities follow the gender coding in the original dataset: Male = 83 and Female = 120.

Measurement Model Quality within Each Group

Table 10. Construct Quality in the Male and Female Groups

Construct	AVE Male	AVE Female	rho_C Male	rho_C Female
Impulse Buying	0.717	0.641	0.927	0.899
Perceived Authenticity	0.604	0.611	0.884	0.886
Social Presence	0.670	0.638	0.910	0.898

Source: SmartPLS 4 output, processed data (2026).

In both groups, all AVE values exceed 0.50 and all composite reliability rho_C values exceed 0.70. These results indicate that, in general, the constructs retain adequate convergent validity and internal consistency when analyzed separately for the Male and Female groups.

MICOM Step 1: Configural Invariance

Configural invariance was assessed based on the use of identical model specifications, indicators, relationship directions, and algorithm settings in both groups. Because the Male and Female groups were analyzed using the same PLS-SEM model, Step 1 is considered satisfied. Step 1 does not produce a separate p-value in the SmartPLS output.

MICOM Step 2: Compositional Invariance

Table 11. MICOM Step 2 – Compositional Invariance Results

Construct	Original Correlation	5% Quantile	p-value	Conclusion
Impulse Buying	0.9981	0.9973	0.1318	Established
Perceived Authenticity	0.9983	0.9850	0.8610	Established
Social Presence	0.9953	0.9959	0.0316	Not established

Source: SmartPLS 4 output, processed data (2026).

Compositional invariance is established for Impulse Buying and Perceived Authenticity. For Social Presence, the original correlation of 0.9953 is slightly below the 5% quantile of 0.9959, with $p = 0.0316$. Therefore, compositional invariance for Social Presence is not established. The numerical difference is very small; nevertheless, procedurally, Step 2 must be reported as unmet for this construct. Consequently, MGA comparisons involving Social Presence should be interpreted with greater caution.

MICOM Step 3: Equality of Composite Means and Variances

Table 12. MICOM Step 3a – Equality of Composite Means

Construct	Difference (Male–Female)	95% Permutation Interval	p-value	Conclusion
Impulse Buying	0.181	-0.280 s.d. 0.286	0.203	Equivalent
Perceived Authenticity	0.170	-0.282 s.d. 0.289	0.230	Equivalent
Social Presence	0.070	-0.277 s.d. 0.286	0.634	Equivalent

Source: SmartPLS 4 output, processed data (2026).

All original differences in composite means fall within the 95% permutation intervals, and all p-values exceed 0.05. Thus, there are no significant differences in composite means between the Male and Female groups for any of the three constructs.

Table 13. MICOM Step 3b – Equality of Composite Variances

Construct	Difference (Male–Female)	95% Permutation Interval	p-value	Conclusion
Impulse Buying	0.103	-0.325 s.d. 0.328	0.523	Equivalent
Perceived Authenticity	-0.046	-0.342 s.d. 0.367	0.801	Equivalent
Social Presence	0.024	-0.324 s.d. 0.353	0.884	Equivalent

Source: SmartPLS 4 output, processed data (2026).

Step 3b likewise shows no significant differences in composite variances between Male and Female. Perceived Authenticity and Impulse Buying therefore demonstrate adequate measurement equivalence. The Social Presence results, however, should still be interpreted with caution because compositional invariance was not established in Step 2, even though the means and variances were equivalent in Step 3.

Permutation MGA Results and Tests of H3–H4

Comparison of Male and Female Models (Permutation MGA)

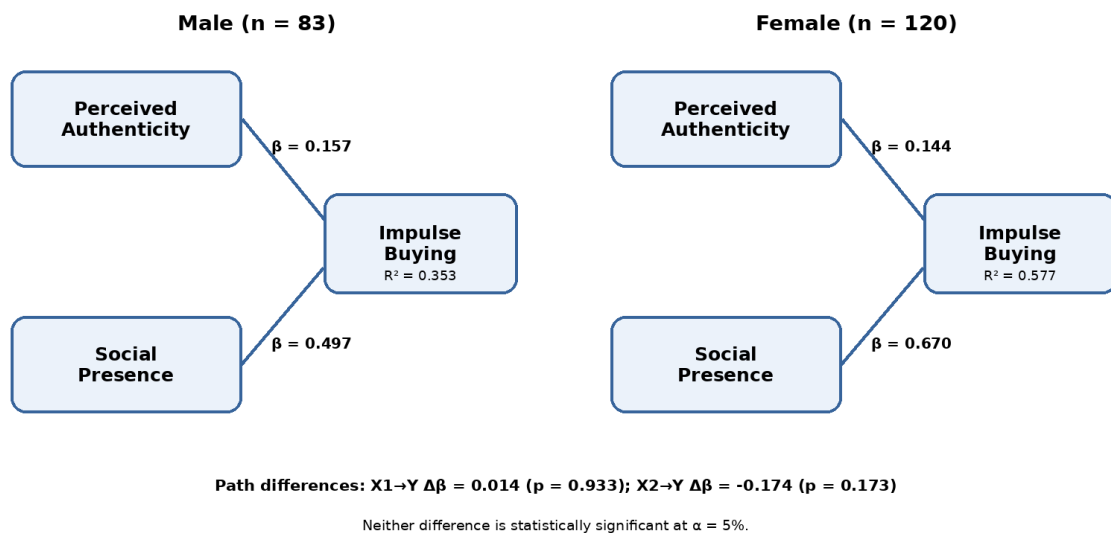


Figure 4. Comparison of Male and Female Path Coefficients

Source: Developed from SmartPLS 4 output (2026).

Table 14. Permutation Multi-Group Analysis Results

Hypothesis	Relationship	β Male	β Female	$\Delta\beta$	p-value MGA	Decision
H3	Perceived Authenticity → Impulse Buying	0.157	0.144	0.014	0.933	Not supported
H4	Social Presence → Impulse Buying	0.497	0.670	-0.174	0.173	Not supported

Source: SmartPLS 4 output, processed data (2026).

H3 proposes that Gender moderates the effect of Perceived Authenticity on Impulse Buying. After aligning the group labels with the gender coding in the original dataset, the path coefficient is 0.157 for the Male group and 0.144 for the Female group, producing a Male–Female coefficient difference of 0.014. The permutation

p-value of 0.933 is far above 0.05. Therefore, there is no significant difference in the effect of Perceived Authenticity on Impulse Buying between Male and Female, and H3 is not supported. This finding indicates that the relationship between perceived authenticity and the tendency toward impulse buying is relatively consistent across the two gender groups.

H4 proposes that Gender moderates the effect of Social Presence on Impulse Buying. Numerically, the Social Presence coefficient is higher for Female (0.670) than for Male (0.497). The Male–Female coefficient difference of -0.174 yields a permutation p-value of 0.173; therefore, the difference is not statistically significant at the 5% level. H4 is not supported. Thus, the data do not provide sufficient evidence that Gender significantly differentiates the strength of the effect of Social Presence on Impulse Buying. This interpretation is made cautiously because Social Presence did not satisfy MICOM Step 2.

Additional Findings by Gender

Table 15. Additional Male–Female Findings

Measure	Male	Female	Difference	p-value	Interpretation
R ² Impulse Buying	0.353	0.577	-0.225	0.069	Difference not significant
f ² PA → IB	0.028	0.033	-0.006	0.933	Small effect in both groups
f ² SP → IB	0.278	0.730	-0.452	0.043	Relative contribution differs; not the basis for H4

Source: SmartPLS 4 output, processed data (2026).

The R² value for Impulse Buying is 0.353 for Male and 0.577 for Female. Descriptively, the model has greater explanatory power in the Female group, but the difference in R² is not significant at the 5% level ($p = 0.069$). This finding is not used as the basis for determining H3 or H4.

The Social Presence effect size is 0.278 for Male and 0.730 for Female, with a statistically significant difference in f² ($p = 0.043$). This result indicates that the relative contribution of Social Presence to explaining Impulse Buying is greater in the Female group. Nevertheless, H4 remains unsupported because the moderation hypothesis is determined by differences in path coefficients rather than differences in f². The between-group path-coefficient comparison for Social Presence has $p = 0.173$.

Summary and Final Interpretation of the Hypotheses

Table 16. Summary of Hypothesis Testing

Hypothesis	Statement	Result Statistik	Decision
H1	Perceived Authenticity has a positive effect on Impulse Buying	$\beta = 0.164$; $p = 0.033$	Supported
H2	Social Presence has a positive effect on Impulse Buying	$\beta = 0.543$; $p < 0.001$	Supported
H3	Gender moderates the effect of Perceived Authenticity on Impulse Buying	$\Delta\beta = 0.014$; $p = 0.933$	Not supported
H4	Gender moderates the effect of Social Presence on Impulse Buying	$\Delta\beta = -0.174$; $p = 0.173$	Not supported

Source: SmartPLS 4 output, processed data (2026).

Overall, the results show that Perceived Authenticity and Social Presence are positive determinants of Impulse Buying in the context of live streaming commerce. However, the strength of the two predictors differs. Social Presence has a path coefficient of 0.543 and a large effect size ($f^2 = 0.356$), whereas Perceived Authenticity has a path coefficient of 0.164 and a small effect size ($f^2 = 0.032$). Thus, social interaction and the sense of presence during live streaming constitute a more dominant mechanism for encouraging spontaneous purchases than perceived authenticity alone.

The MGA results, however, indicate that Gender does not function as a significant boundary condition for either relationship examined. The effect of Perceived Authenticity on Impulse Buying is relatively similar for

Male and Female, and the difference in the effect of Social Presence also does not reach statistical significance. Accordingly, H1 and H2 are supported, whereas H3 and H4 are not supported. For H4 in particular, the conclusion should be considered together with the finding that the Social Presence construct did not satisfy compositional invariance in MICOM Step 2.

Substantively, these findings indicate that live streaming commerce strategies should prioritize the creation of a strong social experience, including real-time interaction, closeness to the host, audience engagement, and a personalized shopping atmosphere, because Social Presence is the strongest predictor of Impulse Buying. Perceived Authenticity remains relevant and significant, although its relative contribution is smaller. The absence of a significant Gender moderation effect indicates that these two mechanisms operate relatively similarly across gender groups in this sample.

CONCLUSION

Overall, this study shows that the social experience created in live streaming commerce is a stronger driver of impulse buying than perceived authenticity. The absence of a significant Gender moderation effect further indicates that both mechanisms operate relatively similarly among male and female consumers in this sample.

The stronger effect of Social Presence on Impulse Buying indicates that businesses should devote greater attention to interaction and social experience during live streaming sessions. Strategically designed live streaming can create interactive and real-time shopping experiences that trigger emotions and encourage consumers to purchase products spontaneously (Mariana & Susilowati, 2025). The host functions not only as a source of product information but also as a facilitator of communication, closeness, and an interactive atmosphere with consumers. The quality of streamer or host performance is an important factor in shaping consumers' emotional experiences (Ramdani & Syam, 2024). This finding is consistent with Oktasavina and Muntazah (2025), who found that persuasive host communication plays an important role in creating emotional relationships and consumer trust in products. Businesses can therefore improve the quality of live streaming by strengthening hosts' two-way communication skills, responding directly to consumer comments, acknowledging interacting consumers, and creating a more personal and engaging shopping atmosphere.

Perceived Authenticity also has a positive effect on Impulse Buying, indicating that businesses need to maintain authenticity and credibility when communicating product information. Product demonstrations should be realistic and transparent, including reasonable explanations of product characteristics, advantages, and limitations. Excessively exaggerated marketing strategies or claims that do not correspond to actual product conditions may reduce consumer trust. Accordingly, sales growth through live streaming should rely not only on promotional incentives but also on communicative and authentic hosts who are capable of creating strong social interaction.

REFERENCES

- Aenaya, Sulhaini, Rinuastuti. (2025). Live Streaming and Impulse Buying in Social Commerce: A Comparative Study of TikTok and Shopee with Price Consciousness as a Moderator. *Journal of Science and Education (JSE)*, 6(1): 841-851.
- Dewi, I G.A.A.I. & Purnamawati, I A. P. S. (2025). Digital Marketing Strategy: An Analysis of Effectiveness of Influencer and Affiliate Endorsement in Promoting Women's Fashion Product. *Journal of Tourism Economics and Policy*, 5(4): 776-787.
- Fitria, Mahrinasari, Fihartini. (2024). Impulsive Buying Behavior in E-Commerce Live Streaming Based on the Stimulus Organism Response (SOR) Framework in Women's Clothing Products (Study on Live Streaming Shopee). *Journal of Economics, Finance and Management Studies*, 7(3): 1700-1706.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM) (3rd ed.). Sage.
- Helbert & Ariawan. (2021). Pengaruh Celebrity Endorsement Vs. Influencer Endorsement Vs. Online Customer Review Terhadap Purchase Intention Pada Produk Skincare. *Jurnal Ekonomi dan Bisnis*, 8(2), 353-370.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2016). Testing measurement invariance of composites using partial least squares. *International Marketing Review*, 33(3), 405-431.
- Herlina & Wilujeng. (2024). Analysis of the Role of Digital Business Communication with Live Streaming Features in Shaping Consumer Attitudes, Interests and Trust. *Formosa Journal of Applied Sciences (FJAS)*, 3(5): 1567-1582.
- Kapriani, Jusman, Marsuki. (2025). Marketing Strategy: Flash Sale and Live Streaming on Impulse Purchase Decisions

on E-Commerce Platforms. *Jurnal Online Manajemen ELPEI (JOMEL)*, 5(1): 1177-1181.

Mariana & Susilowati. (2025). Pembelian Impulsif di Era Digital: Peran Live Streaming, Content Marketing, dan Ulasan Pelanggan Online pada Pengguna Shopee. *Journal of Management and Digital Business*, 5(2): 495-508.

Oktasavina, Muntazah. (2025). Pengaruh Komunikasi Persuasif Host Live Streaming Terhadap Keputusan Pembelian Konsumen. *Sinergi : Jurnal Ilmiah Multidisiplin*, 1(2): 359-370.

Rahayu, ROC., Mulyaningsih, HD. (2021). Pengaruh Content Marketing dan Dukungan Influencer terhadap Minat Beli Konsumen pada Produk Fashion. *Journal Riset Manajemen dan Bisnis*, 1(2), 136-145.

Ramdani, F.R., Syam, W.F. (2024). The Impact of Streamer Performance on Impulsive Buying through Vicarious Experience and Affective Reaction : Moderating Role of Shopping Motivation in E-Commerce Live Streaming. *SEIKO : Journal of Management & Business*, 7(2): 640 – 655.

Ringle, C. M., Wende, S., & Becker, J.-M. (2024). SmartPLS 4. Bönningstedt: SmartPLS

Shimp, Terence A. (2014). Integrated Marketing Communications in Advertising and Promotion. Issue 8. Jakarta: Salemba Four.

Tukidi, Adhani, Antika. (2024). Pengaruh Content Marketing Tiktok Affiliate, Live Streaming, dan Diskon Harga di Tiktok Shop terhadap Keputusan Pembelian Produk Skincare (Studi Kasus di Jakarta Selatan). *Management Research dan Business Journal*, 1(2), 103-119.