

UNDERSTANDING CONSUMER IMPULSIVE BUYING IN LIVESTREAMING COMMERCE: THE ROLE OF STREAMER CHARACTERISTICS, PERCEIVED VALUE, AND PERSONALITY TRAITS

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Abstract. Livestreaming commerce is currently one of the most widely used marketing channels. This study analyzes the influence of streamer characteristics such as attractiveness, expertise, interactivity, and uniqueness on consumer impulsive buying behavior in livestreaming commerce, with perceived value as a mediator and personality traits and narcissism as moderators. Based on a survey of 440 respondents who are users of TikTok Live Commerce in the Tasikmalaya region, it was found that streamer characteristics have a significant influence on the perceived value of consumers, which increases impulsive purchasing. Personality traits such as extraversion and narcissism reinforce this influence, with narcissistic consumers more likely to be influenced by messages that emphasize social status. Although these findings provide practical contributions for marketers to design more effective strategies, this study has limitations in terms of a sample limited to one platform and one region. Further research is recommended to expand the sample coverage in terms of platforms and locations, integrate qualitative approaches to explore psychological factors in depth, further investigate cultural and demographic factors influencing consumption behavior in the digital era, and explore the dynamics between other livestreaming platforms.

Keywords: Livestreaming commerce, impulsive buying, streamer characteristics, perceived value, personality traits, narcissism

I. INTRODUCTION

The extraordinary growth of *livestreaming commerce*, which has become a global phenomenon in recent years, cannot be ignored. In China, for example, the number of *livestreaming commerce* users in June 2022 reached approximately 469 million people, or more than 50% of the total active internet users in the country, indicating high and widespread market penetration and rapid growth (Zhang et al., 2023). This confirms that *livestreaming commerce* is not just a passing trend, but has become one of the main marketing channels that is *widely* used, combining *real-time* interaction and consumer emotional engagement.

The emergence of *livestreaming commerce* has revolutionized the retail landscape by blending entertainment, social interaction, and instant purchasing opportunities. Unlike traditional ecommerce, which generally relies on rational decisionmaking and planned purchases, *livestreaming* creates a dynamic, interactive, and emotional environment that encourages *impulsive buying* behavior from consumers. These characteristics make *livestreaming commerce* an effective medium.

Recent research on *livestreaming commerce* shows that factors such as social presence, attractiveness, and a streamer's communication style play an important role in influencing consumer purchasing decisions (Li et al., 2025). However, this scientific research still has limitations in analyzing how psychological factors and the streamer's personality traits also shape consumer perceptions and behavior. Several research s indicate that a streamer's success in influencing viewers depends not only on the products offered but also on their personal attributes. *The attractiveness* of streamers, whether in terms of physical appearance, speaking style, or personality, can foster emotional closeness and increase perceived value, which ultimately drives viewers' trust and purchase intent (Huang et al., 2023; Sanusi et al., 2022; Li & Li, 2022). In addition, *expertise* reflected in product knowledge and the ability to convey information clearly plays an important role in strengthening trust and commitment, while deepening *the flow experience* that makes viewers more inclined to follow and make purchases (Liu et al., 2020; Zheng et al., 2023; Chen & Lin, 2018). On the other hand, *interactivity* through responsive, timely, and inclusive interactions has been proven to enrich the shopping experience, create a sense of appreciation, and increase the emotional engagement of viewers, which ultimately leads to purchase intent (Khoi et al., 2023; Merritt et al., 2022; Zhao & Wang, 2021). Equally important is *distinctiveness*, namely the uniqueness of the streamer's communication style and personal approach, which makes the experience

more immersive and strengthens the parasocial relationship with the audience. This uniqueness, when supported by sufficient appeal and expertise, has been proven to increase the effectiveness of persuasion and encourage viewers to make purchases (Liao et al., 2023).

Therefore, to fill this gap, this study will focus on four main attributes, namely: *attractiveness, expertise, interactivity, and distinctiveness*, which reflect originality in presentation that strengthens the credibility of streamers, which will influence consumer perception (*perceived value*).

The attributes mentioned above are expected to influence *perceived value*, which is consumer perception that includes rational evaluation of product benefits and responses that arise during interactions. *Perceived value* has been recognized as an important factor that drives impulsive buying, especially in the context of high stimulation levels such as *livestreaming commerce* (Cakanlar & Nguyen, 2019; Wendel et al., 2023). By placing *perceived value* as a mediator, this study is expected to explain more comprehensively the relationship between streamer characteristics and consumer purchasing behavior.

From a theoretical and prespective, recent research highlights that product, characteristic and the role of streamer significantly influence the emergence of *impulsive* consumer behavior. Studies based on *product involvement theory* find that product functional value, perceived quality, product scarcity, and instant feedback from streamers can increase consumer cognitive and emotional involvement, which ultimately drives *impulsive buying* behavior (Zhang et al., 2023). From the *Stimulus-Organism-Response (S-O-R)* prespective, factors such as reference value, scarcity, and immersive experience have also been shown to contribute to higher consumer involvement and trigger *impulsive* buying (Li et al., 2022). Additionally, a streamer's personal characteristics, such a charisma, professionalism, level of interaction, and ability to inspire trust, have been shown to play an important role in encouraging consumer to make impulsive purchase (Li et al., 2024).

Internal consumer factors such as *personality traits* play a strong role in shaping *impulsive buying* behavior. Big Five *Personality traits*, such as extraversion, agreeableness, and neuroticism, are also related to consumptive tendencies (Chen & Lin, 2018; Li et al., 2024). However, research that focuses only on the Big Five *Personality traits* is considered incomplete because it does not take into account other psychological factors such as narcissism. In this case, narcissism, individuals with high levels of narcissism are more prone to impulsive buying behavior because they tend to use online interactions as a means of expressing their status (Moon et al., 2022). In fact, Zhang et al. (2022) found that personality traits such as extraversion and narcissism increase consumers' tendency to respond impulsively to promotional messages, as they are more sensitive to status cues and social recognition.

Thus, *live streaming commerce* is not only seen as a digital marketing innovation, but has also developed into a major driver of modern consumer behavior that combines aspects of entertainment, trust, and urgency. Based on this, the topic of research on this subject is relevant and very interesting to explore further. This study aims to develop and test a conceptual framework that links *the attractiveness, expertise, interactivity, and distinctiveness* of streamers with impulsive buying behavior, with *perceived value* as a mediator and *personality traits* as a moderator, which is also moderated by *narcissism*. The results of this study are expected to provide theoretical contributions in providing knowledge for marketers in designing more effective livestreaming commerce strategies that are more targeted at consumer psychology.

II. RESEARCH METHODS

This study uses a survey method with a quantitative approach. According to (Creswell, 2018:147), surveys can provide a quantitative picture of trends, attitudes, and opinions of a population or test how variables in a population interact with each other by studying a sample of the population. To analyze the influence of *streamer attractiveness, expertise, interactivity, and distinctiveness* on *impulsive buying*, where *perceived value* acts as a mediating variable and *personality traits* and *narcissism* as moderating variables.

The population studied included TikTok Live Commerce consumers in Tasikmalaya. The sample was taken using purposive sampling, with the criteria that respondents were at least 18 years old, had seen and shopped through TikTok Live, and were active users of the platform with at least two transactions. The representative sample size is five to ten times the number of indicators according to Sekaran & Bougie (2021). The minimum number of parameter estimates is set at 66, then multiplied by 5 to calculate the results of the parameter estimates, which amount to 330 samples.

A *bipolar adjective scale*, which is an extension of *the semantic differential scale*, was used to measure the variables in this study. Data collection was conducted by distributing a closed questionnaire to respondents, which was designed with alternative answer choices (Kotler, P., & Keller, K. L. 2021). Each respondent was asked to respond to each statement on a scale of 110. An even scale range was applied to avoid neutral or middleoftheroad tendencies, with ratings of 15 indicating disagreement and 610 indicating agreement. The instrument used in this study was an online questionnaire based on Google Forms, consisting of two parts: (1) respondent demographic information, and (2) research elements. Data was collected by distributing the Google Form link through social media platforms, primarily using TikTok Live. The collected data was then analyzed using Covariance Based Structural Equation Model (CB SEM) to test and validate the theoretical model by analyzing the relationship between variables (Kline, 2015). The statistical analysis tools used in this study were IBM SPSS Statistics 27.0.1 and IBM SPSS AMOS 24. The following model was used to clarify the conceptual flow of the relationship between variables in the study.

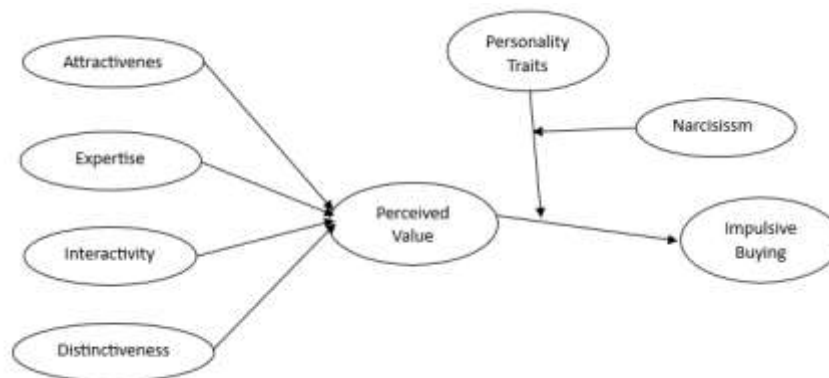


Figure 1. Research Model

From the research structural model, all item measurements were adapted from the literature. The following is the operationalization of the variables used in the study:

Table 1. Variable Operationalization

| Variable | Indicators | Description |
|--|--|-------------|
| Attractiveness (Li et al., 2024) | The streamer looks physically attractive during the live stream. | ATT1 |
| Attractiveness (Li et al., 2024) | The way the streamer communicates makes me interested. | ATT2 |
| Attractiveness (Li et al., 2024) | Streamers project a positive image in the eyes of their audience. | ATT3 |
| Expertise (Jiang et al., 2024) | Streamers have a good understanding of the products they promote. | EXP1 |
| Expertise (Jiang et al., 2024) | Streamers clearly explain product features. | EXP2 |
| Expertise (Jiang et al., 2024) | The streamer can answer audience questions convincingly. | EXP3 |
| Interactivity (Ma et al., 2023) | Streamers provide opportunities for the audience to interact. | INT1 |
| Interactivity (Ma et al., 2023) | Streamers respond to questions quickly. | INT2 |
| Interactivity (Ma et al., 2023) | Streamers encourage audience participation in live activities. | INT3 |
| Distinctiveness (Liao et al., 2023) | Streamers have a presentation style that is different from other streamers. | DIS1 |
| Distinctiveness (Liao et al., 2023) | Streamers present content in a creative way. | DIS2 |
| Distinctiveness (Liao et al., 2023) | Streamers have a memorable selfimage. | DIS3 |
| Perceived Value (Zhu et al., 2023) | The products offered by streamers are practically useful. | PV1 |
| Perceived Value (Zhu et al., 2023) | Watching live shopping is entertaining. | PV2 |
| Perceived Value (Zhu et al., 2023) | Buying products through live streaming enhances selfimage. | PV3 |
| Personality Traits (John & Soto, 2021) | Enjoy interacting with others while shopping online (Extraversion). | PT1 |
| Personality Traits (John & Soto, 2021) | Tends to easily trust others recommendations (Agreeableness). | PT2 |
| Personality Traits (John & Soto, 2021) | Tends to carefully consider before making a purchase (Conscientiousness). | PT3 |
| Personality Traits (John & Soto, 2021) | Easily feels anxious when having to make a purchase decision (Neuroticism). | PT4 |
| Personality Traits (John & Soto, 2021) | Interested in trying new products recommended by streamers (Openness). | PT5 |
| Narcissism (Sedikides & Hart, 2022) | Buying products during live streams to show status. | NAR1 |
| Narcissism (Sedikides & Hart, 2022) | Feeling the need to be recognized by others when purchasing products through live streaming. | NAR2 |
| Narcissism (Sedikides & Hart, 2022) | Purchasing specific products to appear better than others. | NAR3 |
| Impulsive Buying (Chen et al., 2022) | Often buying products offered by streamers without much consideration. | IB1 |
| Impulsive Buying (Chen et al., 2022) | Tends to recommend products from live streaming to others. | IB2 |
| Impulsive Buying (Chen et al., 2022) | Preferring to purchase products through live streaming rather than other channels. | IB3 |
| Impulsive Buying (Chen et al., 2022) | Often opens live streaming to look for product promotions. | IB4 |

This study was conducted on 440 respondents. Respondent characteristics were divided into several groups, including Gender, Age, and Frequency of watching TikTok Live per week. The respondent characteristics selected in the study are presented in Table 2.

Table 2. Respondent Characteristics

| Characteristics | Attribute | Total | % |
|--|-----------------|-------|------|
| Gender | Male | 250 | 56.8 |
| Gender | Female | 190 | 43.2 |
| Age | <18 years old | 100 | 22.7 |
| Age | 18–24 years old | 205 | 46.6 |
| Age | 25–34 years | 90 | 20.4 |
| Age | 35–44 years | 35 | 8 |
| Age | ≥45 years | 10 | 2.3 |
| Frequency of watching TikTok Live per week | 1–2 times | 50 | 11.4 |
| Frequency of watching TikTok Live per week | 3–4 times | 150 | 34.1 |
| Frequency of watching TikTok Live per week | 5 times or more | 240 | 54.5 |

Source: Research Results, 2025

Out of 440 samples, the gender composition was relatively balanced with a masculine tendency 250 males (56.8%) and 190 females (43.2%). The age structure shows a young and active audience: 18–24 years old 205 (46.6%), followed by <18 years old 100 (22.7%) and 25–34 years old 90 (20.4%); with the 35–44 age group comprising 35 (8.0%) and ≥45 years comprising 10 (2.3%) in smaller proportions. Content consumption patterns are consistent with this profile: the majority watch TikTok Live ≥5 times/week 240 (54.5%), followed by 3–4 times 150 (34.1%), and 1–2 times 50 (11.4%). These findings indicate that the audience base is dominated by Gen Z and early millennials, who are accustomed to realtime interaction and tend to respond quickly to clear calls to action.

Covariance-Based SEM

This study uses a covariancebased *Structural Equation Model* (SEM) as the analysis method, utilizing AMOS software. The process start with building the conceptual framework, which drew directly from the research hypotheses we’d already formulated. From there, we reviewed the collected data carefully to make sure nothing was missing and that it satisfied the essential requirements for SEM. Validity and reliability tests were conducted to confirm that the measurement items represented the study’s variables and exhibited internal consistency. Following validation of the measurement items, the model’s fit to the data was evaluated. Upon, confirmation of model *fit*, the analysis proceeded to assess the statistical significance of the relationships among variables, in accordance with the study’s hypotheses (Hair et al., 2019).

SEM Assumption Test

In SEM analysis, data normality testing is performed first to ensure that the data obtained follows a normal distribution (Hair et al., 2019). Based on the analysis results, normality testing with a value of 2.381 shows that there is no *multivariate critical ratio* value that exceeds the *cutoff* value of ± 2.58. Therefore, the data distribution in this study can be categorized as a normal distribution and is suitable for futher analysis. After normality testing, the next step is to test for *outliers* in univariate and multivariate data. The *outlier* test aims to avoid bias that could affect the research results (Hair et al., 2019). The output results show that *the* minimum and maximum *Z-scores* are within the range of ± 3, namely 2.833 and 2.932, indicating that the data used does not have *univariate outliers*. For *univariate outlier* testing, a comparison was made between the *chi-square* table value and the highest *Mahalanobis* distance output value of 40.068. The *chi-square* table value was 43.820, and the study had no *multivariate outliers*. Thus, the research data met the criteria for normality and were based on *outliers*.

Table 3. Measurement, Loadings, CR, and VE

| No | Questionnaire Statements | Construct | Indicator | Loading Factor | CR | VE |
|----|--|-----------------|-----------|----------------|-------|-------|
| 1 | The streamer looks physically attractive physically during live broadcasts | Attractiveness | AT1 | 0.757 | 0.763 | 0.518 |
| 2 | How streamers communicate is what interests me. | | AT2 | 0.657 | | |
| 3 | Streamers project a positive image a positive image in the eyes of the audience. | | AT3 | 0.742 | | |
| 4 | Streamers understand the being promoted well. | Expertise | EX1 | 0.743 | 0.799 | 0.57 |
| 5 | Streamer explains the features the product clearly. | | EX2 | 0.751 | | |
| 6 | The streamer can answer audience questions with confidence. | | EX3 | 0.77 | | |
| 7 | Streamers give the audience the opportunity the audience to interact. | Interactivity | IN1 | 0.816 | 0.788 | 0.557 |
| 8 | Streamer responds to questions quickly. | | IN2 | 0.625 | | |
| 9 | Streamers encourage audience participation in live activities. | | IN3 | 0.784 | | |
| 10 | Streamers have a presentation stylethat is different from other streamers. | Distinctiveness | DIS1 | 0.787 | 0.793 | 0.561 |
| 11 | Streamers display content in creative ways. | | DIS2 | 0.702 | | |
| 12 | Streamers have a memorable selfimage that is easy to remember. | | DIS3 | 0.755 | | |
| 13 | The products offered by streamers are practically useful. | | PV1 | 0.782 | 0.789 | 0.556 |

| No | Questionnaire Statements | Construct | Indicator | Loading Factor | CR | VE |
|----|--|------------------|-----------|----------------|-------|-------|
| 14 | Watching live shopping is entertaining. | Perceived Value | PV2 | 0.686 | 0.845 | 0.576 |
| 15 | Buying products through live streaming boosts selfimage. | | PV3 | 0.765 | | |
| 16 | Often immediately purchasing products offered by streamers without much consideration. | | IB1 | 0.742 | | |
| 17 | Tends to recommend products from live streaming to others. | Impulsive Buying | IB2 | 0.715 | | |
| 18 | Prefer to buy products through live streaming than other channels. | | IB3 | 0.785 | | |
| 19 | Often open live streaming to find product promotions. | | IB4 | 0.792 | | |

Source: Research Result, 2025

After conducting the SEM test, the next stage is the validity and reliability test. Validity refers to the extent to which the measurement can define the intended concept, while reliability focuses on the consistency of the measurement. Based on Table 2, it can be seen that all research indicators have *factor loading* values greater than 0.40. This shows that each variable indicator accurately represents the construct intended in the study. For reliability testing, the *variance extracted* (VE) value for each variable must be greater than 0.50, while the *construct reliability* (CR) value for each indicator must be greater than 0.70. The analysis results show that all VE scores for the research variables exceed 0.50, and the CR values for each variable are also greater than 0.70.

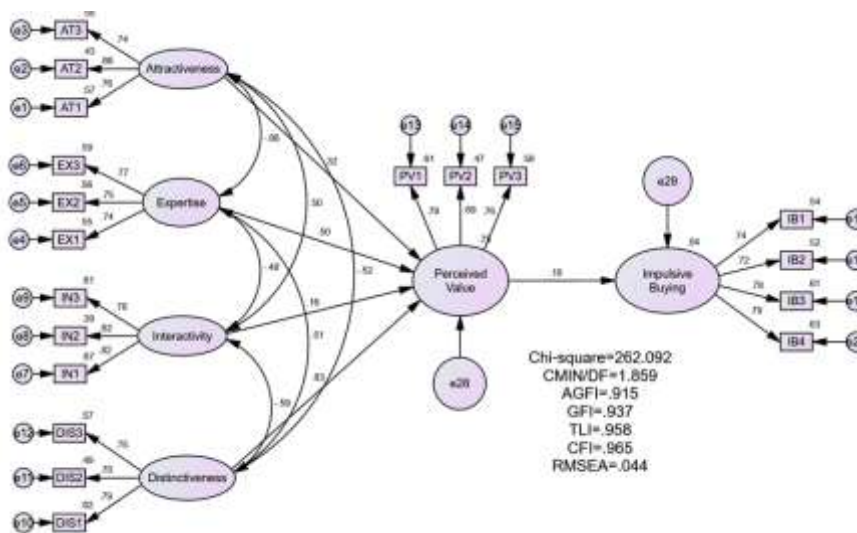


Figure 2. Model 1

Source: Research Result, 2025

Table 4. Gooness of Fit (GoF) SEM-AMOS Model

| Goodness of Fit | Analysis Results | Cut-off Value | Model Evaluation |
|-----------------|------------------|----------------------|------------------|
| Chi-Square | 262.092 | Expected to be small | Marginal Fit |
| CMIN/DF | 1.859 | < 2,000 | Fit |
| AGFI | 0.915 | > 0.90 | Fit |
| GFI | 0.937 | > 0.90 | Fit |
| TLI | 0.958 | > 0.95 | Fit |
| CFI | 0.965 | > 0.95 | Fit |
| RMSEA | 0.044 | < 0.80 | Fit |

Source: Research Result 2025

The research model feasibility test was conducted by evaluating the *goodness of fit* value, which can be seen in Table 4. A low *chi-square* value indicates that the SEM model has a good fit. In addition, the *CMIN/DF* value meets the acceptance criteria, which is less than 2.000. The *AGFI* and *GFI* values also indicate a good fit with an acceptance level greater than 0.90. The *TLI* and *CFI* values are greater than 0.95, indicating that the model fits the data. Furthermore, an *RMSEA* value less than or equal to 0.80 indicates that the model fits the degrees of freedom in the model (Ferdinand, 2016). Based on the analysis results, the *RMSEA* value meets the established criteria. Consequently, it is concluded that the research model is appropriate for futher analysis.

Hypothesis Testing

The hypotheses were tested to investigate the relationship among the latent variables in the research model (Hair et al., 2019). Using *Structural Equation Modeling* (SEM), we did through path analysis in AMOS 24 software. To test the hypothesis, we looked at the *critical ratios* C.R. or *t-values* and *p-values* from the results. If the *p-value* comes in under 0.05, we can accept the hypothesis. Plus, whether the relationship between variables is positive or negative shows up in the sign of that *t-value* (Hair et al., 2019).

Table 5. Direct Hypothesis Testing

| Influencer Relationship | | | Estimate | C.R. | P |
|-------------------------|---|-----------------|----------|-------|-------|
| Perceived Value | < | Attractiveness | 0.357 | 2.043 | 0.041 |
| Perceived Value | < | Expertise | 0.528 | 3.263 | 0.001 |
| Perceived Value | < | Interactivity | 0.164 | 2.324 | 0.020 |
| Perceived Value | < | Distinctiveness | 0.851 | 9.128 | 0.000 |
| Impulsive Buying | < | Perceived Value | 0.174 | 3.381 | 0.000 |

Source: Research Result 2025

Table 6. Indirect Hypothesis Testing

| Parameters | Estimate | Lower | Upper | P |
|------------|----------|-------|-------|-------|
| A>PV>IB | 0.062 | 0.005 | 0.255 | 0.025 |
| E>PV>IB | 0.092 | 0.020 | 0.274 | 0.006 |
| I>PV>IB | 0.028 | 0.004 | 0.073 | 0.016 |
| D>PV>IB | 0.148 | 0.040 | 0.270 | 0.006 |

Source: Research Result 2025

Table 5 shows the results of hypothesis testing that describes the relationship between several variables that influence consumer perception value and impulsive buying. There is a significant relationship between *perceived value* and *attractiveness*, with an estimated value of 0.357 and a pvalue of 0.041. Furthermore, *expertise* also has a significant relationship with *perceived value* with an estimated value of 0.528 and a pvalue of 0.006. For *interactivity*, even though it has a smaller estimated value of 0.164, the relationship is still significant with a *p-value* of 0.025. Meanwhile, *distinctiveness* shows a strong relationship with *perceived value*, with an estimated value of 0.851 and a highly significant *p-value* of 0.000. In addition, *perceived value* is also proven to have a significant effect on *impulsive buying* with an estimate of 0.174 and a pvalue of 0.000.

The next table illustrates the relationship between *perceived value* and *impulsive buying*, which was further tested by showing a fairly significant positive relationship. The relationship between *attractiveness* and *impulsive buying* has an estimated value of 0.092 and a pvalue of 0.006. *Interactivity* shows an estimate of 0.028 and a pvalue of 0.016, indicating a strong relationship. For *expertise*, an estimated value of 0.092 with a pvalue of 0.006 also indicates a significant relationship. Meanwhile, *distinctiveness* has an estimated value of 0.148 with a *p-value* of 0.002, which shows the strongest influence on consumers' impulsive buying decisions. Overall, all hypotheses in this study are accepted because they meet the specified criteria and all variables are related to *perceived value* and also have a significant influence on *impulsive buying*.

SEM Assumption Test

In SEM analysis, data normality testing was conducted first to ensure that the data obtained followed a normal distribution (Hair et al., 2019). Based on the analysis results, normality testing with a value of + 951 shows that there is no *multivariate critical ratio* value that exceeds the *cutoff* value of ± 2.58. Therefore, the data distribution in this study can be categorized as a normal distribution and is suitable for further analysis. After normality testing, the next step is to test for *outliers* in univariate and multivariate data. It can be seen that there are no indications of *univariate outliers*, because the overall *Z-score* is within the range of ±3, with a minimum value of 2.769 and a maximum value of 2.611, which meets the criteria. The absence of *outliers* was also seen at the *multivariate* level, with the highest Mahalanobis distance of 29.444, which was still below the *Chi-square* value benchmark of 32.909. Therefore, the research data met the requirements to proceed to further analysis because there were no *outliers*, but there was a deviation from the assumption of multivariate normality, which required a special method in the subsequent analysis.

After conducting the SEM test, the next stage is the validity and reliability test. Validity refers to the extent to which the measurement can define the intended concept, while reliability focuses on the consistency of the measurement. Based on Table 2, it can be seen that all research indicators have *factor loading* values greater than 0.40. This shows that each variable indicator accurately represents the construct intended in the study. For reliability testing, the *variance extracted* (VE) value for each variable must be greater than 0.50, while the *construct reliability* (CR) value for each indicator must be greater than 0.70. The analysis results show that all VE scores for the research variables exceed 0.50, and the CR values for each variable are also greater than 0.70.

Table 7. Measurement, Loadings, CR, and VE

| No | Questionnaire Statements | Construct | Indicator | Loading Factor | CR | VE |
|----|--|--------------------|-----------|----------------|-------|-------|
| 1 | Products offered by streamers are practically useful. | Perceived Value | PV1 | 0.743 | 0.786 | 0.551 |
| 2 | Watching live shopping is entertaining. | | PV2 | 0.741 | | |
| 3 | Buying products through live streaming boosts selfimage. | | PV3 | 0.743 | | |
| 4 | Enjoy interacting with others when shopping online (Extraversion). | Personality Traits | PT1 | 0.754 | 0.862 | 0.556 |
| 5 | Tends to be easily influenced by to other people's recommendations (Agreeableness). | | PT2 | 0.737 | | |
| 6 | Tends to carefully consider before buying something (Conscientiousness). | | PT3 | 0.749 | | |
| 7 | Easily feels anxious when having to make a purchase (Neuroticism). | | PT4 | 0.740 | | |
| 8 | Interested in trying new products recommended by streamers (Openness). | | PT5 | 0.749 | | |
| 9 | Often immediately purchase products offered by streamers without much consideration. | Impulsive Buying | IB1 | 0.742 | 0.845 | 0.576 |
| 10 | Tends to recommend products from live streaming to others. | | IB2 | 0.715 | | |
| 11 | Prefer to buy products through live streaming than other channels. | | IB3 | 0.785 | | |
| 12 | Often open live streaming to find product promotions. | | IB4 | 0.792 | | |

Source: Research Result 2025

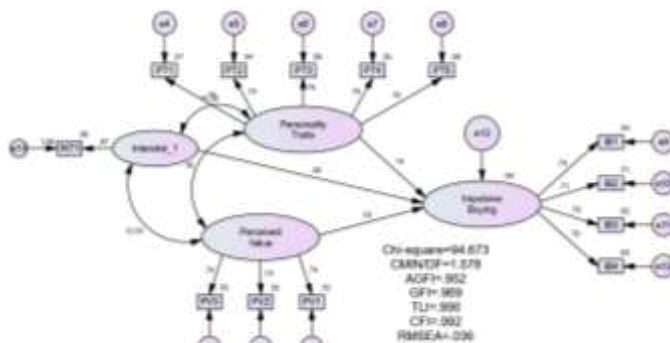


Figure 3. Model 2

Source: Research Result 2025

Table 8. Goodness of Fit (GoF) SEM-AMOS Model

| Goodness of Fit | Analysis Results | Cut-off Value | Model Evaluation |
|-----------------|------------------|----------------------|------------------|
| Chi-Square | 94.673 | Expected to be small | Marginal Fit |
| CMIN/DF | 1.578 | < 2,000 | Fit |
| AGFI | 0.952 | > 0.90 | Fit |
| GFI | 0.969 | > 0.90 | Fit |
| TLI | 0.990 | > 0.95 | Fit |
| CFI | 0.992 | > 0.95 | Fit |
| RMSEA | 0.036 | < 0.80 | Fit |

Source: Research Result 2025

The research model feasibility test was conducted by evaluating the *goodness of fit* value, which can be seen in Table 8. A low *chi-square* value indicates that the SEM model has a good fit. In addition, the *CMIN/DF* value meets the acceptance criteria, which is less than 2.000. The *AGFI* and *GFI* values also indicate a good fit with an acceptance level greater than 0.90. The *TLI* and *CFI* values are greater than 0.95, indicating that the model fits the data. Furthermore, an *RMSEA* value less than or equal to 0.80 indicates that the model fits the degrees of freedom in the model (Ferdinand, 2016). Based on the analysis results, the *RMSEA* value meets the specified criteria. Therefore, it can be concluded that this research model is suitable for further analysis.

Table 9. Hypothesis Testing

| Influencer Relationship | | | Estimate | C.R. | P |
|-------------------------|---|--------------------|----------|-------|-------|
| Impulsive Buying | < | Perceived Value | 0.168 | 3.334 | 0.000 |
| Impulsive Buying | < | Personality Traits | 0.136 | 2.622 | 0.009 |
| Impulsive Buying | < | Interaction 1 | 0.002 | 4.987 | 0.000 |

Source: Research Result 2025

Table 9 above shows that the results of direct hypothesis testing indicate a relationship between several variables and impulsive purchasing behavior. *Perceived value* has a positive effect on impulsive buying with an estimated value of 0.168 and a significant C.R. value of 3.334 with a *p-value* of 0.000. Similarly, *personality traits* have a positive effect on impulsive buying with an estimated value of 0.136, a C.R. value of 2.622, and a *pvalue* of 0.009. Meanwhile, *Interaction_1* also influences impulsive buying with a small estimated value of 0.002, but has a high C.R. of 4.987 and a *p-value* of 0.000. Based on the hypothesis testing results, all of the relationships found can significantly influence consumer impulsive buying.

SEM Assumption Test

In SEM analysis, data normality testing is performed first to ensure that the data obtained follows a normal distribution (Hair et al., 2019). Based on the analysis results, normality testing with a value of 2.088 shows that there is no *multivariate critical ratio* value that exceeds the *cutoff* value of ± 2.58. Therefore, the data distribution in this study can be categorized as a normal distribution and is suitable for further analysis. After normality testing, the next step is to test for *outliers* in univariate and multivariate data. The test results show that the data does not have univariate *outliers*, because the *Z-score* value range of 2.789 and 2.614 is still within the ±3 range. Similarly, the multivariate *outlier* test showed that the data was clean because the highest *Mahalanobis* value of 34.840 was smaller than the critical *Chi-square* table value of 39.252. Therefore, this study is free from *outliers* but has a multivariate normality issue that needs special treatment in further analysis.

Table 10. Measurement, Loadings, CR, and VE

| No | Questionnaire Statements | Construct | Indicator | Loading Factor | CR | VE |
|----|--|--------------------|-----------|----------------|-------|-------|
| 1 | Products offered by streamers is practically useful. | Perceived Value | PV1 | 0.743 | 0.792 | 0.559 |
| 2 | Watching live shopping is entertaining. | | PV2 | 0.741 | | |
| 3 | Buying products through live streaming boosts selfimage. | | PV3 | 0.743 | | |
| 4 | Enjoy interacting with others when shopping online (Extraversion). | Personality Traits | PT1 | 0.754 | 0.863 | 0.557 |
| 5 | Tends to be easily influenced by o other people's recommendations (Agreeableness). | | PT2 | 0.737 | | |
| 6 | Tends to carefully consider before buying something (Conscientiousness). | | PT3 | 0.748 | | |
| 7 | Easily feels anxious when making purchasing decisions (Neuroticism). | | PT4 | 0.742 | | |
| 8 | Interested in trying new products recommended by streamers (Openness). | | PT5 | 0.749 | | |
| 9 | Purchasing products during live streams to show status. | Narcissism | N1 | 0.742 | 0.785 | 0.550 |
| 10 | Feeling the need to be recognized by others when purchasing products through live streaming. | | N2 | 0.74 | | |
| 11 | Purchasing certain products to look better than others. | | N3 | 0.742 | | |
| 12 | Often buying products offered by streamers without much consideration. | Impulsive Buying | IB1 | 0.736 | 0.844 | 0.576 |
| 13 | Tends to recommend products from live streaming to others. | | IB2 | 0.716 | | |
| 14 | Prefer to buy products through live streaming than other channels. | | IB3 | 0.784 | | |
| 15 | Often open l live streaming to find product promotions. | | IB4 | 0.796 | | |

Source: Research Result 2025

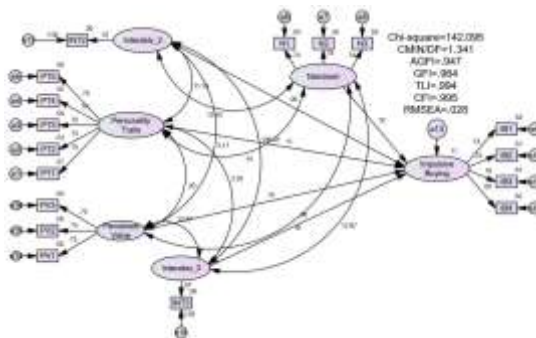


Figure 4. Model 3 Source: Research Result 2025

Table 11. Goodness of Fit (GoF) SEM-AMOS Model

| Goodness of Fit | Analysis Results | Cut-off Value | Model Evaluation |
|-----------------|------------------|----------------------|------------------|
| Chi-Square | 142.095 | Expected to be small | Marginal Fit |
| CMIN/DF | 1.341 | < 2,000 | Fit |
| AGFI | 0.947 | > 0.90 | Fit |
| GFI | 0.964 | > 0.90 | Fit |
| TLI | 0.994 | > 0.95 | Fit |
| CFI | 0.995 | > 0.95 | Fit |
| RMSEA | 0.028 | < 0.80 | Fit |

The research model feasibility test was conducted by evaluating the *goodness of fit* value, which can be seen in Table 11. A low *chi-square* value indicates that the SEM model has a good fit. In addition, the *CMIN/DF* value meets the acceptance criteria, which is less than 2.000. The *AGFI* and *GFI* values also indicate a good fit with an acceptance level greater than 0.90. The *TLI* and *CFI* values are greater than 0.95, indicating that the model fits the data. Furthermore, an *RMSEA* value less than or equal to 0.80 indicates that the model fits the degrees of freedom in the model (Ferdinand, 2016). Based on the analysis results, the *RMSEAI* value meets the specified criteria. Therefore, it can be concluded that this research model is suitable for further analysis.

Table 12. Hypothesis Testing

| Influencer Relationship | | Estimate | C.R. | P |
|-------------------------|----------------------|----------|-------|-------|
| Impulsive Buying | < Personality Traits | 0.102 | 2.001 | 0.045 |
| Impulsive Buying | < Narcissism | 0.099 | 2.124 | 0.034 |
| Impulsive Buying | < Perceived Value | 0.164 | 3.274 | 0.001 |
| Impulsive Buying | < Interaction 2 | 0.001 | 3.484 | 0.000 |
| Impulsive Buying | < Interaction 3 | 0.002 | 4.046 | 0.000 |

In Table 12, which is a direct hypothesis test for model 3, it can be seen that several variables influence impulsive buying behavior. *Personality traits* contribute positively to impulsive buying with an estimated value of 0.012, a C.R. value of 2.001, and a *p-value* of 0.045, which represents a significant influence. Furthermore, *narcissism* also has a positive influence with an estimated value of 0.099, a C.R. value of 2.214, and a *pvalue* of 0.034, indicating a significant influence on impulsive buying. Likewise, *perceived value* has a stronger positive influence with an estimated value of 0.164, C.R. of 3.274, and *p-value* of 0.001. Meanwhile, *interaction_2* has a positive effect with an estimated value of 0.001, a C.R. value of 3.484, and a *pvalue* of 0.000, indicating a very significant effect and suggesting that *interaction_2* can reinforce impulsive behavior. Finally, there is a positive effect of *interaction_3* with an estimated value of 0.002, a C.R. value of 4.046, and a *p-value* of 0.000, which further emphasizes the importance of interaction in shaping impulsive purchasing.

III. RESULT AND DISCUSSION

The rapid development of *livestreaming commerce* has changed the landscape of consumer interaction with products, injecting an emotional and interactive dimension into the shopping experience. Unlike conventional *e-commerce*, which is often based on rational considerations, these *livestreaming* platforms offer a dynamic and emotionally charged stage. Spontaneous interactions with *streamers* provide an element of entertainment that enriches audience engagement, which in turn opens up greater opportunities for impulsive purchases. For example, research by Zhang et al (2023) highlights that more than half of active internet users in China have participated in *livestreaming commerce*. This figure indicates tremendous market reach and confirms that this phenomenon has become an integral part of modern marketing strategies, where entertainment and social aspects are the main drives of consumption decisions.

In this ecosystem, the role of a *streamer* is vital. Their personal attributes ranging from attractiveness and expertise to unique communication styles have a strong influence on shaping the audience’s perception of a product. Research by Li &Li (2022) reveals that a *streamer’s* charm stems not only from their physical appearance but also from their ability to forge emotional connections. This closeness creates parasocial bonds, making the audience feel personally connected and ultimately strengthening their purchase intent. On the other hand, *streamers* expertise in explaining product detail convincingly also contributes to an increase in *perceived value*, as found by Liu et al (2020). Thus, expertise not only builds credibility but also reduces consumer doubt, thereby increasing the likelihood of spontaneous purchases.

Futhermore, interactivity through twoway communication is a transformative element in the shopping experience. *The streamer’s* ability to respond to audience questions in *real-time* and open up space for active participation will increase their engagement and satisfaction (ma et al., 2023). This type of interaction enriches the shopping journey, creates a feeling of being valued, and deepens the audience’s emotional connection with the product. This deep engagement, when combined with instant offers or limited time promotions, can trigger stronger impulsive urges, demonstrating how *livestreaming commerce* cleverly leverages urgency to drive purchasing decisions (Yang, 2024).

The uniqueness of *the streamer’s* communication style is also a determining factor in strengthening the value perceived by consumers. A distinctive style whether in message delivery, presentation creativity, or consistent selfimage creates a memorable shopping experience and sets it apart from other shopping channels. This uniqueness also strengthens parasocial bonds, which ultimately leads to stronger impulsive purchasing decisions. Consumers tend to be more attracted to products presented by authentic *streamers* with distinctive characteristics, as this adds emotional and social value to the product itself (Liao et al., 2023).

Futhermore, consumers’ internal psychological factors also moderate the relationship between *streamer* attributes and impulsive behavior. Research by Sekides & Hart (2022) indicates that consumers with narcissistic personality tendencies are more easily influenced by offers that empathize status and social recognition. Individuals with high levels of narcissism are more responsive to narratives that reinforce their selfimage, making them more susceptible to spontaneous purchasing temptations. This

underscores the importance of *livestreaming* marketing strategies to consider the diversity of the audience's personalities in order to design more persuasive campaigns.

Overall, *livestreaming commerce* has transformed consumption dynamics by combining entertainment, social interaction, and urgency. The captivating, knowledgeable, interactive, and unique characteristics of *streamers* play a key role in shaping value in the eyes of the audience, which then impacts their impulsive behavior. By incorporating psychological factors such as narcissism, this study provides comprehensive insights into how these various elements interact and shape purchasing decisions in the dynamic arena of *livestreaming commerce* (Li et al., 2024; Ma et al., 2023).

Theoretical Implications

This study enriches the theoretical knowledge base on *livestreaming commerce* and its impact on consumer behavior. One of its main contributions is a deeper understanding of how *streamer* attributes (attractiveness, expertise, and uniqueness) can shape value perceptions in consumer minds. These findings refine the literature on parasocial interaction, showing that emotional bonds can catalyze impulsive purchase intentions. Furthermore, this study broadens the horizon of consumer psychology by highlighting the role of personality traits such as narcissism as a moderator. Collectively, these research results enrich theories about impulsive buying, parasocial bonds, and social influence in the context of contemporary digital commerce.

This study also underscores the relevance of entertainment and urgency elements. The entertainment aspect that arises from interactivity, coupled with time-limited offers, plays a significant role in driving unplanned purchasing decisions. Thus, this research encourages the formulation of a more integrated theoretical framework on how social media and two-way communication shape consumption behavior. This also paves the way for further research to explore how various factors, such as content production quality and audience engagement levels, influence purchasing decisions and long-term loyalty.

Managerial Implications

From a practical perspective, the findings of this research offer strategic guidance for businesses that utilize *livestreaming* as a marketing channel. First, it is imperative for companies to be careful in selecting *streamers*. The focus is no longer limited to physical attractiveness, but also their ability to build authentic emotional connections. Expertise, creativity, and a sincere communication style are the foundations for forming strong parasocial bonds, which have been proven effective in encouraging impulsive purchases. Second, business practitioners need to recognize the power of interactivity to enhance the audience experience. Creating space for the audience to ask questions, discuss, and actively participate will foster engagement and strengthen emotional bonds with the brand and product. By integrating personalized and enjoyable interactive mechanisms, companies can create a more lively shopping atmosphere and make the audience feel valued. Furthermore, utilizing urgency strategies through limited offers or promotions is an effective tactical move. Companies can create momentum and a sense of *scarcity* that encourages audiences to make purchasing decisions more quickly. Timing offers and additional incentives are key to maximizing this strategy. Finally, a deep understanding of the audience's psychological profile, including traits such as narcissism, is key. Designing campaigns that highlight aspects of status, exclusivity, and social recognition can be very effective in targeting specific audience segments. This means that the content presented must be in line with psychological preferences of the target market.

In summary, this study equips managers and marketers with a sharper understanding of the factors that drive success in the realm of *livestreaming commerce*. By paying attention to synergy between *streamer characteristics*, interactivity, urgency, and audience profiles, companies can design strategies that not only increase sales but also build consumer loyalty in the digital age.

IV. CONCLUSION

This research confirms that *livestreaming* has reshaped consumer product interactions by combining elements of entertainment, social connection, and urgency as triggers for impulsive purchases. *Streamer* stand as the main axis in this process, where personal attributes such as charm, expertise, and unique communication styles become emotional bridges with the audience. Two-way interactivity further enriches the shopping experience, while psychological factors such as narcissism moderate spontaneous purchasing tendencies.

Theoretically, this research contributes to the literature on parasocial interaction and purchasing behavior in the digital context. Practically, these findings serve as a guide for companies to be more strategic in selecting *streamers*, designing interactive sessions, and leveraging urgency. Ultimately, the success of *livestreaming* marketing depends on the ability to align *streamer* characteristics with the psychological profile of the audience to build sustained engagement and loyalty.

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