



## The Impact of Crowd Interaction in Live Streaming Commerce on Gen Z's Impulse Buying Behavior: An S-O-R Framework Approach

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**KEYWORDS:** Live Streaming Commerce, Crowd Interaction, Herd Psychology, Fear of Missing Out (FOMO), Impulse Buying Behavior, Gen Z, S-O-R Framework, PLS-SEM.

**ABSTRACT:** Live streaming commerce has emerged as a dominant retail channel in Vietnam, significantly altering consumer purchasing dynamics through real-time social engagement and high-interactivity environments. Drawing upon the Stimulus-Organism-Response (S-O-R) framework, Social Influence Theory, and the Fear of Missing Out (FOMO) perspective, this study investigates the empirical mechanism through which crowd interactions in live streaming streams influence the impulse buying behavior of Generation Z consumers. A quantitative cross-sectional design was executed, sampling 297 validated Gen Z respondents across major shopping platforms including TikTok Shop, Shopee Live, and Facebook Live. Structural Equation Modeling via Partial Least Squares (PLS-SEM) was utilized to evaluate measurement scale validity and test structural path hypotheses. The empirical findings reveal that Viewer-to-Viewer Interaction ( $\beta = 0.203$ ,  $p < 0.05$ ), Streamer-to-Viewer Interaction ( $\beta = 0.437$ ,  $p < 0.001$ ), and Perceived Product Popularity ( $\beta = 0.223$ ,  $p < 0.001$ ) significantly and positively stimulate Herd Psychology among Gen Z live streaming audiences. Subsequently, Herd Psychology exerts a profound positive influence on Impulse Buying Behavior ( $\beta = 0.630$ ,  $p < 0.001$ ), explaining 39.5% of the variance in unplanned purchasing decisions. Mediation analysis confirms that Herd Psychology functions as a robust complementary mediator bridging environmental live interactions and spontaneous purchases. Strategic managerial implications for e-commerce merchants and digital broadcasting platforms are discussed, alongside structural limitations and future empirical trajectories.

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### 1. INTRODUCTION

In recent years, the rapid transformation of digital technology and social networking ecosystems has catalyzed the explosive growth of live streaming commerce. In Vietnam, live streaming retail has evolved into a vital distribution channel across leading digital platforms such as TikTok Shop, Shopee Live, and Facebook Live. Unlike traditional electronic commerce interfaces that rely on static product images and asynchronous customer reviews, live streaming commerce provides a synchronized, highly interactive social environment where consumers observe products in real-time, communicate directly with broadcasters, and participate actively within an online crowd.

During a live commercial broadcast, observable social signals—such as real-time viewer counters, rapid comment flows, heart likes, shares, and instant order pop-up notifications—act as prominent crowd interaction stimuli. Generation Z (born 1997–2012), representing the digital-native consumer cohort, constitutes the primary audience and driving demographic of live commerce. Gen Z shoppers demonstrate a strong inclination toward highly entertaining interactive experiences, show susceptibility to community influences, and frequently execute purchasing decisions under short timeframes. In this environment, dynamic crowd interactions generate intense emotional arousal and trigger the Fear of Missing out (FOMO), thereby driving unplanned, spontaneous purchases. Although prior literature has investigated online impulse buying and general social influence, empirical research specifically

dissecting the granular components of crowd interaction (Viewer-to-Viewer Interaction, Streamer-to-Viewer Interaction, and Perceived Product Popularity) and their psychological mechanisms under the Stimulus-Organism-Response (S-O-R) framework remains scarce in emerging live commerce markets. To address this literature gap, this study formulates the following core objectives:

- To identify and structuralize the dimensions of crowd interaction within live streaming commerce.
- To measure the influence of crowd interaction stimuli on the internal psychological state (Herd Psychology & FOMO) of Gen Z viewers.
- To empirically evaluate the relationship between internal psychological states and impulsive buying responses using PLS-SEM.
- To provide strategic managerial recommendations for digital sellers and e-commerce platform operators.

## 2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

### 2.1 Theoretical Foundations

**Stimulus-Organism-Response (S-O-R) Framework:** Originally conceptualized by Mehrabian and Russell (1974), the S-O-R framework posits that environmental cues (Stimuli) alter an individual's cognitive and affective internal state (Organism), which subsequently dictates behavioral outcomes (Response). In live streaming commerce, external environmental stimuli encompass real-time social interactions; the organism represents internal herd psychology and emotional arousal; and the response manifests as spontaneous impulse purchases.

**Social Influence Theory & Herd Psychology:** Developed by Kelman (1958) and expanded by Latané (1981), Social Influence Theory explains how individual attitudes and actions adapt under social group presence. In digital crowds, herd psychology reflects normative and informational compliance, wherein individuals mirror collective behavior to diminish perceived purchasing risks or maintain group alignment.

**Fear of Missing out (FOMO):** FOMO is conceptualized as a pervasive apprehension that others might be having rewarding experiences from which one is absent (Przybylski et al., 2013). In live streaming broadcasts, real-time scarcity indicators (e.g., countdown timers, stock depletion pop-ups) intensify competitive psychological urgency, motivating impulsive purchases as a coping mechanism.

### 2.2 Hypotheses Development

**Viewer-to-Viewer Interaction (VVI) and Herd Psychology:** Real-time discussions, comment flows, and peer exchanges create social proof (Cialdini, 1984). Observing peer buyers praising products generates emotional contagion, curiosity, and compliance, causing individuals to align with the crowd. Thus, we propose:

*H1: Viewer-to-Viewer Interaction positively influences Herd Psychology in live streaming commerce.*

**Streamer-to-Viewer Interaction (SVI) and Herd Psychology:** Streamers employ real-time engagement tactics, such as addressing viewers by name, hosting flash games, and encouraging comments. This synchronized attention elevates emotional arousal and creates a shared collective space, reinforcing crowd psychological alignment. Thus, we propose:

*H2: Streamer-to-Viewer Interaction positively influences Herd Psychology in live streaming commerce.*

**Perceived Product Popularity (PPP) and Herd Psychology:** Indicators such as "item selling fast" or high product view counts signal top-trending items. According to bandwagon theory (Leibenstein, 1950), perceived high popularity reduces perceived cognitive risk and heightens the impulse to join the majority. Thus, we propose:

*H3: Perceived Product Popularity positively influences Herd Psychology in live streaming commerce.*

**Herd Psychology (HP) and Impulse Buying Behavior (IBB):** Herd psychology diminishes analytical cognitive processing and heightens affective urgency. Driven by FOMO and group compliance, consumers execute immediate orders to secure perceived promotional advantages before opportunity loss occurs. Thus, we propose:

*H4: Herd Psychology positively influences Impulse Buying Behavior among Gen Z live streaming viewers.*

## 3. RESEARCH METHODOLOGY

### 3.1 Sampling and Data Collection

A quantitative cross-sectional survey design was deployed targeting Gen Z consumers residing in urban Vietnam who active engagement in live streaming shopping within the preceding six months. Data collection occurred between January 9, 2026, and February 25, 2026. Non-probability convenience sampling via structured digital questionnaires yielded 342 total submissions. Following data screening for speeder responses and unengaged patterns, 297 valid responses were retained for structural modeling, satisfying the minimum sample size threshold  $5 \times 21 = 105$  người. Established by the  $n = 5 \times m$  rule for 21 measurement items.

### 3.2 Measurement Items and Construct Scales

All construct items were adapted from established literature and measured on a 5-point Likert scale (1 = "Strongly Disagree" to 5 = "Strongly Agree"), as detailed in Table 1.

Table 1. Measurement Scale Items and Origin References

| Construct                            | Code | Measurement Item                                                                                      | Source Reference                  |
|--------------------------------------|------|-------------------------------------------------------------------------------------------------------|-----------------------------------|
| Viewer-to-Viewer Interaction (VVI)   | VVI1 | I frequently read comments from other viewers during the live streaming broadcast.                    | Hu et al. (2018)                  |
| Viewer-to-Viewer Interaction (VVI)   | VVI2 | I feel more confident in the product when seeing other viewers compliment or order it.                | Park & Lee (2008)                 |
| Viewer-to-Viewer Interaction (VVI)   | VVI3 | Seeing others actively discussing the product makes me feel excited and curious.                      | Xiang et al. (2016)               |
| Viewer-to-Viewer Interaction (VVI)   | VVI4 | I enjoy interacting and talking with other viewers through the live comment section.                  | Lin & Lu (2011)                   |
| Streamer-to-Viewer Interaction (SVI) | SVI1 | I like it when the streamer reads my name and answers viewer comments immediately.                    | Sun et al. (2019)                 |
| Streamer-to-Viewer Interaction (SVI) | SVI2 | The streamer frequently encourages everyone to interact (like, comment, share).                       | Hu et al. (2017)                  |
| Streamer-to-Viewer Interaction (SVI) | SVI3 | The streamer's enthusiasm and atmosphere-building keep me watching longer.                            | Wongkitrungrueng & Assarut (2020) |
| Streamer-to-Viewer Interaction (SVI) | SVI4 | The streamer's demonstration and interaction help me understand the product features better.          | Lu et al. (2018)                  |
| Streamer-to-Viewer Interaction (SVI) | SVI5 | The streamer shows genuine care for viewer feedback and needs during the stream.                      | Chen & Lin (2018)                 |
| Perceived Product Popularity (PPP)   | PPP1 | I feel that if I don't buy immediately, the product will quickly run out of stock due to high demand. | Kang et al. (2019)                |
| Perceived Product Popularity (PPP)   | PPP2 | Constantly seeing "someone just purchased" pop-ups makes me realize the item is very popular.         | Kang et al. (2019)                |
| Perceived Product Popularity (PPP)   | PPP3 | I pay extra attention to items announced by the streamer as "almost sold out" or "limited quantity".  | Kang et al. (2019)                |
| Perceived Product Popularity (PPP)   | PPP4 | I feel that this product is currently one of the leading top-trending items.                          | Kang et al. (2019)                |

| Construct                     | Code | Measurement Item                                                                                          | Source Reference           |
|-------------------------------|------|-----------------------------------------------------------------------------------------------------------|----------------------------|
| Herd Psychology (HP)          | HP1  | When seeing many people buying, I also intend to buy following them because I believe the crowd is right. | Leibenstein (1950)         |
| Herd Psychology (HP)          | HP2  | I feel more reassured buying a product that many others are competing to purchase.                        | Kasturiratna et al. (2014) |
| Herd Psychology (HP)          | HP3  | I fear missing out on a good opportunity (deal, gift) if I do not act fast like everyone else.            | Przybylski et al. (2013)   |
| Herd Psychology (HP)          | HP4  | The continuously increasing number of items added to cart makes me want to purchase.                      | Chen et al. (2021)         |
| Impulse Buying Behavior (IBB) | IBB1 | Flash sales or attached free gifts make me decide to buy immediately without overthinking.                | Rook & Fisher (1995)       |
| Impulse Buying Behavior (IBB) | IBB2 | When watching live streams, I often buy quickly without carefully considering like usual.                 | Rook & Fisher (1995)       |
| Impulse Buying Behavior (IBB) | IBB3 | I feel urged to press "Buy Now" when the atmosphere in the live stream reaches its peak.                  | Rook & Fisher (1995)       |
| Impulse Buying Behavior (IBB) | IBB4 | After exiting the live stream, I am sometimes surprised by the items I have just ordered.                 | Rook & Fisher (1995)       |

#### 4. EMPIRICAL RESULTS

**Table 2. Demographic Profile of Sample Respondents (N = 297)**

| Variable       | Category                 | Frequency | Percentage (%) |
|----------------|--------------------------|-----------|----------------|
| Gender         | Male                     | 140       | 47.3%          |
| Gender         | Female                   | 157       | 52.7%          |
| Age Cohort     | 1997 - 2002 (Gen Z core) | 293       | 98.7%          |
| Age Cohort     | Others                   | 4         | 1.3%           |
| Monthly Income | < 5 Million VND          | 57        | 19.3%          |

| Variable                 | Category              | Frequency | Percentage (%) |
|--------------------------|-----------------------|-----------|----------------|
| Monthly Income           | 5 - 10 Million VND    | 91        | 30.5%          |
| Monthly Income           | 10 - 20 Million VND   | 120       | 40.4%          |
| Monthly Income           | > 20 Million VND      | 29        | 9.8%           |
| Live Streaming Frequency | Daily                 | 117       | 39.4%          |
| Live Streaming Frequency | 2 - 3 times / week    | 92        | 31.0%          |
| Live Streaming Frequency | 1 time / week or less | 88        | 29.6%          |
| Preferred Platform       | TikTok Shop           | 111       | 37.5%          |
| Preferred Platform       | Shopee Live           | 95        | 31.8%          |
| Preferred Platform       | Facebook Live         | 44        | 14.8%          |
| Preferred Platform       | Instagram Live        | 47        | 15.9%          |

#### 4.1 Descriptive Statistics of Measurement Indicators

Table 3 summarizes the descriptive statistics including mean, median, minimum, maximum, and standard deviation for key indicators across constructs.

**Table 3. Descriptive Statistics of Observed Items**

| Construct                          | Item | Mean  | Median | Minimum | Maximum | Std. Deviation |
|------------------------------------|------|-------|--------|---------|---------|----------------|
| Perceived Product Popularity (PPP) | PPP1 | 3.899 | 4.000  | 1.000   | 5.000   | 0.878          |
| Perceived Product Popularity (PPP) | PPP2 | 3.927 | 4.000  | 1.000   | 5.000   | 0.893          |
| Perceived Product Popularity (PPP) | PPP3 | 4.003 | 4.000  | 1.000   | 5.000   | 0.860          |
| Perceived Product Popularity (PPP) | PPP4 | 4.042 | 4.000  | 1.000   | 5.000   | 0.869          |
| Impulse Buying Behavior (IBB)      | IBB1 | 4.007 | 4.000  | 1.000   | 5.000   | 0.870          |
| Impulse Buying Behavior (IBB)      | IBB2 | 3.840 | 4.000  | 1.000   | 5.000   | 0.875          |

| Construct                         | Item | Mean  | Median | Minimum | Maximum | Std. Deviation |
|-----------------------------------|------|-------|--------|---------|---------|----------------|
| Impulse Buying Behavior (IBB)     | IBB3 | 4.118 | 4.000  | 1.000   | 5.000   | 0.854          |
| Impulse Buying Behavior (IBB)     | IBB4 | 4.139 | 4.000  | 1.000   | 5.000   | 0.851          |
| Streamer-Viewer Interaction (SVI) | SVI1 | 3.941 | 4.000  | 1.000   | 5.000   | 0.909          |
| Streamer-Viewer Interaction (SVI) | SVI2 | 3.997 | 4.000  | 1.000   | 5.000   | 0.903          |
| Streamer-Viewer Interaction (SVI) | SVI3 | 4.080 | 4.000  | 1.000   | 5.000   | 0.840          |
| Streamer-Viewer Interaction (SVI) | SVI4 | 3.976 | 4.000  | 1.000   | 5.000   | 0.856          |
| Streamer-Viewer Interaction (SVI) | SVI5 | 3.941 | 4.000  | 1.000   | 5.000   | 0.894          |

#### 4.2 Outer Model Reliability and Convergent Validity Evaluation

The measurement model was evaluated using SmartPLS 4 for indicator reliability, internal consistency, and convergent validity. As detailed in Table 4, all outer loadings exceeded the recommended threshold of 0.708 (ranging from 0.717 to 0.862). Cronbach's Alpha ( $\alpha \geq 0.788$ ) and Composite Reliability ( $CR \geq 0.855$ ) surpassed 0.70 across all constructs. Average Variance Extracted (AVE) values ranged from 0.541 to 0.716, exceeding the 0.50 cutoff and confirming robust convergent validity.

**Table 4. Outer Loadings and Construct Convergent Validity Metrics**

| Construct                          | Item | Outer Loading | Cronbach's $\alpha$ | CR ( $\rho_a$ ) | CR ( $\rho_c$ ) | AVE                              |
|------------------------------------|------|---------------|---------------------|-----------------|-----------------|----------------------------------|
| Perceived Product Popularity (PPP) | PPP1 | 0.816         | 0.829               | 0.830           | 0.886           | 0.661                            |
| Perceived Product Popularity (PPP) | PPP2 | 0.803         |                     |                 |                 | 0.829<br>0.830<br>0.886<br>0.661 |
| Perceived Product Popularity (PPP) | PPP3 | 0.818         |                     |                 |                 | 0.829<br>0.830<br>0.886<br>0.661 |
| Perceived Product Popularity (PPP) | PPP4 | 0.815         |                     |                 |                 | 0.829<br>0.830<br>0.886<br>0.661 |
| Impulse Buying Behavior (IBB)      | IBB1 | 0.801         | 0.826               | 0.828           | 0.884           | 0.656                            |
| Impulse Buying Behavior (IBB)      | IBB2 | 0.812         |                     |                 |                 | 0.826<br>0.828<br>0.884<br>0.656 |

| Construct                         | Item | Outer Loading | Cronbach's $\alpha$ | CR ( $\rho_a$ ) | CR ( $\rho_c$ ) | AVE                              |
|-----------------------------------|------|---------------|---------------------|-----------------|-----------------|----------------------------------|
| Impulse Buying Behavior (IBB)     | IBB3 | 0.809         |                     |                 |                 | 0.826<br>0.828<br>0.884<br>0.656 |
| Impulse Buying Behavior (IBB)     | IBB4 | 0.818         |                     |                 |                 | 0.826<br>0.828<br>0.884<br>0.656 |
| Streamer-Viewer Interaction (SVI) | SVI1 | 0.717         | 0.788               | 0.789           | 0.855           | 0.541                            |
| Streamer-Viewer Interaction (SVI) | SVI2 | 0.737         |                     |                 |                 | 0.788<br>0.789<br>0.855<br>0.541 |
| Streamer-Viewer Interaction (SVI) | SVI3 | 0.743         |                     |                 |                 | 0.788<br>0.789<br>0.855<br>0.541 |
| Streamer-Viewer Interaction (SVI) | SVI4 | 0.754         |                     |                 |                 | 0.788<br>0.789<br>0.855<br>0.541 |
| Streamer-Viewer Interaction (SVI) | SVI5 | 0.724         |                     |                 |                 | 0.788<br>0.789<br>0.855<br>0.541 |
| Viewer-Viewer Interaction (VVI)   | VVI1 | 0.781         | 0.794               | 0.795           | 0.866           | 0.618                            |
| Viewer-Viewer Interaction (VVI)   | VVI2 | 0.802         |                     |                 |                 | 0.794<br>0.795<br>0.866<br>0.618 |
| Viewer-Viewer Interaction (VVI)   | VVI3 | 0.780         |                     |                 |                 | 0.794<br>0.795<br>0.866<br>0.618 |
| Viewer-Viewer Interaction (VVI)   | VVI4 | 0.781         |                     |                 |                 | 0.794<br>0.795<br>0.866<br>0.618 |
| Herd Psychology (HP)              | HP1  | 0.840         | 0.868               | 0.868           | 0.910           | 0.716                            |
| Herd Psychology (HP)              | HP2  | 0.844         |                     |                 |                 | 0.868<br>0.868<br>0.910<br>0.716 |

| Construct            | Item | Outer Loading | Cronbach's $\alpha$ | CR ( $\rho_a$ ) | CR ( $\rho_c$ ) | AVE   |
|----------------------|------|---------------|---------------------|-----------------|-----------------|-------|
| Herd Psychology (HP) | HP3  | 0.838         |                     |                 |                 | 0.868 |
|                      |      |               |                     |                 |                 | 0.868 |
|                      |      |               |                     |                 |                 | 0.910 |
|                      |      |               |                     |                 |                 | 0.716 |
| Herd Psychology (HP) | HP4  | 0.862         |                     |                 |                 | 0.868 |
|                      |      |               |                     |                 |                 | 0.868 |
|                      |      |               |                     |                 |                 | 0.910 |
|                      |      |               |                     |                 |                 | 0.716 |

#### 4.3 Discriminant Validity (HTMT Criterion)

Discriminant validity was verified using the Heterotrait-Monotrait ratio (HTMT). As displayed in Table 5, all HTMT values fell well below the strict threshold of 0.85 (ranging between 0.710 and 0.826), confirming distinct boundaries between all empirical constructs.

**Table 5. Heterotrait-Monotrait Ratio (HTMT) Matrix**

| Construct | PPP   | IBB   | SVI   | VVI   | HP |
|-----------|-------|-------|-------|-------|----|
| PPP       | -     |       |       |       |    |
| IBB       | 0.753 | -     |       |       |    |
| SVI       | 0.710 | 0.823 | -     |       |    |
| VVI       | 0.799 | 0.812 | 0.737 | -     |    |
| HP        | 0.714 | 0.741 | 0.826 | 0.727 | -  |

#### 4.4 Collinearity Diagnostics (VIF)

Prior to hypothesis testing, Variance Inflation Factors (VIF) were calculated to evaluate potential multicollinearity. As reported in Table 6, all indicator VIF values ranged from 1.473 to 2.270, strictly below the threshold of 3.0, confirming the absence of collinearity issues.

**Table 6. Variance Inflation Factor (VIF) Results for Measurement Indicators**

| Indicator | VIF   | Indicator | VIF   | Indicator | VIF   |
|-----------|-------|-----------|-------|-----------|-------|
| PPP1      | 1.727 | IBB1      | 1.790 | VVI1      | 1.549 |
| PPP2      | 1.772 | IBB2      | 1.775 | VVI2      | 1.630 |
| PPP3      | 1.873 | IBB3      | 1.723 | VVI3      | 1.578 |
| PPP4      | 1.768 | IBB4      | 1.721 | VVI4      | 1.564 |
| SVI1      | 1.480 | SVI4      | 1.600 | HP1       | 2.064 |
| SVI2      | 1.507 | SVI5      | 1.473 | HP2       | 2.052 |
| SVI3      | 1.556 | -         | -     | HP3       | 2.049 |
| -         | -     | -         | -     | HP4       | 2.270 |



#### 4.5 Model Fit and Structural Path Hypothesis Testing

Structural relationships were evaluated using non-parametric bootstrapping with 5,000 sub-samples. Table 7 presents the coefficient of determination  $R^2$ , while Table 8 outlines the direct path analysis outcomes.

**Table 7. Coefficient of Determination (R-Square) Report**

| Endogenous Construct          | R-Square ( $R^2$ ) | R-Square Adjusted ( $R^2$ ) |
|-------------------------------|--------------------|-----------------------------|
| Herd Psychology (HP)          | 0.557              | 0.553                       |
| Impulse Buying Behavior (IBB) | 0.397              | 0.395                       |

The model demonstrated high explanatory power, with  $R^2 = 0.553$  for Herd Psychology and  $R^2 = 0.395$  for Impulse Buying Behavior. All four direct structural hypotheses were fully supported ( $p < 0.05$ ).

**Table 8. Assessment of Structural Path Hypotheses**

| Hypothesis | Structural Relationship                                               | Path Coeff ( $\beta$ ) | p-value | Decision  |
|------------|-----------------------------------------------------------------------|------------------------|---------|-----------|
| H1         | Viewer-Viewer Interaction (VVI) $\rightarrow$ Herd Psychology (HP)    | 0.203                  | 0.001   | Supported |
| H2         | Streamer-Viewer Interaction (SVI) $\rightarrow$ Herd Psychology (HP)  | 0.437                  | 0.000   | Supported |
| H3         | Perceived Product Popularity (PPP) $\rightarrow$ Herd Psychology (HP) | 0.223                  | 0.000   | Supported |
| H4         | Herd Psychology (HP) $\rightarrow$ Impulse Buying Behavior (IBB)      | 0.630                  | 0.000   | Supported |

#### 4.6 Mediation Analysis

To evaluate the indirect mechanisms bridging environmental live interactions and spontaneous purchases, mediation analysis was conducted using Preacher & Hayes (2008) bootstrapping procedure. As shown in Table 9, Herd Psychology serves as a significant mediator across all indirect pathways ( $p < 0.01$ ).

**Table 9. Indirect Mediation Effect Assessment**

| Indirect Pathway                                                                        | Relationship | Indirect Coeff ( $\beta$ ) | p-value | Mediation Result        |
|-----------------------------------------------------------------------------------------|--------------|----------------------------|---------|-------------------------|
| Perceived Product Popularity $\rightarrow$ Herd Psychology $\rightarrow$ Impulse Buying |              | 0.140                      | 0.000   | Complementary Mediation |
| Streamer-Viewer Interaction $\rightarrow$ Herd Psychology $\rightarrow$ Impulse Buying  |              | 0.275                      | 0.000   | Complementary Mediation |
| Viewer-Viewer Interaction $\rightarrow$ Herd Psychology $\rightarrow$ Impulse Buying    |              | 0.128                      | 0.001   | Complementary Mediation |

#### 5. DISCUSSION AND MANAGERIAL IMPLICATIONS

The empirical findings validate the S-O-R paradigm in digital live commerce environments. Notably, Streamer-to-Viewer Interaction emerges as the dominant stimulus ( $\beta = 0.437$ ), demonstrating that immediate broadcaster responsiveness, energetic

delivery, and active moderation generate strong psychological alignment among viewers. Perceived Product Popularity ( $\beta = 0.223$ ) and Viewer-to-Viewer interaction ( $\beta = 0.203$ ) further reinforce social proof and collective momentum.

Most critically, Herd Psychology exhibits a compelling direct impact on Impulse Buying Behavior ( $\beta = 0.630$ ). Driven by FOMO and real-time social pressures, Gen Z shoppers experience reduced cognitive deliberation, leading to rapid purchase execution. Based on these insights, two main managerial recommendations are formulated:

1. **For Live Stream Merchants:** Prioritize real-time engagement training for broadcasters. Merchants should strategically deploy visual scarcity signals—such as real-time stock counters and instant order alerts—to activate FOMO and accelerate consumer decision-making.
2. **For E-Commerce Platform Developers:** Optimize interactive interface components. Enhancing live chat functionality, gamified social sharing, and real-time trend badges will maintain high engagement and capitalize on crowd purchasing dynamics.

## 6. CONCLUSION, LIMITATIONS, AND FUTURE RESEARCH

This study establishes that crowd interaction stimuli significantly influence Gen Z's impulse buying behavior in live streaming commerce, mediated by herd psychology and FOMO dynamics. Despite its empirical contributions, this research has limitations. The sample was gathered via convenience sampling within urban Vietnamese regions, limiting cross-cultural generalizability. Future studies should extend this model across diverse generational cohorts (e.g., Gen Y, Gen Alpha), integrate additional variables such as streamer credibility and platform technological quality, and examine emerging technologies like AI-driven virtual broadcasters.

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