

# The Fast Fashion Phenomenon in Indonesia: Do FOMO and Interactivity in Shopee Live Commerce Trigger the Trend of Impulsive Buying Among Generation Z?

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**Abstract.** This study aims to analyze the influence of interactivity and Fear of Missing Out (FOMO) on impulsive buying in Shopee live commerce for CRSL fashion products, with flow experience as a mediating variable and SOR as the grand theory. Using a quantitative approach and Partial Least Squares-Structural Equation Modeling (PLS-SEM) method, data were collected from 363 respondents who had made impulsive purchases during Shopee live streaming sessions. The results show that interactivity does directly affect impulsive buying, but significantly influences it through flow experience. Furthermore, FOMO directly affects impulsive buying, with flow experience strengthening this relationship. These findings confirm that marketing strategies based on interactivity and urgency effectively drive impulsive buying in Shopee live commerce.

**Keywords:** Interactivity, FOMO, Flow Experience, Impulsive Buying, SOR, Shopee Live Commerce.

## 1 Introduction

The global fashion industry is currently growing rapidly along with the increasing awareness that appearance affects social perception, professional success, self-image, and psychological well-being. The fast fashion phenomenon has become a major strategy adopted by manufacturers by emphasizing the speed of production and very short distribution cycles to respond to trends in a matter of weeks or even days [1]. This strategy encourages consumers to continue making repeat purchases, estimates the global fast fashion market value will reach 150.82 billion USD in 2025 and increase to 184.96 billion USD in 2027.

This trend certainly also has an impact on the fashion market in Indonesia, especially through online media. Previous research by explains that clothing products are ranked top as the most frequently purchased items online, and 56% of consumers are Gen Z [2]. This data is certainly a signal that fashion businesses targeting Gen Z have promising prospects, especially through online media such as live commerce, both now and in the next few years.

The Shopee Marketplace, as a major player in the e-commerce industry in Southeast Asia, plays an important role in supporting the fast fashion phenomenon by presenting interactive features that increase consumer engagement. 69% of respondents chose Shopee Live as the favorite live streaming feature to use, far surpassing TikTok Live (25%), Tokopedia Play (4%), and LazLive (2%). In addition, 79% of respondents stated that the "Fashion & Accessories" category was the most purchased product during Shopee Live, indicating that this feature has contributed to the growth of the local fast fashion industry.

CRSL, a local brand known for its functional and creative streetwear designs, has successfully utilized the Shopee Live feature with 828,300 followers on Shopee. CRSL is in fifth place as the most popular local fashion brand. This success is driven by an effective marketing strategy through social media, which is based on the customer community and offline events with unique contemporary themes to increase emotional attachment to customers. In addition, CRSL also utilizes the Shopee Live feature to offer exclusive benefits and real-time interactions with consumers, thus increasing the effectiveness of interactive strategies in building brands in the fast fashion industry.

The rising trend of live streaming in e-commerce has changed consumer shopping habits by speeding up the decision-making process, increasing shopping efficiency, and driving sales by 27.9% through live shopping features [3]. However, this feature also contributes to increased impulsive buying, which can lead to post-purchase regret, and have a negative impact on consumer satisfaction, including the potential for negative reviews and repeated refund requests, which can ultimately hinder sales [4,5].

Impulsive buying itself is defined as a sudden (spontaneous) purchasing action that is triggered by external stimuli and internal psychological changes [6,7]. Impulsive buying in online commerce occurs suddenly and is often triggered by stimuli that are intentionally designed to attract the consumer's attention [8].

In a socially interactive shopping platform, consumers show higher tendency to make impulse purchases [9]. Therefore, live streaming sales are increasingly popular in e-commerce because they can create an immersive and engaging shopping experience. More than 80% of young shoppers engage in impulse buying while shopping online, with higher levels of impulsive buying during live streaming sessions. In comparison to traditional e-commerce, live commerce plays a bigger role in driving impulsive buying due to the more realistic shopping experience and stronger interactivity [10].

Interactivity itself is defined as the level of reciprocal communication between two people or more [11], which is now increasingly developing thanks to digital technology, enabling continuous connectivity and more intense interactions [12]. In live streaming shopping, interactivity includes not only communication between viewers and hosts, but also with fellow viewers in the same space, providing a high level of social presence with rich sensory stimulation [13,14]. High interactivity and varied stimulation in live shopping increasingly lead consumers to make impulsive purchases [15].

One of the psychological factors that strengthens this phenomenon is the Fear of Missing Out (FOMO), a feeling of worry when someone thinks they will miss out on the pleasant experiences that other people have had, thus causing anxiety and the urge to stay connected [16]. FOMO also reflects an individual's need to stay informed and participate in the community. Regret is one of the main mechanisms that triggers FOMO, where feelings of missed opportunities can produce strong emotions that influence purchasing decisions [17,18]. As the response to the fast and interactive nature of live streaming, individuals with high levels of FOMO tend to want to stay connected with others [19], so that they are more prone to making impulsive purchases.

Flow experience is described as a psychological experience when an individual is fully involved in an activity with an intense level of focus, often accompanied by pleasant feelings [20]. In live shopping activities, the professionalism of the live host and interaction with other audiences can increase the flow experience, which then encourages consumers' tendency to make impulsive purchases [21]. During flow experience, they tend to pay more attention to comprehensive product explanations, which forms a positive perception of the product's

features, thus triggering a desire to purchase [22]. Therefore, flow experience has a significant influence on impulsive buying in live commerce [12].

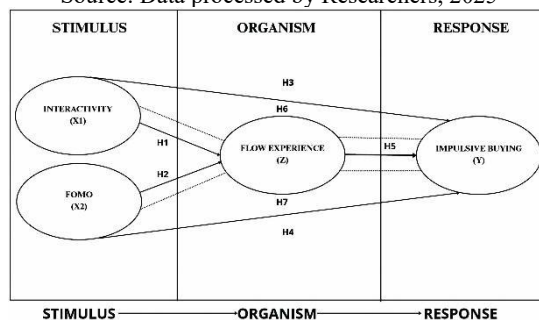
Flow Experience occurs when an individual receives certain external stimuli while performing an activity [23]. In live commerce, stimuli that influence the flow experience can come from interactivity [24] and FOMO [11]. The interactivity provided by the live host increases consumer engagement, making them more focused to the point of forgetting time and entering a state of flow experience [25]. In addition, the message of product scarcity in live shopping often forces consumers to buy immediately before they run out, creating psychological pressure that strengthens impulsive urges [26].

Several studies have shown mixed results regarding impulsive buying [27], found that real-time interactivity in live streaming had a positive and significant effect, while [28], states that interactivity has no direct influence. Furthermore, [29] confirms that FOMO has a significant influence, but [30] find otherwise. Another research [31], validates that Flow Experience has a positive and significant effect, emphasizing the importance of involvement in live commerce on impulsive buying decisions. The gap in these findings prompted this study to explore the effect of interactivity and FOMO on impulsive buying, with flow experience as a mediator, using the S-O-R theory on the CRSL fashion brand on Shopee Live Commerce among millennials and Gen Z. The novelty of this study lies in the variables used, namely flow experience as a mediating variable.

The indicators and items used come from research [32,33], which is mostly used in the context of game-based e-learning, which is then adapted in this study into impulsive buying behavior on the live commerce platform. Although several previous researchers have applied the flow experience variable in the context of digital marketing, this study will use a measurement framework on flow experience from [32,33]. The flow experience indicators in this study were adapted from [32,33]. Both studies were initially developed in the context of game-based and simulation-based learning. Although derived from the context of Education, these indicators are relevant in the context of digital marketing, especially live commerce. The indicators and items were adapted in this study due to the similarity in the characteristics of VBR users and live commerce viewers where there are aspects of interactivity, challenges based on digital systems, and the possibility of flow conditions such as full concentration, time distortion, and autotelic experiences. Furthermore, both studies adopted the flow theory from [34], which is universal.

The results of this study are expected to provide practical contributions for local fashion business actors such as CRSL in designing more effective and interactive marketing strategies.

Source: Data processed by Researchers, 2025



**Fig. 1.** Conceptual Framework of Research

H1: Interactivity has a positive and significant effect on flow experience in Shopee live commerce CRSL fashion products among Gen Z  
H2: FOMO has a positive and significant effect on flow experience in Shopee live commerce CRSL fashion products among Gen Z  
H3: Interactivity has a positive and significant effect on impulsive buying in Shopee live commerce CRSL fashion products among Gen Z.  
H4: FOMO has a positive and significant effect on impulsive buying in Shopee live commerce CRSL fashion products among Gen Z  
H5: Flow experience has a positive and significant effect on impulsive buying in Shopee live commerce CRSL fashion products among Gen Z  
H6: Flow experience mediates the effect of interactivity on impulsive buying in Shopee live commerce CRSL fashion products among Gen Z  
H7: Flow experience mediates the effect of FOMO on impulsive buying in Shopee live commerce CRSL fashion products among Gen Z

## **2 Method**

This study uses a quantitative approach of descriptive and explanatory research. This approach aims to describe the phenomena that occur and explain the causal relationship between the variables in the study. A questionnaire with a Likert scale of 1-5 is the instrument chosen to collect data that is distributed online via social media and also offline to a total of 348 respondents by setting certain criteria, namely aged 15 to 27 years (Generation Z), having a Shopee account, and having made impulsive purchases during the CRSL fashion product live streaming session. Each question item is arranged based on indicators from each variable, which are adapted from previous research. The item for the interactivity variable is adapted from [35,37] FOMO adapted from [38,40], Flow Experience is adapted from [33], and Impulsive Buying adapted from [41,43]

This study uses descriptive and inferential analysis techniques. Descriptive analysis is used to describe the characteristics of the data collected, such as frequency distribution and central tendency, without generalizing [44]. Meanwhile, inferential analysis was conducted to test the relationship between variables using the Partial Least Squares-Structural Equation Modeling (PLS-SEM) method. PLS-SEM is used because it is able to estimate models with high complexity, and also in small sample sizes [45]. The accuracy and consistency of the instrument are ensured through validity and reliability testing [46].

However, in the process, the FE4 indicator on the flow experience variable must be eliminated because all items on the indicator have a loading factor value  $< 0.7$ . as [45] suggested that indicators with outer loading values below 0.70 should be considered for deletion if their deletion can increase the Composite Reliability (CR) and Average Variance Extracted (AVE) values of the construct. Therefore, the FE4 indicator is eliminated in order to increase the convergent validity of other indicators that are more consistent and strong experience. Therefore, the FE4 indicator is eliminated in order to increase the convergent validity of other indicators that are more consistent and strong.

## **3 Results**

### **3.1 Characteristics of Respondents**

The participants in this study were 348 people. Based on gender, the majority of respondents were female (70.69%), while males numbered 29.31%. Based on age, the largest group was aged 20-24 years (66.67%). Based on profession, most respondents were students (52.59%). The respondents used were CRSL brand customers who had bought fashion products impulsively through Shopee live commerce, which shows that all respondents had been influenced by factors that drove impulsive buying in the context of CRSL live commerce.

**Table 1.** Respondent Characteristics

	f	Percentage (%)
Age		
1. 15 - 19 years	43	12.36%
2. 20 - 24 years	232	66.67%
3. 25 - 27 years	73	20.97%
<b>Total</b>	<b>348</b>	<b>100%</b>
Gender		
1. Female	246	70.69%
2. Male	102	29.31%
<b>Total</b>	<b>348</b>	<b>100%</b>
Current Status		
1. Student/University Student	183	52.59%
2. Civil Servant	15	4.31%
3. Private Employed	78	22.41%
4. Entrepreneur	29	8.33%
5. Self-employed	24	6.90%
6. Other	19	5.46%
<b>Total</b>	<b>348</b>	<b>100%</b>
Experienced Impulsive Buying of CRSL Fashion Products on Shopee Live Commerce		
1. Yes	348	100%
2. No	0	0%
<b>Total</b>	<b>348</b>	<b>100%</b>

Source: Processed by Researcher

This study shows that respondents gave an assessment of 3,567 - 4,044. The Grand mean value of interactivity is 4,044, which indicates that the level of interactivity provided by the CRSL brand in the live streaming session is quite good. The lowest mean score is IV6, which can be used as evaluation material for CRSL to improve the quality of content and features in live so that it can provide an interesting experience for customers. The grand mean of the FOMO variable is 3,567, which indicates that CRSL's live streaming is quite effective in triggering feelings of FOMO in respondents. The lowest mean score is found to be FM4 with a value of 3,431, which indicates that CRSL needs to increasing the impression of exclusivity, for example by using scarcity messages on the product.

The flow experience variable has a grand mean value of 3.733, indicating that CRSL's live streaming products have succeeded in stimulating respondents to experience flow conditions. The lowest mean value is owned by FE3, so further evaluation is needed regarding the host's ability to influence customers to be more involved in live shopping activities.

The impulsive buying variable has a grand mean value of 3.707, indicating that impulsive behavior in shopping through the CRSL live streaming page is quite high. The lowest mean is owned by IB6 with a value of 3.624, indicating that CRSL needs to pay attention to product quality and benefits from purchases in live shopping to increase customer satisfaction after purchase.

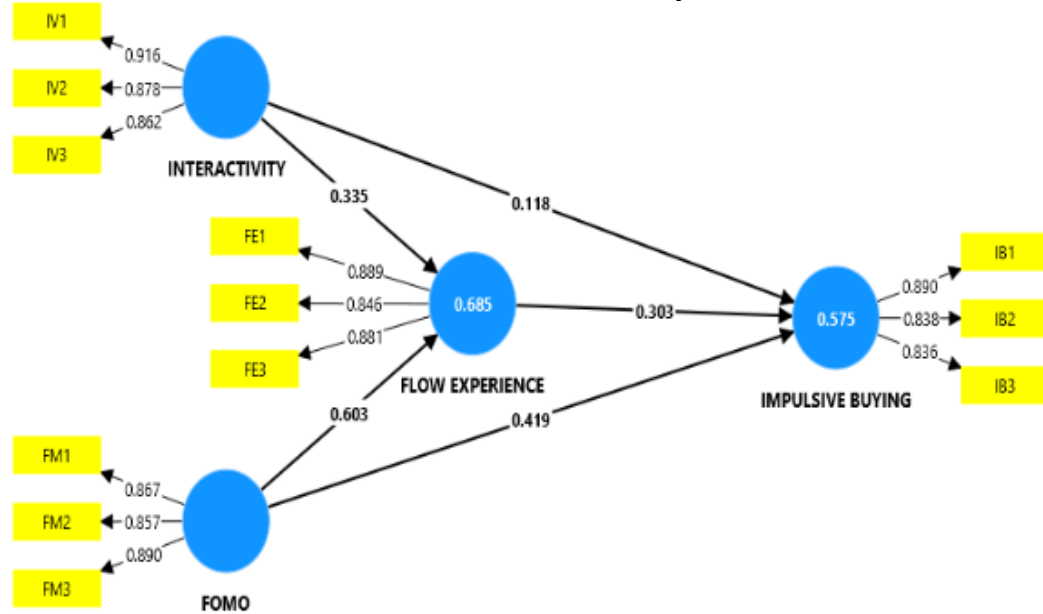
**Table 2.** Analysis Statistic Descriptive Data Per Variable

Variable	Item	Mean	Grand Mean
Interactivity	IV1	4.049	4.044
	IV2	4.072	
	IV3	4.040	
	IV4	4.126	
	IV5	4.060	
	IV6	3.968	
	IV7	3.994	
FOMO	FM1	3.537	3.567
	FM2	3.828	
	FM3	3.471	
	FM4	3.431	
Flow Experience	FE1	3.710	3.733
	FE2	3.667	
	FE3	3.652	
	FE4	3.868	
	FE5	3.770	
Impulsive Buying	IB1	3.684	3.707
	IB2	3.718	
	IB3	3.750	
	IB4	3.730	
	IB5	3.733	
	IB6	3.624	

Source: Processed by Researcher, 2025

### 3.2 Outer Model

Outer models need to be used to evaluate the level of validity and reliability of indicators that form the latent constructs contained in this study.



**Figure 2** Outer Model  
Source: Processed by Researcher, 2025

### 3.3 Convergent Validity and Discriminant Validity

An individual indicator can be concluded as a reliable indicator if the loading factor value (correlation) is  $>0.60-0.70$  with  $AVE >0.50$  [47]. The higher the loading factor value on the indicator, the stronger the correlation between the indicator and its latent variable. Discriminant Validity is carried out to test items/indicators originating from two constructs that should not be highly correlated, carried out by ensuring that the cross-loading value must exceed other existing variables.

**Table 3.** Loading Factors and Average Variance Extracted (AVE)

Indicator	Interactivity	FOMO	Flow Experience	Impulsive Buying	AVE
IV1	0.916				0.784
IV2	0.878				
IV3	0.862				
FM1		0.867			0.760
FM2		0.857			
FM3		0.890			
FE1			0.889		0.761

<b>FE2</b>	0.846		
<b>FE3</b>	0.881		
<b>IB1</b>		0.890	0.731
<b>IB2</b>		0.838	
<b>IB3</b>		0.836	

Source: Processed by Researcher, 2025

The results of the convergent and discriminant validity tests show that each indicator used can be stated as valid and interrelated. All variables have loading factors  $> 0.40$ - $0.70$ , with IV1 (0.916), FM3 (0.890), FE1 (0.889), and IB1 (0.890) as the most representative indicators. The AVE value exceeding 0.5 confirms convergent validity. Meanwhile, the cross-loading test shows that each indicator has the highest loading on its own variable, proving discriminant validity [48]. Thus, this research instrument has good reliability in measuring and distinguishing each variable significantly.

**Table 4.** Cross Loading

<b>Indicator</b>	<b>Interactivity</b>	<b>FOMO</b>	<b>Flow Experience</b>	<b>Impulsive Buying</b>
<b>IV1</b>	<b>0.916</b>	0.479	0.627	0.502
<b>IV2</b>	<b>0.878</b>	0.469	0.545	0.480
<b>IV3</b>	<b>0.862</b>	0.416	0.54	0.419
<b>FM1</b>	0.409	<b>0.867</b>	0.643	0.654
<b>FM2</b>	0.499	<b>0.857</b>	0.64	0.545
<b>FM3</b>	0.444	<b>0.89</b>	0.739	0.662
<b>FE1</b>	0.622	0.689	<b>0.889</b>	0.644
<b>FE2</b>	0.447	0.662	<b>0.846</b>	0.565
<b>FE3</b>	0.609	0.68	<b>0.881</b>	0.629
<b>IB1</b>	0.473	0.661	0.674	<b>0.89</b>
<b>IB2</b>	0.44	0.557	0.525	<b>0.838</b>
<b>IB3</b>	0.445	0.609	0.595	<b>0.836</b>

Source: Processed by Researcher, 2025

### 3.4 Composite Reliability

Construct reliability in this study was assessed by Composite *Reliability* and *Cronbach's Alpha*. A construct will be considered reliable if it got scores at least  $>0.70$  and  $>0,60$  for each [49].

**Table 5.** Composite Reliability and Cornbach's Alpha



		Variable	Composite Reliability	Cronbach's Alpha	
Source: Researcher, 2025 The test that all		IV	0.916	0.862	Processed by results validate variables meet good standards, with Composite Reliability > 0.70 and Cronbach's Alpha > 0.60. The highest value is in interactivity (0.916 and 0.862). The FOMO value (0.904 and 0.842) and flow experience (0.905 and 0.843) also meet very good reliability standards. Furthermore, the impulsive buying value (0.891 and 0.816), which shows a strong level of consistency. The results of the analysis prove that all constructs show a high level of reliability, which indicates that the instruments used are consistent in measuring the variables studied.
		FM	0.904	0.842	
		FE	0.905	0.843	
		IB	0.891	0.816	

### 3.5 Structural Model Evaluation Adjusted R-Squared

The values recorded from the calculation results of Adjusted R-Squared can be used to describe the influence between certain exogenous variables on endogenous latent variables and to find out how much diversity there is in the Y variable values described by the existing X variables.

Table 6. R-Square dan Adjusted R-Square		
Variable	R-Square	R-Square Adjusted
Flow Experience	0.685	0.683
Impulsive Buying	0.575	0.572

Source: Processed by Researcher, 2025

The Adjusted R-Squared' test scores show that the model has moderate predictive power, with flow experience explained by 68.5% by independent variables and impulsive buying by 57.5%, while the other part is explained by variables outside the scope of the model. The Adjusted R-Squared value which is almost the same as R-Squared indicates that the model is not too influenced by the number of independent variables [50]. Although the variables in this study are proven to have a significant impact, there is still room for improvement by adding other factors that can better explain the variability in flow experience and impulsive buying.

### 3.6 Bootstrapping

In this study, bootstrapping is used to determine the amount of influence between one variable and another by looking at the significance value. The main criteria used in this study are p-value <0.50 and t-statistic >1.96 [51], with a significance level of 5%.

**Table 7.** Direct effect hypothesis test

Correlation	Path Coefficients	<i>f</i> -Square	<i>t</i> -Statistic	<i>p</i> -Values	Conclusion
IV → FE	0.335	0.262	7.274	0.000	H1 accepted
FM → FE	0.603	0.849	14.524	0.000	H2 accepted
IV → IB	0.118	0.019	1.992	0.046	H3 accepted
FM → IB	0.419	0.164	7.438	0.000	H4 accepted
FE → IB	0.303	0.068	4.533	0.000	H5 accepted

Source: Processed by Researcher, 2025

Based on bootstrapping results, the H1 calculation obtained *f*-square results of 0.262, *t*-statistic 7.274 and *p*-value 0.000. The H2 calculation obtained *f*-square results of 0.849, *t*-statistic 14.524 and *p*-value 0.000. The H3 calculation obtained *f*-square results of 0.019, *t*-statistic 1.992 and *p*-value 0.046. The H4 calculation obtained *f*-square results of 0.164, *t*-statistic 7.438 and *p*-value 0.000. While the H5 calculation obtained *f*-square results of 0.068, *t*-statistic 4.533 and *p*-value 0.000. So, it can be said that H1-H5 is accepted. Meanwhile, the *F*-Square Value presented also explains how strong the relationship between variables is [52]. Strong influence is found in H2, moderate influence is found in H1 and H4, while weak influence is found in H3 and H5.

**Table 8** Indirect effect hypothesis test

Correlation	Path Coefficients	<i>t</i> -Statistic	<i>P</i> -Values	Conclusion
IV → FE → IB	0.101	3.782	0.000	H6 accepted
FM → FE → IB	0.183	4.205	0.000	H7 accepted

Source: Data processed by Researchers, 2025

Based on the results of statistical analysis, it can be validated that flow experience is a mediator in the relationship between interactivity and impulsive buying with a *t*-statistic of 3.782 and a *p*-value of 0.000. In addition, flow experience also mediates the relationship between FOMO and impulsive buying with a *t*-statistic of 4.205 and a *p*-value of 0.000. it is concluded that H6 and H7 are accepted.

## 4 Discussion

### 4.1 Interactivity on Shopee's live commerce affects the flow experience

This study validates that interactivity in Shopee's live commerce has a positive influence on the flow experience of CRSL fashion product consumers. Interactivity in live streaming sessions allows consumers to participate directly with the host and other users, thereby increasing their involvement in the shopping experience. Descriptive analysis results show that most respondents feel that interactive features such as real-time comments, Q&A sessions with the host, and product explanations make them more involved in the live session. In addition, they find it easier to understand product details and feel more interested in continuing to follow the live session. This concept is relevant

to the Stimulus-Organism-Response (SOR) theory which explains that interactivity in a digital environment can be a stimulus that influences the psychological condition of consumers (organisms) and ultimately impacts their behavioral responses [53,54]. In this context, interactivity plays a role in increasing emotional and cognitive engagement, which then makes it easier for consumers to enter the flow experience [55].

This study is supported by findings from [56], which confirms that interactive features in live streaming can increase user focus and engagement. Respondents pay more attention to interactive live sessions than one-way sessions because two-way communication between the host and the consumer creates a more engaging experience and keeps them focused on the content presented. In addition, it reveals that the flow experience resulting from interactivity in the live commerce platform contributes to increasing purchase intentions and consumer engagement in live streaming-based e-commerce. However, although interactivity increases the flow experience, some respondents feel that live streaming sessions still do not provide a truly immersive shopping experience. Furthermore, [57] mentioned that entertainment elements and platform design also play an important role in strengthening the flow experience. Therefore, more innovative interactive feature optimization is needed to increase consumer engagement in Shopee's live commerce sessions and create a more engaging and immersive shopping experience.

#### **4.2 FOMO on Shopee live commerce affects flow experience**

This study validates the positive and significant influence of FOMO on flow experience in Shopee live commerce for CRSL fashion products. Based on descriptive analysis, the majority of respondents admitted to being worried about missing the opportunity to buy products offered in the live streaming session. This fear of being left behind encouraged them to be more focused and involved in live shopping, which ultimately increased the flow experience. Respondents also showed a tendency to continue monitoring promotions and stock availability so as not to miss purchasing opportunities. This finding supports the Stimulus-Organism-Response (SOR) theory, which explains that FOMO as an external stimulus can affect the psychological state of individuals (organisms) and encourage greater involvement in certain activities [53]. In this context, the fear of missing out increase's consumers' concentration levels during live streaming sessions, making them more focused on product information and interactions taking place within the platform.

It's also supported by [58], which states that FOMO can trigger flow experiences in e-commerce and social media, because users who are afraid of being left behind are more likely to engage in digital experiences. The study (found that individuals with high FOMO are more likely to experience flow experiences when they feel connected to a community or ongoing activity. In Shopee's live commerce, FOMO makes consumers more active in following live sessions, paying more attention to product information, and experiencing a more immersive shopping experience [59]. However, not all consumers who experience FOMO automatically enter the flow state, because other factors such as the appeal of the content, interaction with the host, and the quality of the product presentation also play an important role [60] Therefore, brands need to add entertainment or gamification strategies to increase consumer engagement. Overall,

this study confirms that FOMO-based marketing strategies, such as limited-time promotions and exclusive stocks, have great potential in maximizing consumer engagement and shopping experience in Shopee live commerce.

#### **4.3 Interactivity Pada Live Commerce Shopee Affects the Impulsive Buying**

It can be concluded from the results of this study that interactivity has a causal influence on consumer impulsive buying behavior while watching Shopee live for CRSL fashion products. This result is in accordance with the Stimulus-Organism-Response (SOR) theory, where interactivity is expected to act as a stimulus that triggers impulsive buying as a response. As with the SOR theory, this influence will be even greater if there are other factors that mediate (organism) between interactivity and impulsive buying [61]. In their research, [61] also recommend the variables of inspirational experience and delight as mediating variables that link real-time interactivity with the urge to buy impulsively.

This finding is also in line with research [36], which proves that interactivity influences the occurrence of impulsive urges to buy products on e-commerce platforms. However, although the interactive features in live streaming allow consumers to communicate directly with the host and fellow viewers, this factor is not strong enough to directly encourage impulsive purchases. Interactivity serves more as a tool to increase customer engagement behavior, rather than as a primary trigger for spontaneous purchasing decisions, according to the answers given by respondents [62,63]

In the context of CRSL, this means that while the interactive features in live streaming allow for impulse buying in customers, the effect is not strong enough. Some consumers also enjoy live commerce features as a means of entertainment or product exploration, without any direct intention to buy [27]. Therefore, for brands like CRSL, marketing strategies in live commerce should not only focus on increasing interactivity, but also combine it with other factors such as time urgency, exclusive discounts, and emotional elements that can strengthen impulsive buying.

#### **4.4 FOMO On Shopee Live Commerce Affects Impulsive Buying**

This study validates the significant positive influence between FOMO and impulsive buying in Shopee live commerce for CRSL fashion products. The majority of respondents felt anxious about missing out on exclusive products, limited discounts, or stocks that ran out quickly, so they were more impulsive in buying. This finding supports the SOR theory, where FOMO as an external stimulus affects the psychological condition of consumers (organisms) and ultimately triggers impulsive buying [64]. Study by [1], also confirmed that FOMO reflects the relationship between perceived scarcity and impulsive buying, where the perception of product scarcity strengthens consumers' impulsive drives. However, the effect of FOMO on impulsive buying can vary. The research by [30] found that consumers with high self-control are better able to control their urge to buy even when experiencing FOMO. In addition, [65] shows that FOMO has a greater influence on consumers with hedonic shopping motivations, such as Gen Z and millennials, who are more susceptible to impulsive

drives in live commerce. Therefore, marketing strategies based on urgency and scarcity, such as limited-time discounts and exclusive stocks, are effective in increasing sales in live commerce, especially for young consumers who are responsive to the psychological influence of FOMO.

#### **4.5 Flow Experience in Shopee Live Commerce Influences Impulsive Buying**

This study validates the effect of flow experience on impulsive buying positively and significantly in Shopee live commerce for CRSL fashion products. The tendency of impulsive buying will increase in line with the intensity of the flow experience experienced by consumers in the live streaming session. Flow experience occurs when someone is very involved in an activity to the point of losing awareness of time and the environment [66]. Consumers who experience high involvement are more likely to act on emotional impulses rather than rational considerations, which can lead to impulsive buying [67].

This finding is in line with SOR theory, where flow experience mediates the influence of external stimuli on impulsive buying [68]. Factors such as the interactivity of live streaming, engaging product presentation, and engagement with the host strengthen this experience [69]. Research by [70] also found that engaging visuals, exclusive offers, and real-time interactions enhance the flow experience, driving impulse purchases. Therefore, CRSL needs to optimize a more interactive and engaging live streaming strategy to enhance the flow experience, thereby triggering impulse buying more effectively.

Research by [71] shows that flow experience has a significant positive effect on impulse buying in the context of social commerce, including platforms such as TikTok. Flow experience resulting from real-time interaction, personalization, and entertainment elements in live commerce can strengthen impulse buying intentions, which is similar in live commerce platforms such as Shopee. The findings in this study strengthen the view that intense flow experience can increase impulsive buying, especially for fashion products offered through Shopee live commerce, where interactive and immersive shopping experiences play a key role in driving impulsive buying decisions. The explanation above concludes that flow experience has a positive influence on impulsive buying in Shopee live commerce, especially for fashion products among millennials and Gen Z.

#### **4.6 Flow Experience Mediates the Effect of Interactivity on Impulsive Buying**

This study validates that flow experience plays mediating role between interactivity and impulsive buying in Shopee live commerce for CRSL fashion products. Although interactivity does not directly have a significant effect on impulsive buying, the existence of flow experience bridges the relationship. The more interactive the live streaming session, the more likely consumers are to experience flow experience, which then drives impulsive buying. This is in accordance with the SOR theory, where interactivity as an external stimulus affects the internal condition of consumers (flow experience) which ultimately triggers impulsive buying [66]. Features like live chat,

polls, and direct responses from hosts play a vital role in creating a more engaging shopping experience [55]. Furthermore, [72] also emphasized that high interactivity can strengthen the flow experience, which ultimately increases impulsive buying.

The characteristics and performance of interactive hosts can enhance consumers' flow experience during live streaming sessions. This flow experience then serves as a link between interactivity and impulsive buying behavior, reinforcing the urge to buy quickly. Another study by [67] supports this idea by showing that flow experience mediates the influence of elements in live streaming marketing on impulse buying. In Shopee live commerce, high interactivity can create a strong flow experience, which ultimately drives impulsive buying behavior on fashion products. This suggests that flow experience not only strengthens the relationship between interactivity and impulsive buying but also acts as a key factor in facilitating the transition from passive engagement to impulsive buying decisions.

Study [73], shows that flow experience is the main link between interactive features and impulsive buying. Interesting live streaming sessions make consumers more carried away and lose control in shopping, especially when limited promotions and exclusive discounts increase psychological pressure to buy. Furthermore, [57] also found that high interactivity in digital platforms strengthens the flow experience, which increases consumers' emotional involvement. Therefore, although interactivity does not directly trigger impulsive buying, flow experience as a mediator strengthens the influence. Based on these findings, CRSL needs to optimize interactive features in live streaming, such as fast responses from hosts, Q&A sessions, and interesting content, to improve the flow experience and increase consumers' impulsive buying drive.

#### **4.7 Flow Experience Mediates the Effect of FOMO on Impulsive Buying**

The results of the study validate that flow experience is a significant mediator in the relationship between FOMO and impulsive buying in Shopee live commerce for CRSL fashion products. Although FOMO can directly drive impulsive buying, its effect is stronger when consumers experience flow experience during the live streaming session. The fear of missing out on the opportunity to buy exclusive products or limited discounts makes consumers more easily carried away, experience flow experience, and ultimately more likely to make impulsive purchases. In the context of Shopee live commerce, FOMO is often triggered by limited-time discounts or limited product stock, which creates urgency for consumers. This urgency drives them to be more focused and involved, thus creating a flow experience. Previous studies also support this finding by stating that flow experience can mediate the relationship between various stimuli, such as FOMO, and impulsive buying behavior

In accordance with the SOR theory, FOMO as an external stimulus influences the consumer's internal condition (flow experience), which ultimately has an impact on impulsive buying [66]. Marketing strategies such as scarcity messages or limited-time offers to create psychological pressure that accelerates purchasing decisions [60]. Another study conducted by [70] found that flow experience can mediate the influence of social factors, including FOMO, on impulsive buying behavior. This suggests that flow experience serves as a bridge connecting the psychological drive of FOMO with impulsive buying responses, especially in situations where consumers feel strong time pressure or scarcity

Research by [58] has been shown that FOMO increases user digital experience engagement, specifically within interactive environments. During Shopee live commerce, fear of missing out triggers consumers to become more focused, so they would easily enter a heightened flow state, which in leading them to the likelihood of impulsive purchase with little deliberation. Furthermore, [67] also found that flow experience is the main link between FOMO and impulsive buying, because consumers who experience FOMO are more quickly carried away in an interactive shopping environment. Therefore, CRSL can increase the effectiveness of FOMO-based marketing strategies by presenting more engaging live shopping sessions, creating immersive shopping experiences, and utilizing scarcity messages effectively, thereby increasing consumers' impulsive urges to buy.

## 5 Conclusion and Suggestions

This study confirms the existence of different levels of influence on interactivity and FOMO in Shopee live commerce on impulsive buying, and flow experience plays an important role as a mediator in this relationship. In the context of this study, interactivity has a positive and significant effect on impulsive buying, but its effect is weak due to the mediation of flow experience (partial mediation). In contrast, FOMO has a direct effect on impulsive buying and is stronger when combined with flow experience. These results indicate that marketing strategies using interactive engagement and stimulating consumers' anxiety (FOMO) are very effective in encouraging impulsive buying behavior of CRSL fashion products in Shopee live commerce. Therefore, brands such as CRSL are advised to continue optimizing their live streaming strategy by increasing interactivity through real-time comment features, in-depth product discussions, and exclusive time-limited promotions to strengthen consumers' flow experience.

Furthermore, this study shows that the indicator of loss of self-consciousness in flow experience is inadequate and does not contribute to the variable. Thus, the application of measurement [32,33] in the field of marketing, it is recommended to use the variables of Concentration, Time Distortion, and Autotelic Experience. Therefore, further exploration and validation are needed by researchers in the future in order to adapt appropriate indicators in the context of digital marketing, especially impulsive buying behavior in live commerce. During the study, researchers also found an interesting phenomenon in the CRSL brand which actively utilizes the power of the customer community as the basis of its marketing strategy. This finding can be used as a topic for more in-depth research for researchers in the future, by considering new variables that are not included in this study.

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