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## THE INFLUENCE OF VIRTUAL STREAMERS ON CONSUMER PURCHASE INTENTION IN SHOPEE LIVE STREAMING IN THE FASHION SEGMENT



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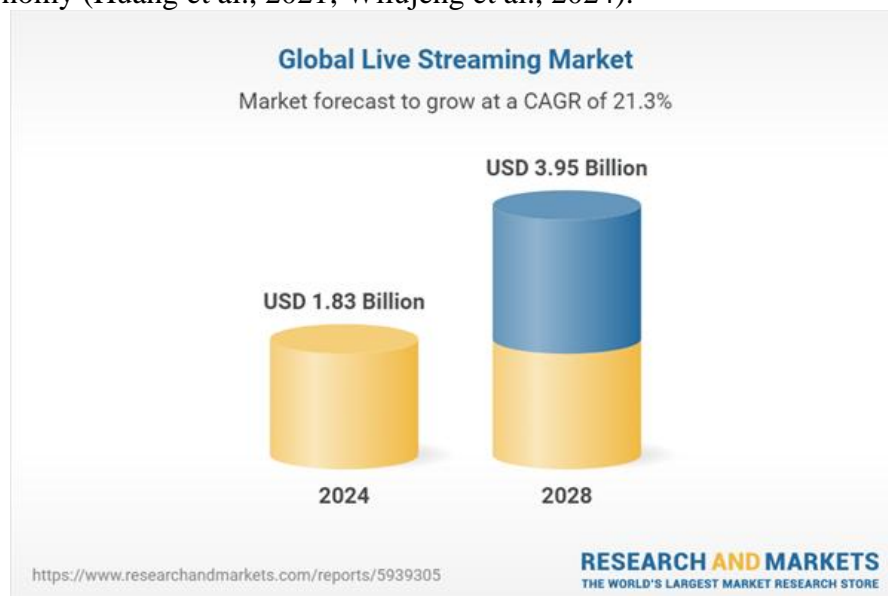
### Abstract

This study examines the influence of virtual streamer characteristics on consumer purchase intention in Shopee Live's fashion segment in Indonesia, addressing the limited empirical evidence on virtual influencers in live commerce contexts. While prior studies predominantly focus on human streamers or general social media influencers, this research offers novel insights by investigating virtual streamers as emerging digital marketing agents in live shopping environments. Using a quantitative approach, data were collected from 150 consumers in the Special Region of Yogyakarta through purposive sampling and analyzed using Partial Least Squares–Structural Equation Modeling (PLS-SEM). The results reveal that likeability does not directly affect purchase intention, indicating that consumers prioritize functional factors such as product attributes, pricing, and promotional incentives over streamer persona. However, likeability and responsiveness significantly enhance social presence, which in turn positively influences purchase intention. Responsiveness also shows a direct positive effect on purchase intention, underscoring the importance of real-time interaction in live commerce. These findings contribute to the literature by clarifying the indirect role of virtual streamer attributes through social presence and offer practical implications for fashion brands to optimize interactive strategies and engagement-driven content when deploying virtual streamers in live shopping platforms.

**Keywords:** Virtual Streamer, Live Commerce, Social Presence, Responsiveness, Purchase Intention, Fashion E-Commerce

## INTRODUCTION

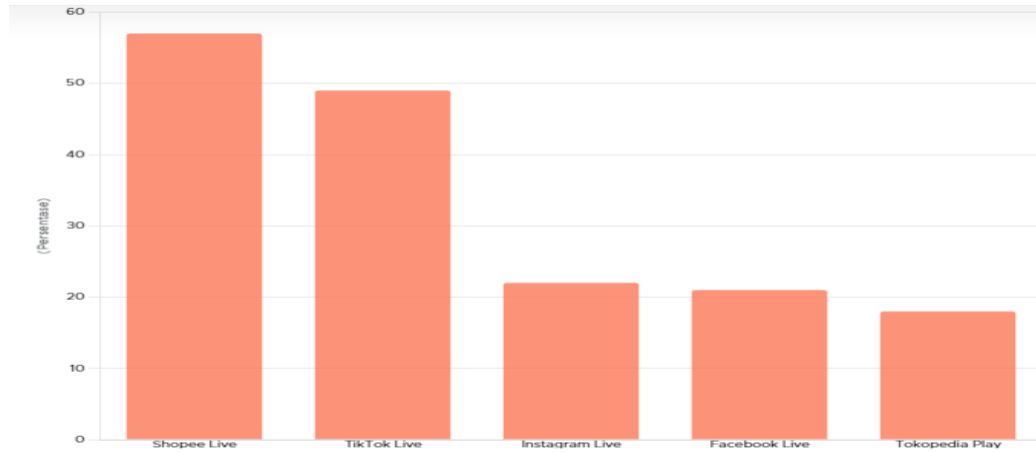
Live streaming has transformed from a purely entertainment-oriented feature into a strategic digital marketing instrument that enables real-time interaction, persuasion, and transaction. The rapid adoption of live streaming by social media and e-commerce platforms reflects changing consumer behavior, where audiences increasingly prefer interactive and immersive content over static or on-demand formats. This shift has encouraged businesses to integrate live streaming into promotional activities such as product demonstrations, flash sales, and interactive shopping events, making it a critical component of contemporary digital marketing strategies (Santora, 2024). The global live streaming market's projected growth underscores its economic relevance, positioning live commerce as a key driver within the digital economy (Huang et al., 2021; Wilujeng et al., 2024).



Source: Influencer marketinghub

**Figure 1. Live Streaming Statistics for Marketing in 2024**

The global live streaming market is projected to grow rapidly from USD 1.83 billion in 2024 to USD 3.95 billion by 2028, with a CAGR of 21.3%, underscoring its rising importance in the digital economy. Platforms like YouTube Live, Twitch, TikTok Live, and e-commerce streams are now vital marketing tools, offering higher audience engagement than traditional methods (Huang et al., 2021; Wilujeng et al., 2024). In Indonesia, the shift toward digital shopping is accelerating, with live shopping becoming a key driver. A 2023 Jakpat survey found that 9 in 10 online consumers watch live shopping, 86% have explored it, and 65% have made purchases during live sessions (Alenia.id, 2024). These trends affirm that live streaming is no longer optional, but essential for digital marketing success.



Source: GoodStats

**Figure 2. Most Used Live Shopping Platforms in Indonesia in 2024**

In Indonesia, the rise of live shopping is particularly pronounced, with Shopee Live and TikTok Live emerging as dominant platforms due to their strong integration of entertainment, social interaction, and commerce. Empirical evidence indicates that a substantial proportion of Indonesian consumers actively watch and purchase through live shopping sessions, especially in visually driven sectors such as fashion. Prior studies largely explain purchase intention in live streaming contexts using the Stimulus–Organism–Response (S-O-R) framework, emphasizing factors such as streamer credibility, interactivity, social presence, and emotional engagement (Ma et al., 2022; Gao et al., 2023; Zhang et al., 2023). These studies predominantly focus on human streamers and general live commerce settings, demonstrating that responsiveness, likeability, and perceived social presence can enhance trust and stimulate purchasing decisions.

However, despite the growing adoption of virtual streamers animated or character-based streamers that combine entertainment with real-time interaction empirical research examining their influence on consumer purchase intention remains limited, particularly in the Indonesian market. Existing literature has not sufficiently differentiated the persuasive mechanisms of virtual streamers from those of human streamers, nor has it explicitly examined how key attributes such as likeability, responsiveness, and social presence operate within Shopee Live fashion segments. This gap raises an important research problem: to what extent and through which mechanisms do virtual streamers influence consumer purchase intention in live shopping environments? Addressing this gap, the present study aims to analyze the influence of virtual streamers' likeability, responsiveness, and perceived social presence on consumer purchase intention in Shopee Live fashion streams, thereby extending the S-O-R framework and contributing context-specific insights to live commerce and digital marketing literature in Indonesia.

## REVIEW OF LITERATURE

### Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM), proposed by Davis (1989) as an extension of the Theory of Reasoned Action, explains technology adoption through perceived usefulness and perceived ease of use, shaping attitudes, intentions, and actual

usage (Noviyanti & Erawati, 2021; Riswan, 2024). While early studies validated TAM in information systems, more recent research extends its application to mobile learning, e-commerce, and eco-friendly technologies (Mishra et al., 2014; Marangunić & Granić, 2015). However, some studies argue that TAM underemphasizes social and affective factors, which are critical in consumer-oriented platforms (Venkatesh et al., 2016). La Pade and Prayoga (2023) refined TAM to include ease of use, usefulness, attitude, intention, and system use, providing a multidimensional approach. In this study, TAM is applied to Shopee Live's virtual streamers, where attributes such as likeability and responsiveness may act as determinants of perceived usefulness and ease, influencing attitudes and purchase intentions.

### **Stimulus-Organism-Response Theory (SOR)**

The Stimulus-Organism-Response (SOR) framework conceptualizes how external stimuli affect internal cognitive and emotional states, producing behavioral outcomes (Mehrabian & Russell, 1974; Cheng et al., 2022). SOR has been applied in online consumer contexts, showing that environmental cues like website design or influencer characteristics (stimulus) shape satisfaction and engagement (organism), which in turn drive loyalty and purchase behaviors (response) (Priscilia & Sumar, 2023; Li et al., 2020). Compared with TAM, SOR emphasizes the mediating role of internal states rather than solely attitudes or intentions, highlighting the psychological mechanisms underlying online interactions. In this study, virtual streamer characteristics function as stimuli, social presence reflects the organismic state, and purchase intention represents the behavioral response.

### **Purchase Intention, Social Presence, Likeability, and Responsiveness**

Purchase intention reflects the probability of a consumer engaging in a transaction, influenced by attitudes, perceived value, social norms, and external cues such as reviews and influencer credibility (Ajzen, 1991; Al-Kilani & El Hedhli, 2021; Zhang & Yue, 2020). Social presence, the sense of being emotionally connected during digital interactions, enhances trust and engagement, facilitating purchase decisions (Richardson et al., 2017; Gunawardena & Zittle, 1997; Sung & Mayer, 2012). Likeability strengthens affective bonds with brands or influencers, particularly among younger consumers, and has been linked to higher purchase intention in social commerce (Siddiqi et al., 2022; Ratten et al., 2021; Wang et al., 2020). Responsiveness, the promptness and relevance of feedback reduces perceived uncertainty and fosters trust (Suaranda et al., 2021; Hossain & Badiuzzaman, 2021). Comparing these studies reveals that while TAM captures rational adoption, SOR and affective constructs like social presence, likeability, and responsiveness better explain emotional and relational drivers in live commerce platforms, suggesting that integrating these frameworks can provide a more comprehensive understanding of consumer behavior.

### **Hypothesis Development**

#### **Likeability and Purchase Intention**

Virtual streamer likeability can positively influence purchase intention by fostering trust and emotional connection in live commerce (Gao et al., 2023; Li & Huang, 2024). When viewers perceive a streamer as likable, they are more receptive to recommendations and confident in their buying decisions (Wu & Huang, 2023). Parasocial interactions strengthen this effect, as emotional resonance with the streamer enhances perceived credibility and enjoyment (Zhang et al., 2022; Zhou & Lou, 2024). Therefore, greater likability increases the likelihood of consumers intending to purchase promoted products. Based on this, the following hypothesis is proposed:

### **H1: Likeability influences Purchase Intention**

#### **Likeability and Social Presence**

Virtual streamer likeability refers to how positively audiences perceive a streamer's personality and communication style, fostering feelings of comfort and enjoyment during live sessions. Research shows that likeable streamers are more effective at creating emotional and social bonds, which enhance perceived social presence (Jin et al., 2021; Hatamleh et al., 2023). When interactions feel authentic, viewers experience greater closeness and engagement. Likeability is thus a key driver of social presence, as it creates a warm and engaging communication environment (Tao et al., 2024; Gao et al., 2023). Accordingly, the more likeable a virtual streamer is, the stronger the audience's sense of social presence. Based on this, the following hypothesis is proposed:

### **H2: Likeability influences Social Presence**

#### **Responsiveness and Purchase Intention**

Streamers' ability to respond quickly to audience questions significantly influences purchase intention, as timely and accurate information makes consumers feel acknowledged and more confident in buying decisions (Chen et al., 2024; Guo & Luo, 2023). Responsiveness also signals professionalism and credibility (Wang et al., 2022), enhancing the overall shopping experience (Febrian et al., 2021; Lee et al., 2022). In live streaming, effective assistance and reduced information gaps increase the likelihood of purchase, making responsiveness a key predictor of purchase intention. Based on this, the following hypothesis is proposed:

### **H3: Responsiveness influences Purchase Intention**

#### **Responsiveness and Social Presence**

Responsiveness, the streamer's ability to promptly and appropriately engage with viewers, plays a key role in building social presence. Direct responses to audience comments create a sense of real-time interaction, turning passive viewers into active participants (Wang et al., 2024; Bründl et al., 2023). Reciprocal communication enhances the perception of connection and attentiveness (Tsai et al., 2021), fostering a more engaging atmosphere during live streams (Anjelita & Qonitah, 2024). Thus, a virtual streamer's responsiveness significantly strengthens perceived social presence. Based on this, the following hypothesis is proposed:

### **H4: Responsiveness influences Social Presence**

#### **Social Presence and Purchase Intention**

Social presence significantly enhances consumer confidence during live streaming by creating a warm, interactive atmosphere. Real-time engagement and a sense of community increase trust in promoted products and foster a comfortable environment that supports purchase decisions (Ma et al., 2022; Attar et al., 2023). Prior research shows that social presence boosts purchase intention by improving communication quality and overall experience (Huang et al., 2023). It also exposes consumers to both product information and peer recommendations, shaping their perceptions (Wang & Huang, 2023). Thus, a stronger sense of social presence leads to a higher likelihood of purchasing:

### **H5: Social Presence influences Purchase Intention.**

## **RESEARCH METHOD**

This study employs a quantitative research design to examine the influence of virtual streamer likeability, responsiveness, and social presence on purchase intention, chosen because numerical data and statistical modeling are appropriate for testing hypothesized relationships and quantifying effect sizes. Data were collected in Yogyakarta, a city with a high concentration of young e-commerce users, through an online questionnaire targeting Shopee users aged 18+ who had watched at least one fashion live-stream on Shopee Live and made a purchase within the last three months. Purposive sampling was applied to select 150 respondents, aligning with recommended sample size guidelines for PLS-SEM (Hair et al., 2019), ensuring that participants had direct experience relevant to the study objectives.

The key variables were measured using validated six-point Likert scale items adapted from previous studies: purchase intention (Gao et al., 2023), likeability (Radu et al., 2023), responsiveness (Arilaha et al., 2021), and social presence (Cummings & Wertz, 2022). Operational definitions were specified: likeability captures viewer affinity toward the streamer; responsiveness measures perceived interactivity; social presence reflects the sense of real-time social engagement; purchase intention indicates the likelihood of buying products featured in the stream. A pilot test confirmed item clarity and internal consistency.

Data validity was verified through convergent and discriminant analyses (outer loadings > 0.70; AVE > 0.50), and reliability using Cronbach's Alpha and Composite Reliability (> 0.60). Prior to hypothesis testing, descriptive statistics were analyzed. The structural model was evaluated via PLS-SEM, examining path coefficients, R<sup>2</sup>, VIF (< 5), and Q<sup>2</sup> (> 0). Robustness checks included bootstrapping with 5,000 resamples, multicollinearity diagnostics, and sensitivity tests for alternative model specifications to ensure stability. Hypotheses were tested at p-values < 0.05 and t-values > 1.96, confirming predictive relevance and model adequacy.

## RESULTS AND DISCUSSION

### Respondent Profile

This study involved 150 participants from the Special Region of Yogyakarta who met specific inclusion criteria. The sample was dominated by young adults aged 18–25, reflecting a digitally active generation engaged in online shopping. Most respondents were students or employees, with a higher proportion of females. All participants actively used Shopee, had made at least one purchase in the past three months, and had watched at least one Shopee Live session in the fashion category, ensuring the relevance and validity of responses for assessing the study's core variables.

**Table 1. Respondent Characteristics**

Category	Sub-Category	Frequency	Percentage
Gender	Male	68	45.33%
	Female	82	54.67%
	Total	150	100%
Age	18-22 years	48	32.00%
	23-27 years	65	43.33%
	28-32 years	33	22.00%

	>32 years	4	2.67%
	Total	150	100%
Work	Private Employees	58	38.67%
	Self-Employed/Freelancers	35	23.33%
	Students/College Students	42	28.00%
	Civil Servants/Police/TNI	14	9.33%
	Others	1	0.67%
	Total	150	100%
Income	1.000.000 - 2.000.000	32	21.33%
	2.000.001 - 3.000.000	46	30.67%
	3.000.001 - 4.000.000	56	37.33%
	4.000.001 - 5.000.000	13	8.67%
	>5.000.000	3	2.00%
	Total	150	100%

Table 1 reveals that the majority of respondents were female (54.67%), indicating greater engagement among women likely due to their responsiveness to lifestyle content and visual promotions on social media. Most respondents were aged 23–27 (43.33%), representing a digitally literate, trend-aware group in early career or post-education stages highly relevant for studies on digital consumer behavior. The largest occupational group was private employees (38.67%), reflecting frequent exposure to online products and digital platforms. The dominant income range was Rp 3,000,001–Rp 4,000,000 (37.33%), suggesting middle-class consumers with strong purchasing power and active participation in both online and offline shopping. Collectively, this demographic represents a tech-savvy, economically active audience ideal for research on digital purchasing behavior.

### Descriptive Analysis of Research Variables

**Table 2. Descriptive Statistics Results**

Interval	Category
1.00 – 1.83	Strongly Disagree (SD)
1.84 – 2.66	Disagree (D)
2.67 – 3.49	Slightly Disagree (SD)
3.50 – 4.33	Fairly Agree (FA)
4.34 – 5.16	Agree (A)
5.17 – 6.00	Strongly Agree (SA)

### Purchase Intention

**Table 3 Description of Respondents' Answers to Purchase Intention Questionnaire Items**

Code	Frequency	Total Respondents	Item	Mean	Criteria
NP1	722	150	I will purchase the product promoted by this virtual streamer in their live stream.	4.813	Agree
NP2	789	150	I intend to purchase the product promoted by this virtual streamer in their live stream.	5.260	Very Agree
NP3	717	150	I will consider this virtual streamer's live stream as my first shopping choice.	4.780	Agree
Average				4.951	Agree

Source: Primary data processed by SmartPLS 4 (2025)

Based on Table 3, the average score for the Purchase Intention variable is 4.951, which falls into the "Agree" category. Among the indicators, the highest mean score of 5.260 was recorded for item NP2: "I intend to purchase the product promoted by this virtual streamer during the live streaming session." This aligns with Candra (2025), who noted that Shopee Live in the fashion segment provides an interactive and enjoyable shopping experience, fostering impulsive purchases and enhancing consumers' perception of informational value and shopping enjoyment. Similarly, Febtiana and Wiandti (2025) found that promotions conducted by virtual streamers are notably effective in shaping audience purchase intention. Consumers not only view live streaming as an alternative shopping channel but also demonstrate genuine interest and commitment to making purchases.

**Likeability (LK)**

**Table 4. Description of Respondents' Answers to the Likeability Questionnaire Items**

Code	Frequency	Total Respondents	Item	Mean	Criteria
LK1	750	150	I found this virtual streamer pleasant.	5.000	Agree
LK2	791	150	I found this virtual streamer friendly.	5.273	Very Agree
LK3	767	150	I found this virtual streamer comfortable.	5.113	Agree
LK4	811	150	I found this virtual streamer kind.	5.406	Very Agree
LK5	766	150	I found this virtual streamer kind.	5.106	Agree
Average				5.180	Very Agree

Source: Primary data processed by SmartPLS 4 (2025)

Table 4 shows that the Likeability variable received an average score of 5.180, placing it in the "Very Agree" category, indicating respondents' generally positive perception of the virtual streamer on Shopee Live. The highest-rated item, LK4 ("I feel this virtual streamer is kind"), scored 5.406, reinforcing the importance of perceived kindness. This supports findings by Davlembayeva et al. (2025), who noted that audiences value virtual streamers' moral character and positive demeanor in forming strong impressions. In Shopee

Live’s fashion segment, such favorable perceptions are strategically significant, as streamers seen as kind and approachable are more likely to build emotional connections, enhance viewer engagement, and increase trust in promoted products (Chen & Yang, 2023).

**Responsiveness (RP)**

**Table 5 Description of Respondents' Answers to the Responsiveness Questionnaire Items**

Code	Frequency	Total Respondents	Item	Mean	Criteria
RP1	752	150	This virtual streamer was very pleasant to communicate with.	5.013	Agree
RP2	796	150	This virtual streamer responded to my questions and requests in a timely manner.	5.306	Very Agree
RP3	765	150	This virtual streamer's responses were very relevant to my issues and requests.	5.100	Agree
RP4	795	150	This virtual streamer provided relevant information to my questions in a timely manner.	5.300	Very Agree
Average				5.180	Very Agree

Source: Primary data processed by SmartPLS 4 (2025)

Table 5 shows that the Responsiveness variable has an average score of 5.180, indicating a Very Agree response level. The highest-rated item, RP2 (“This virtual streamer responds to my questions and requests promptly”), scored 5.306, suggesting that respondents view virtual streamers in Shopee Live’s fashion segment as highly responsive (Yu et al., 2025). In live commerce, especially on Shopee Live, responsiveness is key to creating an engaging and personalized shopping experience. Prompt and relevant replies from streamers not only boost user satisfaction but also build trust in the promoted products and increase the chances of immediate purchases (Zhang et al., 2024).

**Social Presence (SP)**

**Table 6 Description of Respondents' Answers to the Social Presence Questionnaire Items**

Kode	Frequency	Total Respondents	Item	Mean	Criteria
SP1	759	150	There's a sense of human connection in this streamer's virtual live streaming space.	5.060	Agree
SP2	808	150	There's a sense of personality in this streamer's virtual live streaming space.	5.386	Very Agree
SP3	769	150	There's a sense of human warmth in this streamer's virtual live streaming space.	5.126	Agree
SP4	811	150	There's a sense of human sensitivity in this streamer's virtual live streaming space.	5.406	Very Agree

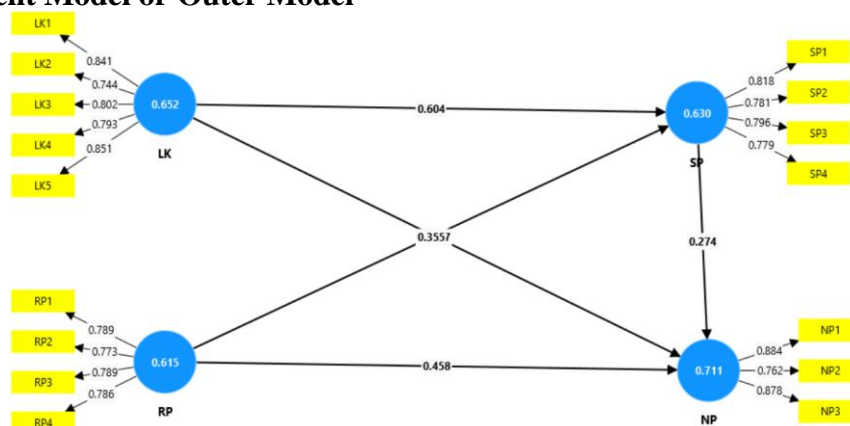
Average 5.245 Very Agree

Source: Primary data processed by SmartPLS 4 (2025)

Table 6 shows that the Social Presence variable has an average score of 5.245, categorized as "Very Agree," with the highest score of 5.406 on the indicator SP4: "There is a sense of interpersonal sensitivity in the virtual streamer's live streaming space." This indicates that viewers strongly perceived empathy and emotional warmth during Shopee Live fashion sessions, suggesting that virtual streamers effectively created a humanized and engaging atmosphere despite the digital setting (Shih et al., 2024). Social presence thus plays a critical role in fostering emotional connections between streamers and audiences, which is vital for driving engagement, trust, and purchase intention in live commerce (Zheng et al., 2023).

**Research Results**

**Measurement Model or Outer Model**



Source: Primary data processed by SmartPLS 4 (2025)

**Figure 3. Outer Model Research Model**

**Table 7 Results of Convergent Validity Evaluation Applying Outer Loadings**

Variable	Item	Outer Loading	Description
Purchase Intention (NP)	NP1	0.884	VALID
	NP2	0.762	VALID
	NP3	0.878	VALID
Likeability (LK)	LK1	0.841	VALID
	LK2	0.744	VALID
	LK3	0.802	VALID
	LK4	0.793	VALID
	LK5	0.851	VALID
Responsiveness (RP)	RP1	0.789	VALID
	RP2	0.773	VALID
	RP3	0.789	VALID

	RP4	0.786	VALID
Social Presence (SP)	SP1	0.818	VALID
	SP2	0.781	VALID
	SP3	0.796	VALID
	SP4	0.779	VALID

Source: Primary data processed by SmartPLS 4 (2025)

Table 7 confirms that all indicators across the four variables exceed the validity threshold of 0.70, indicating strong construct validity. Purchase Intention (PI) shows high indicator loadings from 0.762 to 0.884, reflecting consistent measurement of respondents' buying intentions. Likeability (LK) indicators range from 0.744 to 0.851, with LK5 being the strongest contributor. Responsiveness (RP) has loadings between 0.773 and 0.789, validating its ability to capture perceptions of the streamer's response speed and relevance. Social Presence (SP) indicators fall between 0.779 and 0.818, with SP1 as the most dominant. These results confirm that all constructs are reliably measured and appropriate for the study's measurement model.

**Reliability Test**

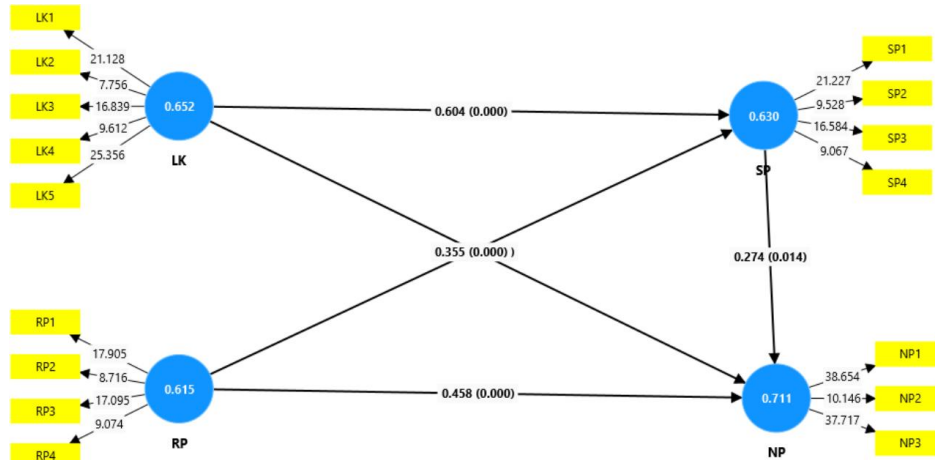
**Table 8 Construct Reliability Values**

Variable	Cronbach's Alpha	Composite Reliability (rho_A)	Composite Reliability (rho_C)	Average Variance Extracted (AVE)
LK (Likeability)	0.865	0.867	0.903	0.652
NP (Purchase Intention)	0.794	0.793	0.880	0.711
RP (Responsiveness)	0.791	0.792	0.865	0.615
SP (Social Presence)	0.804	0.804	0.872	0.630

Source: Primary data processed by SmartPLS 4 (2025)

Based on the results presented in Table 8, all variables meet the criteria for both reliability and convergent validity. Each construct demonstrates acceptable internal consistency, as indicated by Cronbach's Alpha values exceeding 0.70. Additionally, the Composite Reliability (rho\_c) scores for all variables surpass the recommended threshold of 0.70, with the highest reliability observed in the Likeability variable at 0.903, reflecting a very strong level of reliability. Furthermore, the Average Variance Extracted (AVE) values for all constructs are above 0.50, indicating that the indicators sufficiently explain their respective constructs. These findings confirm that the requirements for reliability and convergent validity have been met, validating the instrument's suitability for further analysis.

**Structural Model or Inner Model**



Source: Primary data processed by SmartPLS 4 (2025)  
**Figure 4. Inner Model Research Model**

**Collinearity Test**

The multicollinearity test results indicate that all indicators under the variables Likeability, Purchase Intention, Responsiveness, and Social Presence have Variance Inflation Factor (VIF) values below the threshold of 5. The values range from 1.299 to 2.636, suggesting no signs of multicollinearity among the indicators within each construct. Although the highest VIF values are found in indicators LK5 and NP1, they remain well within acceptable limits. Therefore, all indicators are considered free from multicollinearity issues and are suitable for inclusion in the measurement model.

**Coefficient Determination/R-Square Test**

**Table 9. R Squared Value Test**

	R-square	R-square adjusted
NP	0.618	0.610
SP	0.851	0.849

Source: Data processed by SmartPLS 4 (2025)

Based on Table 9, the R-square value for the Purchase Intention (PI) variable is recorded at 0.618, indicating that the independent variables in the model explain 61.8% of the variation in respondents' buying intentions—classified as a moderate to strong explanatory power. Meanwhile, the Social Presence (SP) variable shows an R-square value of 0.851, meaning that 85.1% of its variation can be accounted for by the predictors included in the model, reflecting a very high level of predictive strength. Additionally, the adjusted R-square values for both variables show minimal differences, suggesting that the model is stable and reliable in capturing the relationships among the variables.

**Predictive Relevance/Q-Square**

According to Hair et al. (2017), a Q<sup>2</sup> value of zero or below indicates that the model lacks sufficient predictive power. Evaluating Q<sup>2</sup> is essential to ensure that the model not only explains existing data but also possesses the ability to predict unseen data, which is a critical component in Partial Least Squares Structural Equation Modeling (PLS-SEM). Based on the Q<sup>2</sup> values obtained from the analysis, all indicators yielded results above 0.35, suggesting that the model demonstrates effective to strong predictive accuracy. For the Purchase

Intention construct,  $Q^2$  values ranged between 0.385 and 0.436, indicating good predictive relevance. Meanwhile, the Social Presence construct showed even higher  $Q^2$  values, ranging from 0.482 to 0.592, which reflects a very strong predictive capability. Overall, the model proves to have adequate predictive quality and can be considered reliable in explaining respondent behavior.

**Path Coefficient Test**

**Table 10. Testing the Influence of Path Coefficients on the Relationship Between Variables**

	Original Sample	Sample mean	Std Deviation	T statistics	P values
LK -> NP	0.087	0.083	0.108	0.801	0.423
LK -> SP	0.604	0.602	0.068	8.899	0.000
RP -> NP	0.458	0.461	0.102	4.493	0.000
RP -> SP	0.355	0.351	0.070	5.073	0.000
SP -> NP	0.274	0.272	0.112	2.449	0.014

Source: Data processed by SmartPLS 4 (2025)

The hypothesis testing reveals that Likeability does not significantly affect Purchase Intention ( $\beta = 0.087$ ,  $t = 0.801$ ,  $p = 0.423$ ), indicating that liking a virtual streamer does not directly drive consumers to buy. However, Likeability strongly influences Social Presence ( $\beta = 0.604$ ,  $t = 8.899$ ,  $p < 0.001$ ), suggesting that greater fondness enhances perceived social connection. Responsiveness significantly affects both Purchase Intention ( $\beta = 0.458$ ,  $t = 4.493$ ,  $p < 0.001$ ) and Social Presence ( $\beta = 0.355$ ,  $t = 5.073$ ,  $p < 0.001$ ), showing that timely, relevant responses strengthen consumer engagement and purchase intent. Additionally, Social Presence itself positively influences Purchase Intention ( $\beta = 0.274$ ,  $t = 2.449$ ,  $p = 0.014$ ), confirming that stronger social presence increases consumers' likelihood to purchase.

**The Influence of Likeability on Purchase Intention**

Table 10 indicates that streamer likeability does not have a statistically significant effect on purchase intention in Shopee Live's fashion segment, with a t-statistic of 0.801 (below 1.96) and a p-value of 0.423 (above 0.05), leading to the rejection of H1. This finding suggests that, in this context, consumers appear to prioritize product-related information—such as promotions, discounts, and tangible benefits—over the personal traits of streamers. While streamer likeability may contribute to audience engagement, it alone seems insufficient to influence purchase decisions without accompanying perceptions of trust or product credibility. This aligns with prior research indicating that digital consumers respond more strongly to the quality and reliability of promotional content than to influencer characteristics (Nurhayati et al., 2025; Saima & Khan, 2020; Hartono & Immanuel, 2022). Consequently, interactive e-commerce platforms like Shopee Live may benefit more from strategies that enhance informational value, such as clearly presenting product features, competitive pricing, and verified reviews, rather than focusing primarily on cultivating streamer personality. From a practical standpoint, marketers could optimize live-stream campaigns by providing structured product demonstrations, time-limited discounts, or bundled offers, which are likely to have a more direct impact on purchase intention than relying solely on emotional engagement with hosts.

### **The Influence of Likeability on Social Presence**

Table 10 indicates that likeability defined as the audience's positive perception of the streamer's attitude, behavior, or personality has a statistically significant association with social presence in Shopee Live's fashion segment. Using PLS-SEM, the analysis produced a t-statistic of 8.899 and a p-value of 0.000, supporting Hypothesis 2. These results suggest that viewers who perceive a streamer as likable tend to experience a stronger sense of social connection, facilitated by interactive features such as real-time chat, virtual gifting, and live engagement. This perceived closeness may contribute to higher trust and comfort, which are factors likely to enhance engagement and purchase intentions, although causality cannot be definitively established. Consistent with Styvén and Mariani (2020), favorable perceptions of the communicator can enhance audience responsiveness, while secondary tests ( $t = 4.202$ ,  $p = 0.000$ ) further support these patterns (Christiarini et al., 2025). Moreover, appealing streamer traits may elicit positive emotions such as joy and relaxation, potentially intensifying the sense of presence (Gao et al., 2023) and fostering perceived intimacy (Wongkitrungrueng & Assarut, 2020).

From a practical perspective, platforms and marketers could leverage these insights by developing guidelines and training for streamers to enhance interpersonal warmth and approachable communication, emphasizing authentic engagement rather than scripted interactions. Features that enable real-time interaction such as chat moderation, personalized responses, or interactive mini-games can be optimized to strengthen the perceived social presence and deepen viewer engagement.

### **The Influence of Responsiveness on Purchase Intention**

Table 10 indicates that responsiveness exerts a positive and statistically significant association with purchase intention in Shopee Live's fashion segment, with a t-statistic of 4.493 and p-value of 0.000, supporting Hypothesis 3. While the findings suggest that prompt and informative responses from streamers are related to higher purchase intention, it is important to interpret this as a correlation rather than definitive causation. In live shopping contexts, timely interaction may enhance consumers' perceptions of personalization, trust, and professionalism, which can facilitate emotional and cognitive engagement (Chen et al., 2024; Qin et al., 2023). Prior studies similarly note that responsiveness can reduce uncertainty and support quicker decision-making (Ho et al., 2024; Christiarini et al., 2025; Guan et al., 2024), though effects may vary depending on product type and consumer characteristics. From a practical perspective, e-commerce platforms and fashion streamers could implement structured response protocols, such as pre-prepared FAQs, rapid moderation for queries, and interactive features that prioritize common concerns, to optimize responsiveness and consumer confidence. These measures may improve purchase intentions while maintaining service consistency and reducing cognitive overload for both streamers and viewers.

### **The Influence of Responsiveness on Social Presence**

Based on the data in Table 10, responsiveness is positively associated with social presence in the context of Shopee Live, as indicated by a t-statistic of 5.073 ( $>1.96$ ) and a p-value of 0.000 ( $<0.05$ ), supporting Hypothesis 4 (H4). Prompt interactions, such as replying to comments or greeting viewers, appear to enhance perceptions of authenticity and personal connection, contributing to greater social presence. These results are consistent with prior research suggesting that immediate streamer responses can foster emotional closeness (Li &

Candidate, 2025) and strengthen perceived social connection by addressing informational needs (Huo et al., 2023). However, causality should be interpreted cautiously, as responsiveness may coexist with other factors influencing engagement, such as content quality or streamer popularity. Analytically, the findings indicate that responsiveness functions as a mechanism for reinforcing relational cues in live commerce, translating into higher user engagement and perceived social interaction. From a policy perspective, e-commerce platforms and live-streaming managers could implement structured response protocols, including standardized reply times or automated acknowledgment messages, to enhance perceived social presence and loyalty. Streamers could also be trained in interactive communication strategies to maintain real-time engagement without overburdening operational capacity.

### **The Influence of Social Presence on Purchase Intention**

Table 10 indicates that social presence has a significant positive association with purchase intention in Shopee Live's fashion segment, with a t-statistic of 2.449 and p-value of 0.014, supporting Hypothesis 5 (H5). While the relationship is statistically significant, it is important to note that this analysis identifies correlation rather than definitive causation. The finding aligns with prior studies (Christiarini et al., 2025), which report a strong link between perceived social presence and purchase intention ( $t = 5.949$ ,  $p = 0.000$ ), suggesting that viewers' perceptions of warmth, responsiveness, and relatable streamers may enhance trust and engagement. Conceptually, these results extend the literature by emphasizing the role of emotional and relational cues in online live commerce, complementing prior work on virtual interaction and consumer decision-making (Qadri et al., 2024; Patricia & Sahetapy, 2021). From a policy perspective, e-commerce platforms and brands could operationalize these insights by designing streamer training programs that enhance interactive and empathetic communication, implementing feedback mechanisms to monitor viewer engagement, and encouraging consistent streamer-audience interactions to reinforce social presence, thereby potentially increasing purchase intention in a structured and measurable manner.

## **CONCLUSION**

This study demonstrates that in virtual product promotions, Social Presence mediates the effect of Likeability and Responsiveness on Purchase Intention, highlighting that real-time interaction and emotional engagement are key drivers of consumer behavior in live streaming commerce. While Likeability alone does not directly increase purchase intention, it strengthens Social Presence, and Responsiveness directly boosts both Social Presence and Purchase Intention. For practical implementation, brands on platforms like Shopee Live should prioritize training streamers to provide timely, personalized, and persuasive responses, use interactive features to foster emotional connection, and develop scripts or AI tools to enhance responsiveness without overemphasizing appearance. Limitations include the study's focus on a single region (Yogyakarta), a narrow demographic, the fashion product category, and measuring intention rather than actual purchase behavior. Future research should extend to multiple regions and diverse consumer segments, explore additional variables such as trust, entertainment value, or perceived expertise, and apply comparative

models like S-O-R, TAM, or UTAUT to better understand live commerce dynamics across product categories.

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