Volume 7 Issue 2 (2024) Pages 640 - 655
SEIKO : Journal of Management & Business
ISSN : 2598-831X (Print) and ISSN : 2598-8301 (Online)

The Impact of Streamer Performance on Impulsive Buying through Vicarious Experience and Affective Reaction : Moderating Role of Shopping Motivation in E-Commerce Live Streaming

Fadli Rahmat Ramdani[1], Winda Fitria Syam[2]
[1]Fakultas Ekonomi dan Bisnis, Universitas Siliwangi, [2]Fakultas Ekonomi dan Bisnis, Universitas Islam Negeri Sunan Gunung Djati

Abstract

This study aims to analyze the influence of Streamer Performance on Impulsive Buying through Vicarious Experience and Affective Reaction within the context of e-commerce live streaming on the Shopee Live platform. Additionally, this research examines the moderating role of Shopping Motivation in strengthening the impact of Streamer Performance on Vicarious Experience and Affective Reaction. Using the Stimulus-Organism-Response (SOR) model, this study identifies Streamer Performance as a stimulus influencing consumers' impulsive buying behavior through organism processes, specifically Vicarious Experience and Affective Reaction. Data was collected from 225 respondents, comprising Millennial and Gen Z consumers in Indonesia, and analyzed using Structural Equation Modeling (SEM). The results show that Streamer Performance has a positive and significant effect on Vicarious Experience and Affective Reaction, which subsequently enhance Impulsive Buying within e-commerce live streaming. Furthermore, Shopping Motivation serves as a moderator, strengthening the relationship between Streamer Performance and Vicarious Experience and Affective Reaction, particularly among Gen Z, who are more familiar with digital interactions. This study contributes to understanding the mechanisms of impulsive buying in e-commerce live streaming and offers practical insight for e-commerce platforms to enhance their marketing strategies through live streaming.

Keywords: *Streamer Performance, Vicarious Experience, Affective Reaction, Impulsive Buying, Shopping Motivation, Live Streaming.*

✉ Corresponding author :
Email Address : fadlyrrr073@gmail.com, windafsyam@gmail.com

INTRODUCTION

The development of e-commerce in recent years has transformed global consumption patterns, especially in Indonesia. One of the latest innovations in e-commerce is live streaming, which allows sellers to interact directly with consumers in real-time. In Indonesia, live streaming e-commerce platforms have grown increasingly popular because they create an interactive experience similar to physical shopping while maintaining the convenience of online shopping (Budianto & Kusuma, 2024). This shift also influences how consumers make purchasing decisions, notably impulsive buying.

Impulsive buying refers to an unplanned and immediate purchasing action that often bypasses rational consideration. Impulsive purchases tend to involve a strong emotional impulse, driving consumers to buy a product right away (Rook, 1987; Verplanken & Herabadi, 2001). In other words, impulsive buying is characterized by spontaneus purchasing decisions,

made without prior planning and triggered by sudden external stimuli. Factors such as consumers' moods and the shopping environment's stimuli play a significant role in these decisions (Beatty & Elizabeth Ferrell, 1998).

Various studies have extensively explored the phenomenon of impulsive buying on live streaming platforms. Research LI et al. (2024) found that streamer characteristics and performance can build relationships with audiences through experience and trust, creating a sense of engagement that leads to impulsive purchases. However, this study did not consider situational factors and suggested exploring additional factors that may mediate or explain the impact of streamer performance on impulsive buying behavior. Meanwhile, a study by Lo et al. (2022) found that vicarious experience and anchors positively impact consumer enthusiasm, leading to impulsive buying. However, this study did not consider situational factors like shopping motivation as a moderator for other elements. Additionally, it focused on live streaming commerce in general without specifying a particular platform, and the study was conducted in Malaysia, which may limit the generalizability of the findings to other countries.

Addressing these limitations, this research aims to fill the gap by integrating elements from these studies. Therefore, this study will comprehensively examine the relationships among streamer performance, vicarious experience, affective reaction, and impulsive buying. Furthermore, this research will investigate the moderating role of shopping motivation, which may influence the extent to which stimuli from streamer performance affect consumers' vicarious experiences and affective reactions. This study will use Shopee Live as the platform to test these elements within the context of live streaming e-commerce, focusing on Millennial and Generation Z customers in Indonesia, particularly in the Java region.

The objectives of this research are to test whether streamer performance influences vicarious experience and affective reaction, whether shopping motivation moderates the relationship between streamer performance and both vicarious experience and affective reaction, and how vicarious experience and affective reaction mediate the relationship between streamer performance and impulsive buying within the live streaming context. This study applies the Stimulus-Organism-Response (SOR) model framework, with streamer performance serving as the stimulus, influenced by the moderation of shopping motivation, while vicarious experience and affective reaction are considered part of the organismic process that ultimately results in the response, i.e., impulsive buying (Jacoby, 2002).

Through this approach, this study will not only provide insights into the mechanism of impulsive buying in the digital age but also offer new perspectives on effective marketing strategies for live streaming e-commerce platforms, specifically Shopee Live.

LITERATURE REVIEW

1. Streamer Performance and Vicarious Experience

Streamer performance refers to the streamer's effectiveness during live streaming sessions, marked by their credibility, expertise, and interactivity, which can create a more immersive and enjoyable shopping environment for consumers, thereby strengthening the emotional bond between the streamer and the audience (Jiang et al., 2022; LI et al., 2024). The credible performance of a streamer provides consumers with confidence in the promoted product, while direct interaction with viewers deepens feelings of engagement, resulting in an experience that feels more genuine and relevant to the consumer (Ma et al., 2022). Additionally, the streamer's interactivity and professionalism create a dynamic shopping atmosphere, allowing viewers to "experience" the product vicariously through visual and narrative demonstrations shown in the live stream (Wang et al., 2022).

Furthermore, the alignment between the streamer's personality and the showcased product has been shown to enhance the authenticity of the experience. Viewers who feel that the streamer has a close connection to the product are more likely to become emotionally and cognitively engaged in the purchasing process, as the product is perceived to be more relevant

and suited to their needs (C. C. Wu et al., 2021). An entertaining and informative presentation has also been found effective in eliciting an emotional response from consumers. When streamers not only demonstrate the product but also present it in an engaging and entertaining manner, they create a more enjoyable experience for consumers, ultimately enhancing the vicarious experience (Wang et al., 2022).

H1: Streamer performance has a positive influence on vicarious experience.

2. Streamer Performance and Affective Reaction

Streamer performance influences consumers' affective reactions in e-commerce live streaming through various interrelated mechanisms. The streamer's credibility, encompassing factors such as reputation, expertise, and interactivity, plays a key role in building trust and engagement among viewers. This, in turn, enhances their emotional response to the presented content (Jiang et al., 2022). High credibility helps viewers feel secure and comfortable responding to the content, thereby strengthening their emotional bond with the streamer and the promoted product. Additionally, the streamer's communication style and ability to deliver tailored information during live streaming sessions are essential for creating a positive shopping atmosphere. This capability not only makes viewers feel at ease but also has the potential to increase their purchase intentions (Wang et al., 2022).

Dynamic and responsive interactions between the streamer and viewers help create a more personal and enjoyable experience, which is crucial for evoking positive affective reactions. The alignment between the streamer and the promoted product, known as streaming-product congruence, also plays a role in enhancing trust and emotional connection. When viewers feel that the streamer genuinely understands and represents the product, this can positively influence consumers' affective reactions, making them more likely to become emotionally involved with the offerings (Dai & Cui, 2022).

Furthermore, the entertainment value and professional presentation of the streamer significantly contribute to a more engaging and immersive experience. Such engagement is essential for eliciting favorable emotional responses from viewers, ultimately leading to quicker and more impulsive purchase decisions (Ma et al., 2022; C. C. Wu et al., 2021). Positive experiences during live streaming sessions also strengthen the emotional connections fostered by the streamer, enhancing viewers' empathy. This is particularly important in e-commerce, where trust and emotional connectedness greatly influence purchasing decisions (Duarte et al., 2023). Additionally, shared viewing experiences, especially those involving active viewer interaction, have been shown to enhance learning performance and metacognition. The social dynamics fostered during live streaming sessions can enrich viewer engagement and satisfaction, contributing to more positive affective reactions (C. Liu et al., 2024).

H2: Streamer performance has a positive influence on affective reaction.

3. Vicarious Experience and Affective Reaction

Vicarious experience is defined as a realistic, imaginative encounter with products and services, projected through the experiences of others, whether it be the live streamer or other viewers in the live streaming session (Lo et al., 2022). Thus, vicarious experience refers to consumers' ability to feel an experience through others and is a crucial factor in e-commerce live streaming, especially on Shopee Live. When consumers watch a streamer demonstrate a product, they can envision themselves using it, creating an emotionally closer experience (Lo et al., 2022). The interactive nature of live streaming allows consumers to witness product demonstrations in real-time, which strengthens their sense of connection and trust with the streamer, as well as enhances their emotional response and purchase intentions (He, 2024; Widiyaningsih & Nugroho, 2024). Additionally, the streamer's credibility and rich visual media reinforce viewer loyalty, which in turn strengthens consumers' internal reactions (Y. Wu, 2024). Psychological factors such as consumer personality and past shopping experiences

also play a significant role in shaping their reactions. Positive experiences can trigger impulsive buying behavior (Xiya, 2024).

The combination of these elements creates an engaging environment, further influencing consumers' purchase decisions in live streaming commerce (Xiya, 2024; Zhang et al., 2024). Moreover, vicarious experience can foster co-creation, especially among health-conscious consumers, where sensory experience plays a crucial role in influencing behavioral loyalty, such as product recommendations (Meeprom et al., 2023). Even in negative contexts, consumers' reactions to brand events can be intensified by vicarious experiences, with personal experiences leading to stronger feelings of betrayal compared to communal events (Gerrath et al., 2023).

H3: Vicarious experience has a positive influence on affective reaction.

4. Vicarious Experience and Impulsive Buying

In the context of live streaming, vicarious experience enables consumers to engage with a product through others' actions, facilitating their purchase decision-making process. Research by Ma et al. (2022) highlights that interactivity and entertainment within live streaming can enhance consumer engagement and increase the likelihood of impulsive purchases. Furthermore, Y. Liu et al. (2018) found that vicarious experiences, such as observing others interact with a product, can evoke significant emotional responses, which in turn may trigger impulsive buying. For instance, watching someone touch a product can influence purchase intention by activating neural responses within the mirror neuron system, thus strengthening the emotional connection to the product. Consequently, vicarious experience proves essential in indirectly influencing consumers' purchasing decisions, particularly in increasing impulsive purchase urges. Additionally, found that in live streaming, vicarious experience contributes to affective reactions that intensify the impulse to buy. The sensory perceptions created through augmented reality (AR) applications in live streaming enhance the intensity of vicarious experiences, elevating consumers' emotional states and leading to stronger impulses for impulsive purchases (Goel et al., 2024).

H4: Vicarious experience has a positive influence on impulsive buying.

5. Affective Reaction and Impulsive Buying

Research Lo et al. (2022) indicates that affective responses play a crucial role in triggering impulsive buying, especially in the context of live streaming commerce. Negative emotions, such as anxiety from social comparisons, can also lead to impulsive buying behaviors, with consumer self-confidence moderating this effect positively (Tran, 2022). Research by Iyer et al. (2020) found that external stimuli, including marketing strategies and product engagement, significantly influence consumers' emotional states and their tendency toward impulsive purchases. Furthermore, Goel et al. (2024) revealed that sensory perceptions generated through e-commerce experiences directly impact the urge to buy impulsively, with product involvement moderating this relationship. And Fei et al. (2022) also emphasized that emotional regulation, especially positive emotions, increases the likelihood of consumers engaging in impulsive buying.

H5: Affective reaction has a positive influence on impulsive buying.

6. Shopping Motivation Moderates the Relationship Between Streamer Performance and Vicarious Experience

Shopping motivation plays a critical role in moderating the relationship between streamer performance and vicarious experience in live streaming e-commerce. Consumers who are motivated to shop are more likely to engage deeply with content presented by streamers, leading to a richer vicarious experience through the interactive and entertaining live streaming platform (Ma et al., 2022; Wang et al., 2022). When consumers' shopping motivation is high, their engagement with streaming content strengthens emotional

connections and enhances perceived value during the shopping process (Ye et al., 2023). Additionally, the perceived value of live streaming, including its utility and social value, moderates this relationship, as motivated consumers are more inclined to view streaming as beneficial and engaging (Yang et al., 2023). Research by Vogel et al. (2023) further indicates that shopping motivation can influence engagement strategies across various retail settings, with a significant impact on consumer behavior.

H6: Shopping motivation moderates the relationship between streamer performance and vicarious experience.

7. Shopping Motivation Moderates the Relationship Between Streamer Performance and Affective Reaction

Shopping motivation plays a crucial role in moderating the relationship between streamer performance and affective reaction during consumer interactions on e-commerce live streaming platforms, particularly on Shopee Live. Attributes of the streamer, such as appeal, expertise, and interactivity, significantly impact audience engagement and satisfaction. This effect is especially prominent among consumers with high shopping motivation, who seek both functional value and entertainment, leading them to engage more deeply with the content presented by the streamer (Heo et al., 2020; Ng et al., 2023).

Studies show that shopping motivation significantly influences consumers' emotional responses and decision-making. For instance, high shopping motivation can trigger a deeper affective engagement with streaming content, enhancing memory retention and decision evaluation processes (Xiao & Nie, 2023). In neurological terms, the orbitofrontal cortex and amygdala, associated with emotional and motivational processes, play a key role in shaping consumers' affective reactions to external stimuli, such as an engaging streamer presentation (Rolls, 2023). This underscores how shopping motivation not only affects perceptions of streamer performance but also enhances consumers' emotional attachment to the content.

Moreover, the impact of motivation on behavioral and decision-making processes, observed even in fields such as health management, emphasizes its importance in e-commerce live streaming, where shopping motivation acts as a catalyst that boosts consumer engagement and satisfaction with streamer performance, especially when consumers are motivated to seek added value in their shopping experience (Lin et al., 2023).

H7: Shopping motivation moderates the relationship between streamer performance and affective reaction.

METHODOLOGY

This study uses a verification research design. According to Bougie & Sekaran (2019), verification research aims to establish cause-and-effect relationships between variables and test predetermined hypotheses. The data used is cross-sectional data, specifically primary data. Based on Hair Jr et al. (2019), primary data is data collected directly for analysis to find solutions to the problems under study. In this study, primary data consists of respondents' responses regarding the influence streamer performance on impulsive buying through vicarious experience and affective reaction, moderated by shopping motivation on live streaming platforms.

This research employs a survey research method using a closed-ended questionnaire distributed to respondents. Shopee Live Streaming was selected as the platform for this study, as it is one of the most widely used live streaming platforms. The research sample was drawn from a population of millennial and Generation Z consumers who have previously made purchases through live streaming. According to Hair Jr et al. (2019), a representative sample size typically ranges from 100 to 200 respondents, with a recommended minimum sample size being five to ten times the number of indicators. This study includes 45 estimated parameters, thus requiring a minimum sample size of 225 respondents.

The study employs a non-probability sampling technique, specifically purposive sampling. Data collection was carried out by distributing questionnaires to respondents. The criteria for respondents in this study include: (1) millennial and Generation Z consumers with experience using the Shopee live streaming platform, and (2) Indonesian citizens residing on the island of Java. Each respondent was asked to indicate their level of perception on each statement item using a 10-point Likert Scale, where ratings from 1 to 5 represent disagreement, and ratings from 6 to 10 indicate agreement. The minimum sample size for this study is 225 respondents.

This research uses Structural Equation Modelling (SEM) to visualize relationships between variables. SEM was chosen as it aligns with the research objective, which is to analyze all relationships among latent constructs defined by several measures, clarifying both direct and indirect relationships between these latent constructs. The analysis tools used in this study are IBM SPSS 26.0 and IBM SPSS AMOS 24. The model used below illustrates the conceptual flow and interrelationship of variables in this research.

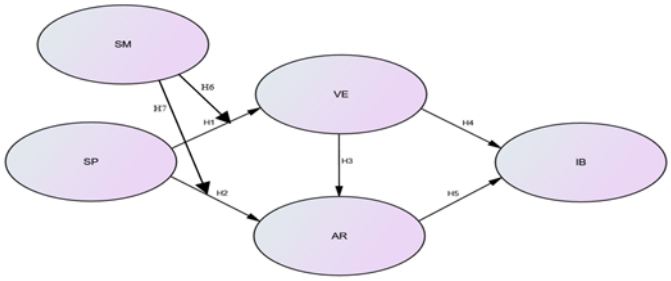

Figure 1. Research Model
Source: Processed By Author, 2024

In the structural model, all measurement items are adapted from the literature. Below is the operationalization of the variables used in this study:

Table 1. Operational Variable

No	Variable	Dimension	Indicator	Description
1.	Streamer Performance (LI et al., 2024; C. Liu et al., 2023; Ma et al., 2022)	Interactivity	Streamers interact with the audience during live streaming	SP1
		Entertainment	Streamers create a fun atmosphere during live streaming	SP2
		Presentation	Streamer demonstrates the product during live streaming	SP3
		Professionalism	Streamers show a professional attitude	SP4
2.	Vicarious Experience (Lo et al., 2022)	Emotional Connection	Emotional Response to the story told by the streamer	VE1
		Cognitive Processing	Level of understanding of the product based on the information obtained	VE2

		Learning and Reflection	Ability to internalise information: relate experiences to personal experiences.	VE3
3.	Affective Reaction (Lo et al., 2022)	Arrousal	High emotional engagement during live streaming	AR1
		Affection	Feeling of control over the viewing experience	AR2
		Excitement	The excitement of seeing interaction in livestreaming	AR3
		Pleasure	The fun felt during live streaming	AR4
4.	Impulsive Buying (Beatty & Elizabeth Ferrell, 1998b; Lo et al., 2022)	Spontaneus Purchase	Purchases without prior planning	IB1
		Impulsive Buying Urge	Intensity of urge to buy without prior planning	IB2
		Emotional Satisfaction	Emotional satisfaction after making a purchase	IB3
5.	Shopping Motivation (Amara et al., 2023; Babin et al., 1994)	Utilitarian Motivation	Shopping for functional needs	SM1
		Hedonic Motivation	Shopping for pleasure	SM2
		Social Motivation	Shopping due to social influence	SM3

Source: Processed By Author, 2024

RESULT AND DISCUSSION

Respondent Characteristics

Data were collected from 225 respondents according to the specified sample size. With the characteristics of respondents divided into several criteria groups:

Table 2. Respondent Characteristics

No	Variable	Classification	Total	Persentage
1.	Age	18-24 years old	143	63,5%
		24-39 years old	82	36,4%
2.	Gender	Man	106	47,1%
		Woman	119	52,8%
3.	Occupation	Student	121	53,8%
		Government employees	14	6,2%
		Private employees	19	8,4%
		Self-employed	57	25,3%
		Others	14	6,2%

4.	Domicile	West Java	77	34,2%
		Central Java	42	18,7%
		East Java	24	10,7%
		DKI Jakarta	56	24,9%
		Others	26	11,6%
5.	Income	<Rp. 500.000	14	6,2%
		Rp. 500.000 – Rp 1.000.000	18	8%
		Rp. 1.000.000 – Rp. 1.500.000	67	29,8%
		Rp. 1.500.000 – Rp. 2.000.000	36	16%
		>Rp. 2.000.000	90	40%

Source: Processed By Author, 2024

Normality Test

In SEM analysis, it is necessary to perform a normality test on the data first to determine whether the data obtained follows a normal distribution (Hair et al., 2019). In Structural Equation Modeling (SEM) models that use Maximum Likelihood Estimation (MLE), it is assumed that the data has a normal distribution, both univariate and multivariate (Ullman, 2006). This normality test can be assessed through the Critical Ratio (CR) values of skewness and kurtosis. If the CR value falls within the range of -2.58 to 2.58 (±2.58) at a 1% significance level (0.01), it can be concluded that the data is normally distributed, both univariately and multivariately.

Table 3. Normality Test

Variable	Min	Max	Skew	c.r.	Kurtosis	c.r.
INT	494,000	1073,000	-,086	-,526	-,442	-1,354
IB03	6,000	10,000	,099	,606	-,365	-1,117
IB02	6,000	10,000	,136	,833	-,032	-,098
IB01	6,000	10,000	,034	,205	-,301	-,922
AR01	6,000	10,000	-,182	-1,117	-,314	-,961
AR02	6,000	10,000	-,047	-,290	-,192	-,588
AR03	6,000	10,000	-,011	-,065	-,523	-1,600
AR04	6,000	9,000	-,153	-,935	-,531	-1,626
VE03	6,000	10,000	,256	1,569	,105	,321
VE02	6,000	10,000	,082	,504	-,364	-1,114
VE01	6,000	10,000	-,147	-,899	-,604	-1,850
SP01	6,000	10,000	-,289	-1,768	-,492	-1,505
SP02	6,000	10,000	-,144	-,879	-,108	-,331
SP03	6,000	10,000	,164	1,002	-,443	-1,355
SP04	6,000	10,000	-,160	-,982	-,415	-1,270
SM03	6,000	10,000	-,061	-,373	-,207	-,633
SM02	6,000	10,000	,005	,032	-,426	-1,306
SM01	6,000	10,000	-,032	-,196	-,239	-,732
Multivariate					,497	,139

Source: Processed By Author, 2024

The results of normality test indicate that the research data has been normally distributed, because the univariate kurtosis value of all indicators is in the interval <2.58. While the

multivariate kurtosis value obtained is 0.497 with a CR value of 0.139 so it can be concluded that the data is normally distributed multivariate.

Multivariate Outlier Test

The purpose of univariate and multivariate outlier testing is to avoid bias in research results (Hair Jr et al., 2019). The output shows that the minimum and maximum Z-score values are not greater than 3 or less than -3, indicating that the data used in this study does not contain univariate outliers. For multivariate outliers, a comparison is made between the chi-square table value and the highest Mahalanobis distance output value. The chi-square table value is 40.790, while the highest Mahalamobis distance output value is 35.570. This result indicates that the research data passes the normality test.

Validity and Reliability Test

Validity relates to how well a measure defines a concept, while reliability concerns the consistency of the measure. Based on Table 4, it can be seen that all research indicators have a loading factor value >0.4. This indicates that all variable indicators represent the research constructs. The Average Variance Extracted (AVE) value for each construct should be above 0.4, and the Composite Reliability (CR) coefficient for each construct should be above 0.70 for reliability testing. All AVE scores for the research variables are above 0.4 (Table 4), and the composite reliability coefficients for each research indicator are all above 0.70.

Table 4. Validity and Reliability Test

Variable	Indicator	Loading Factor	CR	AVE
Streamer Performance	SP1	0,714	0,819	0,530
	SP2	0,73		
	SP3	0,738		
	SP4	0,73		
Vicarious Experience	VE1	0,84	0,833	0,625
	VE2	0,801		
	VE3	0,726		
Affective Reaction	AR1	0,705	0,823	0,537
	AR2	0,75		
	AR3	0,705		
	AR4	0,77		
Impulsive Buying	IB1	0,683	0,716	0,456
	IB2	0,683		
	IB3	0,66		
Shopping Motivation	SM1	0,759	0,798	0,569
	SM2	0,751		
	SM3	0,752		

Source: Processed By Author, 2024

Structural Model Fit

To test the feasibility of the Structural model, several feasibility criteria for fitting are seen, such as the values of Chi-square, PROBABILITY, CMIN/DF, GFI, AGFI, TLI, CFI RMSEA, and RMR. The results of the modification of the fitting feasibility model are as follows:

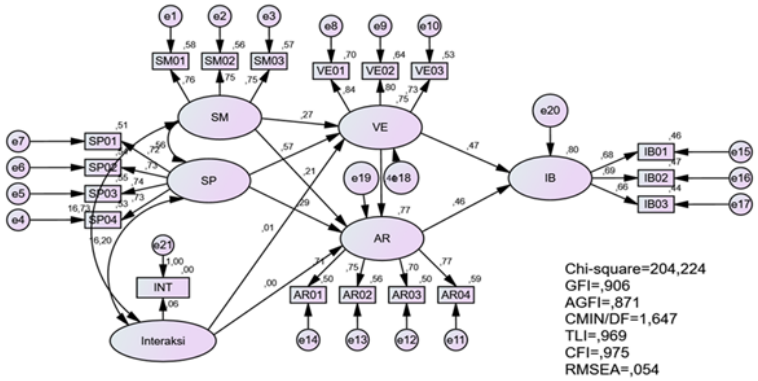

Figure 2. Structural Model Fit
Source: Processed By Author, 2024

Table 5. Goodness of Fit Test Result

Goodness of Fit	Cut of value	Value	Information
Chi-square	Expected to be small	204,224	Good Fit
GFI	≥ 0,90	0,906	Good Fit
AGFI	≥ 0,90	0,871	Marginal Fit
CMIN/DF	≤ 2,00	1,647	Good Fit
TLI	≥ 0,95	0,969	Good Fit
CFI	≥ 0,95	0,975	Good Fit
RMSEA	≤ 0,08	0,054	Marginal Fit

Source: Processed By Author, 2024

Based on the table above, the results that are already good fit are Chi-square of 204.224, GFI of 0.906, CMIN/DF of 1.647, TLI of 0.969, CFI of 0.975. While AGFI of 0.897, RMSEA of 0.054 which falls into the marginal fit category. This model is still acceptable because it has met the model feasibility test with 5 good fit measurements (Chisquare, CMIN/DF, GFI, AGFI, TLI, CFI, and RMSEA).

Based on the empirical model proposed in this study, the hypothesis was tested through path coefficient testing in the structural equation model. (Table 6) explains the estimation results in the SEM model. If the path coefficient value n paths <0.05, then the influence between variables is included in the significant category. Hypothesis testing is used to determine whether or not exogenous variables have an effect on endogenous variables.

Table 6. Hypothesis Test Results

Relationship	Estimate	S.E.	C.R.	P	Description
VE <--- SP	,763	,105	7,253	,000	Accepted
VE <--- SM	,344	,090	3,806	,000	Accepted
VE <--- Interaction	,005	,001	7,733	,000	Accepted
AR <--- SP	,295	,116	2,533	,011	Accepted
AR <--- SM	,208	,076	2,738	,006	Accepted
AR <--- VE	,313	,110	2,845	,004	Accepted
AR <--- Interaction	,002	,001	3,329	,000	Accepted
IB <--- VE	,304	,100	3,044	,002	Accepted
IB <--- AR	,390	,131	2,978	,003	Accepted

Source: Processed By Author, 2024

From the table above, the following conclusions can be drawn:

1. The p-value for the effect of streamer performance on vicarious experience is 0.000 with a positive CR of 7.253. Since the p-value obtained is <0.05, this hypothesis is accepted. This demonstrates that streamer performance significantly affects vicarious experience.
2. The p-value for the effect of streamer performance on affective reaction is 0.011 with a positive CR of 2.533. Since the p-value obtained is <0.05, this hypothesis is accepted. This shows that streamer performance significantly affects affective reaction.
3. The p-value for the effect of vicarious experience on affective reaction is 0.004 with a positive CR of 2.845. Since the p-value obtained is <0.05, this hypothesis is accepted. This indicates that vicarious experience significantly affects affective reaction.
4. The p-value for the effect of vicarious experience on impulsive buying is 0.002 with a positive CR of 3.044. Since the p-value obtained is <0.05, this hypothesis is accepted. This demonstrates that vicarious experience significantly affects impulsive buying.
5. The p-value for the effect of affective reaction on impulsive buying is 0.003 with a positive CR of 2.978. Since the p-value obtained is <0.05, this hypothesis is accepted. This indicates that affective reaction significantly affects impulsive buying.
6. The p-value for the effect of shopping motivation on vicarious experience is 0.000 with a positive CR of 7.733. Since the p-value obtained is <0.05, this hypothesis is accepted. This demonstrates that shopping motivation significantly affects vicarious experience.
7. The p-value for the effect of shopping motivation on affective reaction is 0.004 with a positive CR of 3.329. Since the p-value obtained is <0.05, this hypothesis is accepted. This shows that shopping motivation significantly affects affective reaction.

DISCUSSION

Based on the research data (Table 4), the respondent characteristics by age show that out of 225 respondents, 46.54% (82 respondents) belong to the millennial generation, while 63.56% (143 respondents) belong to Generation Z, indicating that Gen Z respondents are the dominant age group in this study.

In this study, all variables show significant relationships, with each component directly contributing to impulsive buying in the context of live-streaming e-commerce. The study found that streamer performance, including interactivity and entertainment dimensions, positively affects vicarious experience and affective reaction. This finding aligns with previous research emphasizing the importance of performer attributes in shaping consumer emotional engagement and experiences, especially in interactive live-streaming platforms (LI et al., 2024; Ng et al., 2023). The study highlights that the quality of streamer performance itself is an important factor in creating emotional experiences for consumers, particularly among Gen Z, who are the dominant respondents.

Furthermore, vicarious experience is found to have a significant impact on affective reaction and impulsive buying, indicating that the representative experience perceived by consumers when seeing others use or demonstrate a product can evoke strong emotional reactions and drive spontaneous purchase behavior. This finding is consistent with the literature stating that vicarious experience enhances consumer affect, particularly through sensory activation and emotional attachment (Goel et al., 2024; Lo et al., 2022). However, this study expands this perspective by confirming the critical role of vicarious experience in triggering immediate emotional reactions toward purchase decisions, specifically on Shopee live streaming, which resonates more with Gen Z.

Meanwhile, affective reaction shows a significant relationship with impulsive buying, indicating that emotional reactions, such as excitement and other affective engagements, are key drivers of impulsive buying on the Shopee live-streaming platform. This result supports

previous research findings that identify emotional reactions triggered by direct interaction with visual and verbal content in real-time as increasing impulsive buying tendencies (Fei et al., 2022; Iyer et al., 2020). This finding provides additional evidence that live-streaming platforms have a strong emotional impact on consumers, especially younger generations who are more responsive to interactive and entertaining content.

Shopping motivation, as a moderating variable, shows a significant influence in strengthening the relationship between streamer performance and vicarious experience and affective reaction. This indicates that shopping motivation, whether utilitarian or hedonic, can enhance consumers' emotional engagement, directly linked to streamer performance. This finding reinforces previous research suggesting that consumer motivation affects the intensity of affective reactions and emotional experiences during online shopping (Ye et al., 2023). In contrast, other studies have emphasized consumer motivation's role in more traditional or text-based e-commerce contexts. This study underscores the importance of motivation in influencing consumer perception in the live-streaming environment, suggesting that shopping motivation is not only relevant in the context of live-streaming e-commerce in general but also functions as an enhancer in live-streaming interactions.

Overall, the results of this study confirm that each variable plays a significant role in driving impulsive buying in the context of live-streaming e-commerce. With a dominant Gen Z respondent group, the study suggests that they are more responsive to the interactive and emotional elements of this platform. This study expands the knowledge of how personal attributes (motivation) and streamer performance contribute to impulsive buying behavior and provides empirical evidence of the importance of emotional experience and affective reactions in a more dynamic and interactive live-streaming e-commerce context.

CONCLUSION

The findings of this study indicate that all hypothesized variables have a significant impact, with several arguments supporting these results:

Firstly, streamer performance has been shown to significantly affect both vicarious experience and affective reaction. High streamer performance—such as strong interactivity, engaging entertainment, clear and professional product demonstrations—can create a more immersive and interactive environment. The underlying argument here is that the more interactive and credible the streamer, the better they bridge the gap between the consumer and the product being sold. Consumers, who cannot physically touch or try the product, increasingly rely on the streamer's skill to stimulate their imagination, creating a vicarious experience that feels close to reality. This suggests that streamer performance is a key element in creating a profound experience and encouraging consumers to further interact, thereby increasing purchase potential.

Secondly, vicarious experience significantly influences both affective reaction and impulsive buying. Consumers who feel as if they themselves are using the product tend to become more emotionally engaged, which triggers positive affective responses like excitement, enthusiasm, or even an emotional impulse to buy impulsively. This finding aligns with consumer behavior theory, which states that impulsive buying is often driven by high emotional experiences (Rook, 1987; Verplanken & Herabadi, 2001). Therefore, it can be concluded that the stronger the vicarious experience consumers feel during streaming, the more likely they are to respond emotionally and act on spontaneous urges.

Thirdly, shopping motivation's moderating role on the relationship between streamer performance and both vicarious experience and affective reaction shows that consumers with higher shopping motivation—whether utilitarian, hedonic, or social—are more sensitive to streamer performance. A coherent argument supporting this finding is that shopping motivation provides a cognitive framework for consumers in processing the information and experiences they receive during live streaming (Amara et al., 2023; Babin et al., 1994). Motivated consumers are more receptive to the influence of the streamer, as they seek relevant,

immersive experiences to justify their purchases. This suggests that shopping motivation plays a central role in strengthening consumers' emotional engagement and interaction with the streamer.

Overall, this study highlights the importance of streamer performance in form consumers' experiences and emotional reactions in live-streaming e-commerce. Effective streamer performance not only creates high vicarious experiences but also triggers affective responses, ultimately increasing the likelihood of impulsive buying. Thus, companies aiming to optimize their live-streaming strategies should focus on enhancing the interactivity and entertainment quality provided by the streamer and consider consumers' shopping motivations that can amplify this impact. These findings make a significant contribution to digital marketing literature and provide valuable practical insights for e-commerce companies focused on enhancing consumer experience and engagement.

Reference

Amara, S. H. D., Zamzamy, A., Veteran, U. ", & Timur, J. (2023). *Dawatuna: Journal of Communication and Islamic Broadcasting Motivasi Konsumen Remaja Surabaya dalam Menggunakan Tiktok Live Video Shopping*. *3*, 901–914. https://doi.org/10.47467/dawatuna.v4i2.3650

Babin, B. J., Darden, W. R., & Griffin, M. (1994). Utilitarian shopping value. *Journal of Consumer Research*, *20*(4), 644–657.

Beatty, S. E., & Elizabeth Ferrell, M. (1998). Impulse buying: Modeling its precursors. *Journal of Retailing*, *74*(2), 161–167. https://doi.org/10.1016/s0022-4359(98)90009-4

Bougie, R., & Sekaran, U. (2019). *Research Methods For Business: A Skill Building Approach* (J. Wiley, Ed.; 8TH Edition). www.wiley.com.

Budianto, A. Z., & Kusuma, Y. B. (2024). Pengaruh Live Streaming Selling, Discount, Dan Kualitas Produk Terhadap Impulsive Buying Pada Pengguna E-Commerce Shopee Di Kota Surabaya. *Journal of Economic, Bussines and Accounting (COSTING)*, *7*(4), 7768–7780. https://doi.org/10.31539/costing.v7i4.10091

Dai, Q., & Cui, X. (2022). The influence and moderating effect of trust in streamers in a live streaming shopping environment. *Journal of University of Science and Technology of China*, *52*(2). https://doi.org/10.52396/JUSTC-2021-0219

Duarte, A., Surugiu, R., Moraru, M., & Marinescu, V. (2023). Digital empathy in online education: A comparison study between Portugal and Romania; [Empatía digital en la educación en línea: Un estudio comparativo entre Portugal y Rumanía]. *Comunicar*, *31*(76), 107–118. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85153720738&doi=10.3916%2FC76-2023-09&partnerID=40&md5=e6ba83f6b818b4e3cf243c76e0ac22a6

Fei, T., Zhu, C., Zhang, L., Liu, X., Zhang, Y., & Li, H. (2022). Curriculum Design of Virtual Simulation Experiment of Thermistor Temperature Measurement Characteristics Based on Educational Psychology. *International Journal of Neuropsychopharmacology*, *25*(Supplement_1), A43–A43. https://doi.org/10.1093/ijnp/pyac032.059

Gerrath, M. H. E. E., Brakus, J. J., Siamagka, N. T., & Christodoulides, G. (2023). Avoiding the brand for me, us, or them? Consumer reactions to negative brand events. *Journal of Business Research*, *156*(August 2021). https://doi.org/10.1016/j.jbusres.2022.113533

Goel, P., Garg, A., Sharma, A., & Rana, N. P. (2024). Impact of Sensory Perceptions on the Urge to Buy Impulsively. *Journal of Computer Information Systems*, *64*(4), 469–485. https://doi.org/10.1080/08874417.2023.2224748

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). The Results of PLS-SEM Article information. *European Business Review*, *31*(1), 2–24.

Hair Jr, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariat Data Analysis*.

He, Y. (2024). Stream, Influence, and Purchase: Dissecting live stream ing commerce's Stimulus on Markets and Consumer Mindsets. *Highlights in Business, Economics and Management*, *39*, 312–317. https://doi.org/10.54097/sk88r133

Heo, J., Kim, Y., & Yan, J. (2020). Sustainability of live video streamer's strategies: Live streaming video platform and audience's social capital in South Korea. *Sustainability (Switzerland)*, *12*(5), 1–13. https://doi.org/10.3390/su12051969

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

Jacoby, J. (2002). Stimulus-organism-response reconsidered: An evolutionary step in modeling (consumer) behavior. *Journal of Consumer Psychology*, *12*(1), 51–57. https://doi.org/10.1207/153276602753338081

Jiang, Z., Wang, H., Xue, J., & Zhai, T. (2022). Propelling consumer engagement via entrepreneurs' live streaming? *Frontiers in Psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.890707

LI, X., Huang, D., Dong, G., & Wang, B. (2024). Why consumers have impulsive purchase behavior in live streaming: the role of the streamer. *BMC Psychology*, *12*(1), 1–16. https://doi.org/10.1186/s40359-024-01632-w

Lin, M., Chen, T., & Fan, G. (2023). Current status and influential factors associated with adherence to self-monitoring of blood glucose with type 2 diabetes mellitus patients in grassroots communities: a cross-sectional survey based on information-motivation-behavior skills model in China. *Frontiers in Endocrinology*, *14*(June), 1–13. https://doi.org/10.3389/fendo.2023.1111565

Liu, C., Sun, K., & Liu, L. (2023). The Formation and Transformation Mechanisms of Deep Consumer Engagement and Purchase Behavior in E-Commerce Live Streaming. *Sustainability (Switzerland)*, *15*(7). https://doi.org/10.3390/su15075754

Liu, C., Wang, L., Pi, Z., & Yang, J. (2024). Interaction matters: Co-viewing facilitates learning from live video streaming for elementary students. *Education and Information Technologies*, *29*(2), 2387–2411. https://doi.org/10.1007/s10639-023-11920-4

Liu, Y., Zang, X., Chen, L., Assumpção, L., & Li, H. (2018). Vicariously touching products through observing others' hand actions increases purchasing intention, and the effect of visual perspective in this process: An fMRI study. *Human Brain Mapping*, *39*(1), 332–343. https://doi.org/10.1002/hbm.23845

Lo, P. S., Dwivedi, Y. K., Wei-Han Tan, G., Ooi, K. B., Cheng-Xi Aw, E., & Metri, B. (2022). Why do consumers buy impulsively during live streaming? A deep learning-based dual-stage SEM-ANN analysis. *Journal of Business Research*, *147*(March), 325–337. https://doi.org/10.1016/j.jbusres.2022.04.013

Ma, L., Gao, S., & Zhang, X. (2022). How to Use Live Streaming to Improve Consumer Purchase Intentions: Evidence from China. *Sustainability (Switzerland)*, *14*(2), 1–20. https://doi.org/10.3390/su14021045

Meeprom, S., Jaratmetakul, P., & Boonkum, W. (2023). Nutrition And Sustainable Diets, A Section Of The Journal Frontiers In Sustainable Food Systems Examining The Eeect Of Consumer Experience On Co-Creation And Loyalty For Healthy Meat Consumption. *Front. Sustain. Food Syst.*

Ng, M., Law, M., Lam, L., & Cui, C. (2023). A study of the factors influencing the viewers' satisfaction and cognitive assimilation with livestreaming commerce broadcast in Hong Kong. *Electronic Commerce Research*, *23*(3), 1565–1590. https://doi.org/10.1007/s10660-022-09656-3

Rolls, E. T. (2023). Emotion, motivation, decision-making, the orbitofrontal cortex, anterior cingulate cortex, and the amygdala. In *Brain Structure and Function* (Vol. 228, Issue 5). Springer Berlin Heidelberg. https://doi.org/10.1007/s00429-023-02644-9

Rook, D. W. (1987). The buying impulse. Journal of Consumer Research. *Journal of Consumer Research*, *14*(2), 189–199.

Tran, V. D. (2022). Consumer impulse buying behavior: the role of confidence as moderating effect. *Heliyon*, *8*(6), e09672. https://doi.org/10.1016/j.heliyon.2022.e09672

Ullman, J. B. (2006). Structural Equation Modeling: Reviewing the Basics and Moving Forward. *Journal of Personality Assessment*, *87*(1), 35–50. https://doi.org/doi.org/10.1207/s15327752jpa8701_03

Verplanken, B., & Herabadi, A. (2001). Individual differences in impulse buying tendency: Feeling and no thinking. *European Journal of Personality*, *15*(1 SUPPL.), 71–83. https://doi.org/10.1002/per.423

Vogel, C., Dijkstra, C., Huitink, M., Dhuria, P., Poelman, M. P., Mackenbach, J. D., Crozier, S., Seidell, J., Baird, J., & Ball, K. (2023). Real-life experiments in supermarkets to encourage healthy dietary-related behaviours: opportunities, challenges and lessons learned. *International Journal of Behavioral Nutrition and Physical Activity*, *20*(1), 1–13. https://doi.org/10.1186/s12966-023-01448-8

Wang, Y., Lu, Z., Cao, P., Chu, J., Wang, H., & Wattenhofer, R. (2022). How Live Streaming Changes Shopping Decisions in E-commerce: A Study of Live Streaming Commerce. *Computer Supported Cooperative Work: CSCW: An International Journal*, *31*(4), 701–729. https://doi.org/10.1007/s10606-022-09439-2

Widiyaningsih, N., & Nugroho, J. A. (2024). Pengaruh Live Streaming Terhadap Purchase Intention Pada Thrift Shop Dengan Consumers Attitudes Sebagai Variabel Mediasi. *Jurnal Manajemen Pemasaran*, *18*(1), 40–57. https://doi.org/10.9744/pemasaran.18.1.40-57

Wu, C. C., Chen, C. J., & Chiang, T. W. (2021). Forming the strategy for live streaming e-commerce: An action research. *Proceedings of the Annual Hawaii International Conference on System Sciences*, *2020-Janua*, 2770–2779. https://doi.org/10.24251/hicss.2021.338

Wu, Y. (2024). Live streaming marketing campaign, psycho-social factors, and consumers' patronage behavior: Basis for consumer acquisition framework. *International Journal of Research Studies in Management*, *12*(8), 139–150. https://doi.org/10.5861/ijrsm.2024.1211

Xiao, Y., & Nie, A. (2023). Does Expecting Matter? The Impact of Experimentally Established Expectations on Subsequent Memory Retrieval of Emotional Words. *Journal of Intelligence*, *11*(7). https://doi.org/10.3390/jintelligence11070130

Xiya, H. (2024). a Study on the Impact of Brand Reputation on Impulsive Consumer Consumption in the Context of Live Streaming: a Moderated Mediation Model. *The EUrASEANs: Journal on Global Socio-Economic Dynamics*, *3*(3(46)), 72–79. https://doi.org/10.35678/2539-5645.3(46).2024.72-79

Yang, Q., Chaiwan, A., & Nimanussornkul, C. (2023). Factors Effecting of the Consumer Purchase Intention by Local Life Services Live Streaming. *Frontiers in Business, Economics and Management*, *9*(3), 224–232. https://doi.org/10.54097/fbem.v9i3.9662

Ye, X. M., Batool, H., & Huang, S. Z. (2023). The effect of e-commerce livestreaming services on customer loyalty: a test of the chain mediation model. *Journal of Innovation and Entrepreneurship*, *12*(1). https://doi.org/10.1186/s13731-023-00310-2

Zhang, Z., Mo, Y., & Xia, Y. (2024). A Study on the Factors Influencing Consumer Purchase Decision Under the Live-Streaming Sales Model. *Journal of Electronic Research and Application*, *8*(3), 185–190. https://doi.org/10.26689/jera.v8i3.7237