

FOMO, Social Validation and Impulse Buying in Live Streaming E-Commerce

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Abstract

Due to extreme marketing exposure, live streaming and e-commerce are now being merged as a unique marketing platform. Recently, some studies have identified how live streaming has increased consumer impulse purchase behaviour. They found FOMO (Fear of Missing Out) is the primary factor that drives this behaviour. However, despite live streaming being a social media phenomenon, social validation was overlooked by many authors as an organism. This study conducted a primary survey among 467 Chinese participants within an empirical design setting. A structural equation model reveals that, apart from FOMO, social validation is also a significant factor that drives impulse purchase behaviour. Some stimuli, such as visual appeal, price, and product varieties, were also tested. FOMO and social validation were found to mediate these stimuli. Overall, impulse purchase behaviour in live streaming is a combined phenomenon of FOMO and social validation.

Keywords: *Fear OF Missing Out, Fomo Validation, IMPULSE PURCHASE BEHAVIOUR, LIVE-STREAMING COMMERCE, Sem, E-Commerce, SOCIAL VALIDATION, Visual APPEAL, Internet Marketing, Structural Equation MODE.*

Introduction

In 2023, a Doyuin user made headlines after earning 100 million yuan (\$13.7 million) weekly through '3 Second live streaming' promotional content (Ke, 2023). A live-streaming platform generating staggering sales numbers in a remarkably short time indicates that live-streaming commerce is not just a trend; 'it's the future of digital retail'. The advent of live-streaming e-commerce has drastically changed the online retail environment by fusing entertainment with business and offering a singular, immersive buying experience. The popularity is such that Widodo (2023) claimed since 2020, live streaming has grown by 266%, and 80% of consumers prefer watching live videos over reading a product review blog. The Chinese live-streaming e-commerce business is expected to grow from 420 billion yuan in 2019 to approximately five trillion yuan by 2026, a tremendous growth (Ou, 2024). 69% of urban Chinese customers who observed livestream shopping have completed at least one purchase, whereas 16% spent 7,000 yuan or more, 22% spent between 1,000 and 3,000 yuan, 18% spent between 3,000 and 7,000 yuan, and 14% spent less than 1,000 yuan (Intel, 2021). Moreover, China has the highest percentage of frequent live-shopping attendance, at 87%, compared to 43% in the US, 52% in Europe, and 64% in Latin America (McKinsey, 2023). This is undoubtedly explosive growth reflecting the true potential of live-streaming as a powerful sales channel, drawing millions of viewers and driving unprecedented levels of consumer engagement and spending. The question remains: What makes live streaming successful at converting promotional content into sales leads, unlike other forms of content?

The efficiency of live streaming in generating sales from vulnerable consumers has been extensive (Lo et al., 2022; Oyibo & Vassileva, 2019). Live-streaming e-commerce breaks conventional buying paradigms and uses psychological triggers to influence consumer behaviour (Xu et al. 2020). The fear of missing out (FOMO) plays a central role in driving consumer impulsive purchasing behaviour, especially in the context of live-streaming commerce (Parveiz et al., 2023; Zhang et al., 2020a; Widodo, 2023; Alutaybi et al., 2019; Varchetta et al., 2020; Saavedra & Bautista, 2020). The anxiety of missing out on goods is heightened since products are often available in limited quantities. Missing out on special deals inherently is a psychological

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phenomenon that affects consumers' decision-making processes by triggering anxiety and urgency. There are empirical studies on how FOMO can be a significant psychological stimulus in live-streaming commerce, and most of them suggest it drives impulse purchase behaviour (Fumar et al., 2023; Putri et al., 2024; Rosely et al., 2024; Deliana et al., 2024; Kurnia & Antonio, 2023). While researching what drives this impulse behaviour, Huang and Suo (2021) found visual appeal, whereas Li et al. (2018) and Karim et al. (2021) found price and product variety to be the stimuli. Now, live streaming is primarily social media-oriented, and validation is the most prominent stimulus for social media. Since live streaming is inherently social media-driven, social validation emerges as a crucial psychological organism. Yet its impact on live-streaming commerce still needs to be explored. Simultaneously, consumers want to be validated in the social circle so much that they want to take advantage of every quick opportunity. This study proposes that stimuli like pricing, visual attractiveness, and product variety in live streaming platforms influence psychological organisms such as FOMO and social validation to trigger impulse purchase behaviour among viewers. This study examines whether FOMO or social validation is the more significant factor influencing impulsive purchase behaviour during online live-streaming events.

Literature Review

Live Streaming E-Commerce

The real-time online transmission and communication method known as "collecting, releasing, and watching video information simultaneously" on the Internet is called "live streaming." It has become a global economic and social trend with its sales model (Zhang et al., 2024). Live streaming E-commerce is a type of sales that mixes live streaming with online shopping to offer goods in real-time, briefly bringing customers together (Xin et al., 2023). Steamers sell their product through real-time interaction while the consumers make their purchase decisions in the same environment (Xu et al., 2024). Live streaming e-commerce allows for one-to-many communication and real-time information exchange between merchants and customers (Wang et al., 2022), in contrast to typical e-commerce systems where customers finish their online buying on the website (Hamilton et al., 2014). It creates the impression of a frequent and intense exchange between buyers and sellers. Live broadcasting encourages customers to make larger purchases than expected (Zhang et al., 2020b).

Impulse Purchase Behaviour

Impulse purchase behaviour is a universal but particular mode of human consumption (Liu et al., 2024). This behaviour is characterised by the unplanned and spontaneous purchase of an item or service without prior intention (Zhang et al., 2020b). It is commonly influenced by emotional responses rather than logical reasoning and is sometimes caused by external factors such as appealing promotions, visual attractiveness, time-limited deals, or social pressures (Rook, 1987). A pre-purchase strategy deficiency defines this behaviour and is typically linked to a robust urge to make an immediate purchase.

Fear of Missing Out (FOMO)

FOMO is a psychological phenomenon characterised by the pervasive fear that others are engaging in rewarding or fulfilling experiences. However, the person who is thinking about this is missing out on a rewarding experience (Hartanto et al., 2024). It has become a vernacular recently and is constantly getting attention from the media and academics (Milyavskaya et al., 2018). In consumer behaviour, FOMO is often linked to anxiety and urgency. This has been associated with individuals making impulsive purchase decisions to avoid the regret of missing out on a perceived opportunity (Alutaybi et al., 2019). Much literature states that it can influence purchasing behaviour. FOMO increases impulse actions in digital environments where real-time and social interactions are prevalent (Parveiz et al., 2023; Zhang et al., 2020a). The immediacy and scarcity of offers in live streams amplify FOMO, prompting consumers to act quickly without thorough consideration (Widodo, 2023). Empirical evidence supports that FOMO can trigger impulse buying by exploiting consumers' desire to keep up with trends, maintain social status, and capitalise on limited-time deals (Fumar et al., 2023; Putri et al., 2024). Hence, a hypothesis can be proposed, such as;

H1: FOMO positively influences impulse purchase behaviour

Social Validation

Social validation is a psychological phenomenon where people continuously seek approval or affirmation from others in their actions, decisions, and thoughts (Ghaemmaghani et al., 2021). Earlier social validation was explored through the conformity lens (Hollebeek et al., 2022). Conformity is referred to as an individual's trying to modify his beliefs, behaviours, and cognition to align with the expectations or others' normative beliefs (Martin & Johnson, 2008). However, in the context of social media, social validation has become a driving force. Unlike conformity, which involves compliance with group norms, social validation on platforms like live-streaming commerce offers positive reinforcement through likes, shares, and endorsements. These actions shape consumer behaviour by providing cues of approval from peers and influencers. Consumer behavioural theories are giving importance to social validation as a psychological factor as more and more commerce is shifting online (Wellons et al., 2023). The ultimate desire to fit in and be accepted by a particular group drives people's choices and consumption patterns (Ballara, 2023). Many empirical studies have tested its influence on purchasing behaviour. For instance, consumers are more likely to purchase impulse when they think it is the current trend (Muruganantham & Bhakat, 2013). Tran (2022) has found that social comparison on social media platforms has affected materialism in consumers, which later affects their purchase behaviour. Despite a clear relationship between purchase behaviour and social validation, very few studies have been done where social validation is tested against impulse behaviour in live e-commerce. Hence, the following hypothesis is proposed:

H2: Social validation positively influences impulse purchase behaviour.

Visual Appeal in Live Commerce

Visual appeal in live commerce plays a vital role in driving consumer behaviour, especially with the help of the creation of FOMO and the pursuit of social validation. As Amanah and Harahap (2023) commented, the psychological impact of visually appealing content in digital environments helps influence buyers' purchasing decisions. Aesthetically pleasing layouts, high-quality visuals, and engaging presentation styles enhance consumer engagement. On the other hand, as Chen et al. (2022) argued, over-dependence on visual appeal can result in superficial purchasing decisions influenced by impulse instead of informed choice. Therefore, the dependence on social validation by visual cues often pressures consumers to conform to trends. Hence, visual appeal is crucial and must be balanced with original content to enhance brand loyalty and customer satisfaction. Visually captivating live commerce experiences are more likely to perceive the product because they are exclusive and desirable. Platon (2024) states that visual appeal triggers FOMO when consumers are presented with visually captivating live experience experiences. Additionally, this fear is influenced by the possibility of losing out on the products that drive customers to impulse purchase decisions during live commerce events. Hence, visual appeal in live commerce plays a significant role in improving customers' shopping experience. Visual appeal has been associated with social validation, where the consumer mainly focuses on affirmation and approval from others in their social circles. As viewed by Giertz et al. (2022), visually appealing content drives higher levels of attention, including shares and comments that positively contribute to a sense of community and collective endorsement. Moreover, the real-time interaction combines visually engaging presentations in a live commerce environment. It reinforces social validation as viewers mainly observe the feedback and reactions of others. Therefore, this social proof boosts the consumers' confidence in their purchase decisions because the positive viewpoints of their peers drive them. Hence, it can be proposed that.

H3: Visual appeal positively influences FOMO.

H4: Visual appeal positively influences social validation.

H5: The relationship between price and impulse purchase behaviour is mediated by FOMO.

H6: The relationship between visual appeal and impulse purchase behaviour is mediated by social validation.

Price of Product in Live Commerce

The product price is a crucial factor in live commerce, working in tandem with visual appeal to influence consumer behaviour in live e-commerce settings. As Kim et al. (2020) commented, product price is an influential factor accomplished with visual appeal, primarily through social validation and FOMO. Additionally, visually appealing presentations make products seem more desirable and exclusive. Contrastingly, consumers sometimes overlook a high price when they see a product as visually attractive during a live e-commerce event. It is influenced by the fear of missing out on the unique opportunity to purchase the product. Therefore, this psychological trigger of FOMO linked with the product's visual appeal can result in impulsive buying decisions by consumers.

Social validation is enhanced by the visual appeal of the products in the aspect of live e-commerce, which can reduce the price sensitivity of consumers. As stated by Li and Peng (2021), a product with high aesthetic value enhances positive reactions from the viewer's when the live event is going on. It also creates social proof through which customers can easily purchase impulsively. However, sometimes, consumers observe the enthusiastic responses of others to purchase the product. It causes fear among consumers because they think failing to do so leads to regret or social exclusion. According to Wu et al. (2023), the relationship between visual appeal and price in live e-commerce events has complexities, and higher prices can lead to short-term sales. Therefore, the positive social validation received through visual appeal during live e-commerce events directly reinforces the purchase decisions. Hence, the following hypotheses are proposed:

H7: Price significantly increases FOMO.

H8: Price significantly influences social validation.

H9: The relationship between price and impulse purchase behaviour is mediated by FOMO.

H10: The relationship between price and impulse purchase behaviour is mediated by social validation.

Product Variety in Live Commerce

The product variety is associated with visual appeal during live experiences, significantly influencing consumer behaviour. As Platon (2024) mentioned, buyers are more likely to purchase the offerings because they are time-sensitive and exclusive, while a wide range of products is showcased through visual appeal. Furthermore, the visually captivating manner of different products increases FOMO because customers feel an urgency to buy the product before the opportunity passes. Hence, this sense of fear associated with the visual attraction of the products influences consumers to make impulsive buying decisions. The variety of visually appealing products in live commerce increases social validation because customers look for approval from others before they purchase. As viewed by Horng and Hsu (2020), a wide selection of aesthetically pleasing products results in more customer engagement during live experiences. Besides this, viewers actively join and participate by liking, sharing, and commenting on their choices in those live events. This interaction is crucial to creating a community where buyers act as social validators in their choices by observing others' reactions, endorsements, and feedback. As contradicted by Cham et al. (2023), too much focus on the reactions of others leads to a herd mentality that creates shallow purchase decisions. Henceforth, diverse, visually appealing products significantly encourage viewers to link their purchase decisions with their sentiments. Visual appeal and product variety can trigger social validation and FOMO, and in this aspect, the brands must manage a proper balance to achieve long-term success. As commented by Hua et al. (2023), offering less visually appealing products can overload buyers, leading to decision fatigue and reducing the effectiveness of live commerce events. The positive impacts of social validation and FOMO fade if the product variety seems low quality or superficial. Henceforth, a well-balanced visual appeal with authentic product variety is critical in psychologically triggering customers to live e-commerce events. Hence, the following hypotheses are proposed:

H11: Product variety positively influences FOMO.

H12: Product variety positively influences social validation.

H13: The relationship between product variety and impulse purchase behaviour is mediated by FOMO.

H14: The relationship between product variety and impulse purchase behaviour is mediated by social validation.

Theoretical Underpinnings

With its three stages of external stimuli, consumers' internal state or organism, and response, the SOR model is a crucial theoretical foundation for this study (Zhang et al., 2023). It helps us understand how three stimuli- price, visual appeal, and product variety- influence impulse purchase behaviour. FOMO and social validation are the critical internal states that affect consumers' responses. According to the SOR model, an organism's internal state is influenced by external stimuli, and this internal condition then triggers a particular reaction. In this scenario, the organism (FOMO and social validation) is influenced by the stimuli (price, visual appeal, and product diversity), which in turn causes the response (impulsive purchasing behaviour). Previous studies, such as Karim et al. (2021) and Zhang et al. (2023), have used the SOR framework but did not consider social value as an organism. This study extensively focuses on how impulse purchase behaviour is associated with psychological stimuli such as visual appeal, price, and product diversity and psychological organisms such as FOMO and social validation. Based on that, the following conceptual model has been presented in Figure 1:

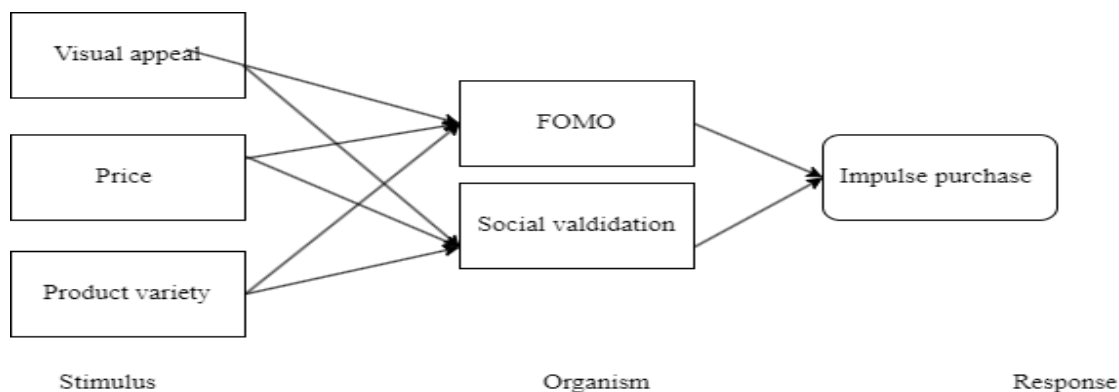


Figure 1 Conceptual Framework

Literature Gaps

Previous studies such as He and Zeng (2024), and Sun and Bao (2023) have extensively researched how FOMO acts as an organism between stimulus and response in live streaming. However, they did not consider social validation a factor, even though live streaming occurs on social media. These studies have ignored live streaming's social environment, especially social validation. Live-streaming platforms are fundamentally social, with peer interactions, influencer endorsements, and community participation, yet social validation's impact on customer behaviour is understudied. Social validation, a powerful force in online environments, significantly shapes customer decisions by offering cues of approval from others. Early studies (Hollebeek et al., 2022) often approached this concept through the lens of social conformity, focusing on how individuals align with group norms under pressure. The absence of social value elements like social approval and peer behaviour obscures the psychological forces that drive impulse purchases in live streaming. This study examines how social validation and FOMO mediate crucial stimuli and impulse purchases in live-streaming commerce to fill this gap and provide practical insights for marketers and e-commerce professionals. Understanding the dual role of FOMO and social validation provides crucial insights into the psychological drivers of consumer behaviour in live streaming. The findings aim to offer practical recommendations for marketers and e-commerce professionals on how to leverage these elements to boost engagement and sales.

Methodology

This study examines how FOMO and social approval affect impulse purchases in live-streaming e-commerce. Its cross-sectional design aims to collect a data sample within a brief period. A primary survey of Chinese live-streaming shoppers was conducted. Stimuli (visual appeal, price, and product diversity), organisms (FOMO and social validation), and response (impulse buying behaviour) were measured in a standardised questionnaire. The scales for each construct were selected from previous studies. The scales for visual appeal (VA) were adopted from Mathwick (2001), impulse purchase behavior (IB) from Beatty and Ferrell (1998), fear of missing out (FOMO) from Osemeahon and Agoyi (2020), price (PRC) from Ho et al. (2022), social validation (SV) is self-developed and inspired by Wellons et al. (2023), and product variety (PV) is self-developed and inspired by Horng and Hsu (2020). Table 1 below suggests the scales and authors from which they were adopted. Every dimension of these items was measured on a Likert scale from 1 (strongly disagree) to 5 (strongly agree). The questionnaire was designed in Chinese for clarity and relevance and published on Chinese social media channels, including WeChat and Weibo.

Table 1. Measurement Scales

Construct	Items	Source
Visual Appeal (VA)	The streamers' presentation of products is visually appealing.	Mathwick (2001)
	The overall visual ambiance of the live-streaming room is exceptional.	
	I appreciate the layout of the live-streaming room.	
Impulse Purchase Behavior (IB)	I intended to buy something when I entered the live-streaming room.	Beatty & Ferrell (1998)
	I purchased it without fully considering it.	
	The moment's mood largely influenced my purchase.	
Fear of Missing Out (FOMO)	During the shopping experience, I often strongly urged to buy items I had not planned.	Osemeahon & Agoyi (2020)
	I worry that other consumers are having more rewarding experiences on this brand's fan page.	
	Seeing others enjoying themselves without me on this brand's fan page makes me anxious.	
Price (PRC)	I become uneasy when unaware of what other consumers do on this brand's fan page.	Ho et al. (2022)
	Live streams offer holiday discounts.	
	Sellers provide discounts on products.	
Social Validation (SV)	Discounted prices are available only during livestream shopping.	Self-developed and inspired by Wellons et al. (2023)
	The price is lower than what's found in the market.	
	I feel compelled to keep up with the latest trends.	
Product Variety (PV)	Observing other consumers make purchases encourages me to buy as well.	Self-developed and inspired by Horng & Hsu (2020)
	I have confidence in products that are popular among other livestream viewers.	
	Positive feedback from other viewers boosts my confidence in making a purchase.	
	A diverse range of products is available during live streaming.	

	The live stream features unique products that are hard to find elsewhere.	
	The offerings in live streams cater to a variety of needs.	
	I enjoy the selection of products showcased in live streams.	

Purposive sampling selected respondents with live-streaming purchasing experience. The completion of the survey resulted in 467 valid samples. Now, Hair et al. (2017) discussed a 10-time rule where the number of the sample should be at least ten times the number of latent constructs. Here, we have six constructs; therefore, the rule of thumb suggests that at least 60 should be an adequate population. However, several studies mentioned a large sample to increase the statistical power of SEM (Matthews et al., 2018). Thus, considering both opinions, a $60 < N < 467$ sample seems appropriate for further analysis. Hence, SEM was utilised to analyse the data using SMART-PLS 4 software. Contextually, a path analysis allowed us to examine FOMO and social validation's mediation impacts on impulse buying. The analysis involves two steps: testing a measurement model for construct reliability and validity and testing the hypotheses with a structural model. The model fit was assessed using NFI, SRMR, and the Chi-square/df ratio.

Result

Descriptive Statistics

Table 2 Descriptive Statistics

Category	N	%
Gender		
Male	315	67.5%
Female	152	32.5%
Education		
High school diploma or equivalent	152	32.5%
Bachelor's degree	152	32.5%
Associate degree	47	10.1%
Master's degree	58	12.4%
Doctorate or professional degree	58	12.4%
Age		
18-24	174	37.3%
25-35	94	20.1%

36-50	47	10.1%
>50	105	22.5%
Other	47	10.1%
Live streaming purchase		
Yes, frequently	304	65.1%
Yes, occasionally	58	12.4%
Rarely	105	22.5%

This survey has been associated with a primarily male group (67.5%) with different educational backgrounds, mostly high school (32.5%) and bachelor's degrees (32.5%). Table 2 shows that 37.3% were between 18 and 24, and 20.1% were 25 to 35. A substantial majority (65.1%) frequently purchase through live streaming, highlighting that target audience selection was appropriate.

Structural Equation Model

Construct Reliability and Validity

Table 3. Reliability

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
FOMO	0.881	0.882	0.926	0.807
IB	0.814	0.828	0.877	0.641
PRC	0.877	0.881	0.916	0.730
PV	0.929	0.931	0.950	0.825
SV	0.903	0.903	0.932	0.775
VA	0.862	0.864	0.907	0.709

The following measures show strong reliability and validity for the constructs: Cronbach's alpha values of 0.814–0.929 are above 0.7, indicating strong internal consistency. Rho_c values of 0.877 to 0.950 exceed the 0.7 benchmark (Kennedy, 2022), confirming the constructions' reliability even more. Convergent validity is shown by AVE values over 0.5, between 0.641 and 0.825. These findings confirm the study's constructs' robustness, guaranteeing they appropriately reflect the measured dimensions.

HTMT

Table 4. HTMT Tests

	FOMO	IB	PRC	PV	SV	VA
FOMO						
IB	0.770					
PRC	0.460	0.728				
PV	0.517	0.798	0.489			
SV	0.593	0.744	0.530	0.541		
VA	0.601	0.768	0.429	0.490	0.513	

The HTMT values between constructs are below 0.85, indicating good discriminant validity (Yusoff et al., 2020) between the constructs and confirming that the constructs are distinct.

*Model Fit***Table 5.** Model Fit Statistics

	Saturated model	Estimated model
SRMR	0.062	0.100
d_ULS	1.075	2.776
d_G	0.481	0.619
Chi-square	1189.083	1397.865
NFI	0.850	0.824

The saturated model fits the data well and is validated by several fit indices. According to Ximénez et al. (2022), the SRMR value should be below 0.08. For the SRMR, we got 0.062, which is <0.08; thus, the model fits well. The saturated model's improved fit is further supported by its lower d_ULS and d_G values. Although the NFI score is not precisely above 0.9, as suggested by Ding et al. (1995), still based on SRMR statistics, this model is fit.

*Path Coefficients***Table 6** Path Analysis

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
FOMO -> IB	0.439	0.437	0.046	9.587	0.000
PRC -> FOMO	0.168	0.166	0.066	2.569	0.010
PRC -> SV	0.264	0.265	0.056	4.740	0.000
PV -> FOMO	0.238	0.238	0.049	4.867	0.000
PV -> SV	0.278	0.274	0.056	4.974	0.000
SV -> IB	0.417	0.418	0.046	9.108	0.000
VA -> FOMO	0.356	0.355	0.061	5.801	0.000
VA -> SV	0.232	0.233	0.053	4.392	0.000

Table 6 above suggests the path analysis result. FOMO (coefficient = 0.439, $p < 0.001$) strongly predicts impulsive buying, suggesting that fear of missing out significantly impacts impulsive buying decisions. Price has a good impact on social validation (coefficient = 0.264, $p < 0.001$) and a moderate impact on FOMO (coefficient = 0.168, $p = 0.010$). Product variety increases social validation (coefficient = 0.278, $p < 0.001$) and FOMO (coefficient = 0.238, $p < 0.001$). Similarly, FOMO and social validation are enhanced by visual appeal (coefficient = 0.356, $p < 0.001$) and, respectively, (coefficient = 0.232, $p < 0.001$). The social validation also seems to significantly influence impulsive buying (coefficient = 0.417, $p < 0.001$). These results highlight all the constructs, whether organisms like FOMO and social validation or stimuli such as visual appeal, price, and product variety, drive impulse buys.

Indirect Effects

Table 6 Indirect Effects

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
VA -> SV -> IB	0.097	0.097	0.025	3.867	0.000
PRC -> FOMO -> IB	0.074	0.073	0.031	2.358	0.018
PV -> FOMO -> IB	0.104	0.104	0.024	4.357	0.000
VA -> FOMO -> IB	0.156	0.156	0.034	4.614	0.000
PRC -> SV -> IB	0.110	0.112	0.030	3.711	0.000
PV -> SV -> IB	0.116	0.114	0.027	4.325	0.000

The above table suggests the indirect effects of FOMO and social validation on the stimulus. The result suggests that organisms' FOMO and social validation mediate between the stimulus and response. FOMO mediates visual appeal, price, and product variety against impulse purchase within effects of 0.156 ($p < 0.001$), 0.074 ($p = 0.018$) and 0.104 ($p < 0.001$) simultaneously. Similarly, social validation mediates the impact of visual appeal, price, and product variety on impulse purchases. The effect sizes are 0.097 ($p < 0.001$), 0.110, and 0.116 for visual appeal, price, and product variety. The final structural model with cross-loadings, R square, and effect sizes is presented in Figure 2 below. It can be seen that stimulus explained 36.6% (R-square=0.366) of the changes in FOMO, whereas 36.8% variance in social validation (R-square=0.368). This variance indicates that both organisms are closely related and almost explained in a similar range. However, when the overall model was tested, it was found that stimuli and organisms explained 56% (R-square=0.560) of the variance in impulse behaviour.

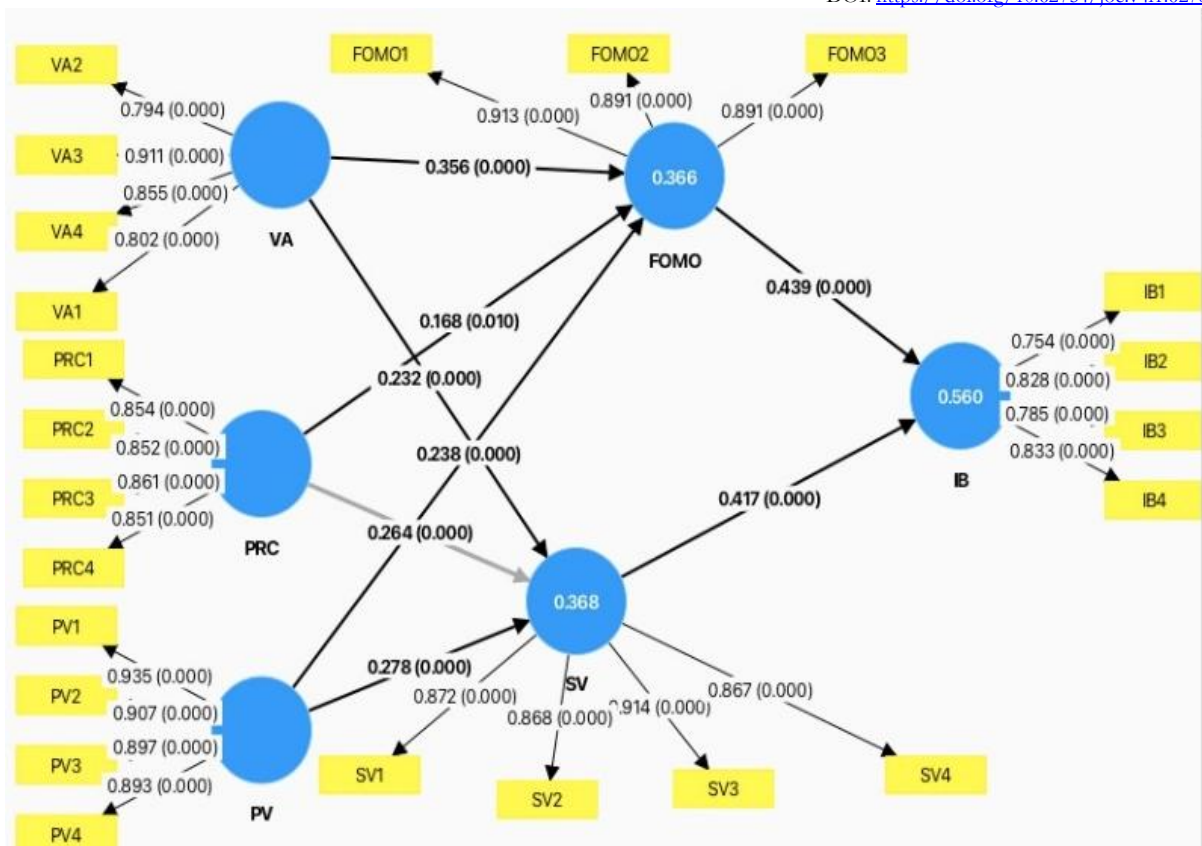


Figure 2 Structural Model

Table 7. Final Summary

Hypotheses	Description	Status
H1	FOMO positively influences impulse purchase behaviour.	Accepted
H2	Social validation positively influences impulse purchase behaviour.	Accepted
H3	Visual appeal positively influences FOMO.	Accepted
H4	Visual appeal positively influences social validation.	Accepted
H5	The relationship between visual appeal and impulse purchase behaviour gets mediated by FOMO.	Accepted
H6	The relationship between visual appeal and impulse purchase behaviour is mediated by social validation.	Accepted
H7	Price positively influences FOMO.	Accepted
H8	Price positively influences social validation.	Accepted
H9	The relationship between price and impulse purchase behaviour is mediated by FOMO.	Accepted
H10	The relationship between price and impulse purchase behaviour is mediated by social validation.	Accepted
H11	Product variety positively influences FOMO.	Accepted
H12	Product variety positively influences social validation.	Accepted
H13	The relationship between product variety and impulse purchase behaviour is mediated by FOMO.	Accepted
H14	The relationship between product variety and impulse purchase behaviour is mediated by social validation.	Accepted

The final summary, Table 7, presents all the hypotheses with results. Fourteen hypotheses were proposed before that data analysis. Each has been tested and accepted with a 95% confidence interval.

Discussion

These findings address the earlier gap of needing a social validation perspective. FOMO and social validation are significant factors that increase impulse purchase behaviour among consumers. FOMO was found to be a critical factor of impulse purchase behaviour, coinciding with previous findings of Parveiz et al. (2023), Zhang et al. (2020), Widodo (2023), and Putri et al. (2024). The FOMO also mediated the stimulus visual appeal, price, and product variety against impulse purchase behaviour. The second organism was found to play a similar role in interacting with the stimuli and the response. The result showed that social validation, directly and indirectly, influences impulse buying behaviour. Similar to what Ballara et al. (2023) and Wellon et al. (2023) found, our study has also confirmed that impulse purchases in live streaming platforms are significantly associated with viewers wanting to follow the trends or make themselves fit for society. It also mediates between stimuli (such as visual appeal, price, and product variety) and impulse buying behaviour. This mediation suggests that when products in live-streaming settings are presented attractively, consumers are urged to buy as they think it will increase their social validity. A similar finding was denoted by Liu et al. (2013), stating excitement and emotions are stimulation results of visual appeal. Therefore, visual appeal is enhanced in a live-streaming product, which increases the urge to purchase and meet their validation needs. Live streaming e-commerce strengthens consumer desire through validation appeal, thus making them more likely to purchase.

On the other hand, price was always a significant stimulus that drove consumer impulse purchase behaviour. Our study showed that price and FOMO significantly correlate, increasing impulse purchase behaviour. However, this has been proven by many studies before. The unique case is how social validation mediated price and consumers' impulsive actions. The social approval of making a "good deal" through purchasing at a discounted rate may amplify the urgency and desirability in a live streaming environment. The variety of products attracts consumers' validation urge even more in a live setting environment. The varied options cater to the needs of consumers wanting to explore more for the best item before buying. This exploratory behaviour matches consumers' natural desire to compare things, discover the best value, or find the correct item for them. The live-streaming product variety is more dynamic since it happens in real-time, frequently with the streamer's recommendations or live demonstrations, which can add excitement. Now, out of all products, when some specific ones get more attention from the other viewers, it validates the consumer's interest in that product, making them feel confident and supported in their potential purchase. Overall, social validation is a factor alongside FOMO that increases impulse purchase behaviour among viewers.

Conclusion

This study was done to understand what drives Chinese people to buy impulsively from online commerce. FOMO has been tested to be a significant factor contributing to consumer vulnerability. However, the focus was on whether there was any other factor except FOMO. The findings confirmed that FOMO significantly contributes to consumer vulnerability, heightening the urgency and desire to make purchases to avoid missing out on perceived rewarding experiences. However, the study also revealed that social validation plays an equally critical role as a mediator between stimuli (such as visual appeal, price, and product variety) and impulse buying behaviour. Social validation emerged as a critical factor, demonstrating that consumers are not only driven by individual fears but also by the desire for social approval and acceptance. This dual mediation of FOMO and social validation highlights the complicated psychological and social processes that convince people to purchase immediately in a live-streaming setting. The study emphasises that to enhance impulse purchases effectively, tactics must address both the social environment in which customers operate and their psychological triggers. Generally, managers must ensure that product price, appeal, and variety increase FOMO and have enough elements to increase social validation appeal. Through comprehension and application of these findings, marketers may craft more focused and captivating live-streaming events that address the complex incentives of viewers. Apart from these managerial implications, this study also contributes to the theoretical domains of live e-commerce. Previous studies have mainly focused on FOMO. However, social validation emerges as another organism that needs to be considered in future studies. Similarly, the SOR theory extended as social validation was included alongside FOMO, while the research domain was live streaming and e-commerce. Overall, this study

notifies that influencers are selling fears in their live streams and encouraging social validation behaviour. This explains why live streaming platforms are becoming so successful: combining fear and validation as marketing.

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