

Exploring the Dynamics of Parasocial Interactions with Hosts and Co-Viewers in Live-Streaming Shopping

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Abstract

In the last decade, a new era of social commerce has emerged, known as live streaming platforms, where consumers often build illusionary relationships known as Parasocial Interaction (PSI). While many scholars have explored various aspects of live-streaming shopping, they neglected both PSI with hosts and co-viewers. This study intends to bridge this gap by integrating these elements and investigating how they affect the Urge to Buy Impulsively (UBI) through Utilitarian Value (UV). The study population consists of Shopee live-streaming users, with a sample size of 400 respondents. The findings reveal that PSI with the host has no effect on UV or UBI, nor does UV mediate this connection. In contrast, PSI with co-viewers influences both UV and the UBI. Moreover, UV affects UBI and mediates the relationship between PSI with Co-Viewers and UBI. This study proves that illusionary interactions with co-viewers in live streaming can drive UBI by increasing the utilitarian value of the product through co-viewer validation. These results suggest that marketers should focus on fostering communities to enhance social proof in live-streaming.

Memahami Dinamika Interaksi Parasosial dengan *Host* dan *Co-Viewers* dalam *Live-Streaming Shopping*

Abstrak

Aktivitas *live-streaming* melibatkan seorang *host* atau *streamer* yang menyiarkan konten video langsung, dimana konsumen seringkali membangun hubungan maya dengan *host* dan *co-viewers*, yang dikenal dengan *Parasocial Interaction (PSI)*. Meskipun banyak akademisi telah mengeksplorasi berbagai aspek dari belanja *live streaming*, mereka sering mengabaikan dua aspek kunci tersebut, yakni *PSI* dengan *host* dan *co-viewers*. Penelitian ini bertujuan untuk mengisi kekosongan ini dengan mengintegrasikan kedua aspek tersebut dan mengeksplorasi mekanisme melalui mana aspek-aspek ini membentuk *the Urge to Buy Impulsively (UBI)* melalui *Utilitarian Value (UV)*. Penelitian ini melibatkan pengguna *live streaming* Shopee sebagai populasi, dengan 400 responden sebagai sampel. Hasil menunjukkan bahwa *PSI* dengan *host* tidak mempengaruhi *UV* maupun *UBI*, dan *UV* tidak dapat memediasi hubungan ini. Sebaliknya, *PSI* dengan *Co-Viewers* berpengaruh terhadap *UV* dan *the UBI*. Selain itu, *UV* dapat memediasi hubungan antara *PSI* dengan *Co-Viewers* dan *UBI*. Dengan demikian, pemasar direkomendasikan untuk fokus membangun komunitas demi meningkatkan bukti sosial.

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INTRODUCTION

Over the past few decades, Social Networking Sites (SNS) have received significant attention from Internet users (Hu et al., 2017). The rise of the Facebook and Twitter platforms has sparked more interest in social commerce from consumers and businesses. Social commerce is the intersection of social media and e-commerce, driven by online social capital to perform various commercial activities (Liang & Turban, 2011). Lately, computer-mediated communication has progressed from text and images to include audio and video. This shift has given rise to a new era of social commerce, particularly in the form of live-streaming platforms (Fu & Hsu, 2023).

Live-streaming commerce has become a global trend, revolutionizing traditional social commerce by improving real-time interaction and offering a more immersive experience (Sun et al., 2019). Unlike traditional online shopping, where customers rely on pictures and text to understand products, live-streaming shopping allows streamers to showcase their products in real-time videos with more comprehensive detail (Wongkitrungrueng & Assarut, 2020). While traditional social commerce requires customers to navigate away from the product page to inquire, live-streaming shopping allows for real-time communication through a bullet screen, letting customers get immediate answers from streamers (Wongkitrungrueng & Assarut, 2020). This reduces perceived risk in online shopping, a common challenge for online consumers (Sun et al., 2019).

Live video streaming activities typically involve a host or streamer who broadcasts real-time video and audio content (Hu et al., 2017). This type of live streaming offers viewers an experience in real-time and also facilitates communication and social interaction among broad-

casters and viewers (Hilvert-Bruce et al., 2018). Such digital interactions can support audiences in developing their self-concept and deepen their connection with different referents (Hall-Phillips et al., 2016). Viewers can use text chat to interact with each other during these streams while the streamer engages in conversation with the audience. This mediated, one-sided relationship is known as a Parasocial Interaction (hereinafter referred to as PSI) (Horton & Wohl, 1956).

PSI is an illusionary experience where consumers engage with a media figure as if interacting directly and reciprocally (Labrecque, 2014). The intimacy generally distinguishes this interaction between the individuals involved (Hartmann & Goldhoorn, 2011). As a result, the formed connection can create feelings such as friendship and increase the involvement and attachment of individuals and the persona in the media. Recent studies have expanded the concept of PSI into a virtual context (Liu et al., 2019; Zheng et al., 2020). This is likely to enhance the relevance of PSI in live-streaming contexts. Viewers in virtual environments generally desire intimacy like that in real relationships and consider the live streamer a true friend (Xiang et al., 2016). Investigating parasocial interactions with hosts is essential in live-streaming research, as hosts are central to the live-streaming experience. Through these interactions, viewers can adopt the behaviors, attitudes, and preferences the streamer displays, leading to a strong identification with the host (Hall-Phillips et al., 2016). Furthermore, understanding parasocial interactions with hosts provides insight into how streamers build and maintain important viewer relationships, which are critical to their success (Labrecque, 2014).

Previous studies have indicated that viewers can form PSI with co-viewers (Xiang et al., 2016). This phenomenon is

also known as “co-viewing,” which refers to the “perceived shared experience with a large, yet unseen community (Fu & Hsu, 2023). Co-viewers in the context of live-streaming refers to individuals who simultaneously watch the live-streaming together with other viewers (Xiang et al., 2016). Although they may not be physically in the same place, they engage with each other in shared virtual experiences, which can be seen in their interactions through comments, reactions, or other features on the live streaming platform.

Similar to interactions between viewers and hosts, when watching a live stream, viewers “meet” with other users. In this condition, they benefit from the presence and support of fellow co-viewers, as the collective interest in the same product often generates unique perspectives (Zheng et al., 2020). These interactions allow viewers to explore or validate their opinions through discussions and feedback from others. Investigating PSI with co-viewers is essential for live-streaming research because co-viewers significantly shape the overall experience and engagement of the audience. Social exchanges among viewers foster a sense of community and enhance social presence (Labrecque, 2014), enhancing the enjoyment and satisfaction of the streaming experience. Understanding PSI with co-viewers is crucial for identifying how social interactions influence viewer behavior and attitudes (Xiang et al., 2016).

Recent research on live-streaming shopping has notably flourished, addressing various aspects of this emerging phenomenon (Hsu, 2020; Sokolova & Kefi, 2020; Yi Yong Lee & Gan, 2020). Scholars have investigated how live streaming impacts consumer behavior in social commerce, focusing on IT affordances such as accessibility and interactivity and social factors influencing purchase intentions (Sun et al., 2019). Additional-

ly, research has analyzed the impact of live streaming components, including the user interface and gift-giving feature (Ho & Yang, 2015; Yu et al., 2018), and content quality affect consumer trust and engagement (Wongkitrungrueng & Assarut, 2020). However, these studies frequently neglect the unique characteristics of live-streaming shopping, particularly both the PSI with host and co-viewers.

Scholars have also investigated how streamers’ communication style affects purchase intention (Liao et al., 2023). Furthermore, research has also examined how various types of technology appeal influence parasocial interaction, affecting users’ intentions in social commerce (Zheng et al., 2020). Although these studies offer a comprehensive look at factors affecting consumer engagement in live-streaming contexts, they infrequently consider the Urge to Buy Impulsively (UBI), despite indications that live-streaming environments can trigger impulsive buying (Wang et al., 2020).

Live streaming shopping is recognized for its tendency towards an impulsive nature due to several critical factors that drive spontaneous purchasing behavior. The interactive features of live streaming predominantly produce a sense of urgency and immediacy, often intensified by limited-time offers and real-time promotions from engaging hosts. This urgency prompts viewers to make hasty purchasing decisions without thorough consideration (Wang et al., 2020; Liao et al., 2023). Additionally, the lively and captivating presentation of products, along with real-time feedback and social validation from fellow viewers, enhances the appeal and desirability of the products, further fostering impulsive buying behavior (Sokolova & Kefi, 2020).

Despite the significant role of PSI in live-streaming environments, research on the impact of PSI on UBI remains limited.

Nevertheless, previous studies indicate a potential influence of PSI—with both the host and co-viewers—on the urge to make impulsive purchases (Luo, 2005). In the context of live streaming, two major sources of social influence are particularly prominent: the host (Hu et al., 2017) and the co-viewers (Luo, 2005). Studies suggest that consumers might perceive the product interests of other buyers and be aware of the number of individuals who have made purchases, further influencing their buying behavior (Luo, 2005).

Therefore, to bridge the gap identified in current research, this study intends to incorporate two unique aspects of live-streaming shopping: Parasocial Interaction with the host (PSI) and Parasocial Interaction with Co-Viewers (hereinafter referred to as PSI with Co-Viewers) and to examine their effects on UBI. Furthermore, this research explores the mechanisms through which PSI with the host and co-viewers influence UBI.

Exploring these PSI mechanisms with the host and co-viewers is essential because it reveals how different social cues become relevant to influencing consumer behavior in live streaming (Hilvert-Bruce et al., 2018; Mai et al., 2023). These forms of PSI bridge the research gap by addressing how both individual (host-driven) and collective (co-viewer-driven) interactions uniquely contribute to shaping the UBI in live-stream shopping. Examining both aspects allows for a more comprehensive understanding of how different social cues can shape consumer behavior. It also fills a gap in the literature that has often overlooked the distinct yet complementary roles of hosts and co-viewers in influencing consumer behavior.

Previous research has highlighted customer value as a key precursor to impulsive buying behavior, with many studies supporting this finding (Kim & Gupta, 2009; Lee & Wu, 2017), showing that

customer value is an important predictor. Thus, we base our theory on Customer Value Theory, concentrating on Utilitarian Value, to explore how PSI affects the tendency to make impulsive purchases during live-streaming shopping.

Utilitarian Value (UV) is the consumer's comprehensive appraisal of a product or service, reflecting its functional benefits and shortcomings. (Lee & Wu, 2017). When analyzing live-streaming shopping, it's important to view utilitarian value as a mediator linking PSI with the inclination toward impulsive buying. Studies reveal that PSI with a host can lead to more impulsive buying behavior, as it fosters an emotional connection and trustworthiness with the host. However, this effect is driven significantly by hedonic motivations (Lee & Wu, 2017), like enjoyment and excitement. In contrast, utilitarian value addresses the practical and functional benefits the consumer perceives (Lee & Wu, 2017). Impulsive purchasing is typically connected to hedonic desires, but using utilitarian value as a mediator underscores the importance of rational considerations in decision-making.

The novelty of this research is attributed to its specific focus on two unique aspects of live-streaming shopping: Parasocial Interaction with the host and Parasocial Interaction with co-viewers, and its influence on UBI. This area remains underexplored in the literature. Additionally, this study aims to leverage Customer Value Theory to elucidate the mechanisms through which PSI affects the urge to buy impulsively, with Utilitarian Value serving as a mediating variable. The use of Utilitarian Value is particularly distinctive, as most existing research on impulsive buying within live-streaming contexts primarily emphasizes hedonic motivations (Ozen & Engizek, 2014). By incorporating Utilitarian Value as a mediating variable, this study explores the rational aspects

of consumer decision-making during live streaming. Specifically, it investigates how parasocial interactions with hosts and co-viewers can lead consumers to engage in rational thought processes, subsequently influencing their impulsive buying propensity.

Live-streaming shopping has gained worldwide popularity, including in Indonesia. In the Indonesian market, live streaming platforms are broadly categorized based on their primary content and target audience (Vero Team, 2023). E-commerce platforms like Shopee Live and Tokopedia Play incorporate live streaming for live selling, product demonstrations, and promotions within their e-commerce ecosystems.

This study examines Shopee Live Streaming as the main area of investigation. The choice of this platform is based on data from e-commerce visits throughout 2023, which indicates that Shopee consistently ranks at the top with significantly higher visitor numbers compared to other platforms, recording 2.35 billion visitors. This surpasses its closest competitors, such as Tokopedia (1.25 billion) and Lazada (762 million) (KataData Insight Center, 2023).

Furthermore, Shopee Live has emerged as the most favored live-streaming feature among Indonesian consumers. Statistics show that Shopee Live is more popular than TikTok Shop in Indonesia, with 69% of respondents using it frequently compared to 25% for TikTok Shop. Additionally, Shopee Live has a higher recall rate, with 60% of respondents remembering it versus 30% for TikTok Shop (Vero Team, 2023). The high levels of popularity and interaction on Shopee Live indicate that it is a main platform for users to connect directly with sellers. The integration of live streaming and e-commerce on Shopee Live creates a distinctive environment for studying PSI and its impact on impulsive buying behavior. These factors make Shopee Live

a relevant research subject for exploring how live-streaming features can influence impulsive purchases, particularly within the rapidly growing Indonesian market.

The main purpose of this research is to investigate how PSI with host and PSI with co-viewers directly affect UBI. Furthermore, this research aims to understand the potential mediating effect of Utilitarian Value in the relationship between PSI with Host and Co-viewers and UBI.

This study aims to contribute to the body of knowledge on live-streaming shopping and may serve as a reference for future research on parasocial interactions and impulsive buying behavior in e-commerce. Furthermore, by introducing utilitarian value as a mediating variable, this research introduces a unique lens to studying impulsive buying behavior, which has traditionally been associated with hedonic motivations. From a practical standpoint, this research offers insights for marketers utilizing live-streaming platforms. Understanding the mechanisms through which PSI with hosts and co-viewers influence impulsive buying can help marketers design more effective live-streaming strategies that foster stronger connections with their audience. By highlighting the role of utilitarian value, businesses can tailor their live-streaming content to emphasize the practical benefits, thereby enhancing the overall shopping experience.

Hypotheses Development

The Effect of PSI with Host to UBI

PSI refers to the asymmetrical relationships where audiences engage with media personalities without reciprocal interaction (Horton & Wohl, 1956), where viewers feel a sense of intimacy with the host (Labrecque, 2014). This concept has been extensively studied, revealing that PSI enhances emotional engagement and trust (Labrecque, 2014), which are crucial factors influencing impulsive buying beha-

avior. When viewers feel emotionally connected to and trust the host, they are more likely to make spontaneous purchase decisions because the host's recommendations are perceived as genuine and trustworthy, thereby reducing perceived risk (Sun et al., 2019).

The entertaining and dynamic nature of live-streaming creates an environment that encourages viewers to make impulsive purchases for immediate gratification (Hu et al., 2017). PSI also provides for social influence, in line with which the host could influence viewers through their persuasive communication (Liao et al., 2023). This persuasive effect is amplified in live-streaming settings where the host can speak directly with the audience, reply to their comments, and create a sense of urgency through real-time promotions and limited-time offers (Wang et al., 2020). Building on this, hypothesized that:

H1: PSI with the host positively and significantly influences UBI.

The Effect of PSI with Host on UV

The concept of utilitarian value involves the consumer's total appraisal of a product or service, considering its functional benefits and cost (Lee & Wu, 2017). Such a value is characterized by task-oriented and rational behavior where consumers seek efficient methods of accomplishing shopping tasks (To et al., 2007). Utilitarian value is influenced by the effectiveness of completing shopping tasks, driven by consumer demand (Hirschman & Holbrook, 1982). In live-streaming shopping, PSI with the host has been found to help viewers build up trust in the host, which is subsequently transferred to the products being showcased (Labrecque, 2014).

PSI gives them a sense of warmth and human connection because it gives them recognition and identification with the host with similar views (Labrecque, 2014). This trust is essential for consumers

seeking effective and dependable ways of accomplishing their shopping tasks. When viewers feel comfortable and trust the live-streaming host, the information about the products reduces perceived risks and enhances the products' functional benefits (Labrecque, 2014). Furthermore, in live streaming, PSI with the host offers personalized interaction, making the information more relevant and valuable to consumers. This relevance and personalized information assist consumers in making rational decisions, aligning with their task-oriented behavior (Yuksel & Labrecque, 2016). Thus, we hypothesize that:

H2: PSI with the host positively and significantly influences UV.

The Effect of PSI with Co-Viewers to UBI

PSI with Co-Viewers refers to relationships and social bonding perceived to be established by viewers during live-streaming sessions (Fu & Hsu, 2023). PSI with co-viewers enhances social presence, making viewers feel part of a community. This social presence stimulates feelings of belongingness and social validation, where viewers perceive others' purchasing actions as endorsements, prompting them to make impulsive purchases (Liu et al., 2019). Interaction with co-viewers in real-time, on the other hand, provides immediate feedback and social cues, intensifying one's desire to conform to group behaviour. At the same time, the communal environment of live-streaming allows for peer influence, where viewers are influenced by the actions and opinions of other co-viewers (Luo, 2005). The interactive chat features and visible purchasing behaviors create a sense of urgency and competition, encouraging viewers to make quick (Feng et al., 2024), impulsive decisions to keep up with or mimic others. Furthermore, the dynamic nature of live-streaming offers an emotional contagion since the thrill and

excitement of co-viewers get automatically transferred or diffused very quickly, raising overall emotional involvement for the whole audience. This heightened emotional state can degrade self-control and increase the likelihood of impulse buying (Zheng et al., 2020). Thus, we hypothesized that:

H3: PSI with co-viewers positively and significantly influences UBI.

The Effect of PSI with Co-Viewers on UV

Studies have suggested that viewers may build parasocial interactions with other viewers present during the same broadcast. (Xiang et al., 2016; Fu & Hsu, 2023). This type of parasocial interaction is termed co-viewing, referring to “a perceived involvement with a broad but invisible community” (Fu & Hsu, 2023). Even when the interaction is “imagined,” social interaction significantly affects how consumers handle information. In live-streaming contexts, viewers gain advantages and support from others, as having many co-viewers can prompt unique questions about the product that they might not have thought of alone (Xiang et al., 2016). In this regard, they can elaborate and confirm their opinions through discussions or comments from others. Moreover, interacting with Co-Viewers through PSI can minimize ambiguity and uncertainty, thereby increasing utilitarian value. Luo (2005) contends that people tend to regard the views and actions of co-viewers as credible because of the social support and the “safety in number” phenomenon, which makes them more likely to adopt others’ visible opinions, behaviors, and purchases as social indicators. On this basis, we hypothesize:

H4: PSI with the co-viewers positively and significantly influences UV.

The Effect of UV on UBI

Given that utilitarian value involves consumers’ cognitive evaluation of how well a product or service serves its purpose and solves problems (To et al., 2007). Impulse purchases are triggered when consumers perceive a product, imagine its use, and decide they require it. These mental processes enhance a rational view of the product, which can prompt impulsive buying behavior. Previous studies found that the utilitarian value positively influences the impulse purchase. High-level utilitarian shopping values are found to cause consumers to show a tendency towards impulsive buying (Chen et al., 2016). Thus, we hypothesize that:

H5: UV significantly and positively influences UBI.

The Mediating Effect of UV in the Relationship of PSI with Host to UBI

PSI with the host is a situation where viewers form a one-sided relationship and feel emotionally attached to the host of live streaming (Fu & Hsu, 2023). When viewers experience PSI with the host, they are more likely to perceive the product as valuable and functional, which aligns with their practical needs and desires. This perception of utilitarian value reinforces impulsive buying behavior by incorporating practical considerations. The increased trust established through PSI makes the viewers more receptive to the practical benefits presented by the host, which can further amplify their impulse to purchase. Mai et al. (2023) found that PSI with the host builds consumers’ trust. Kim & Eastin (2011) identified the role of utilitarian value in predicting impulse buying behavior. Building on this, we hypothesized that:

H6: UV mediates the influence between PSI with Host on UBI.

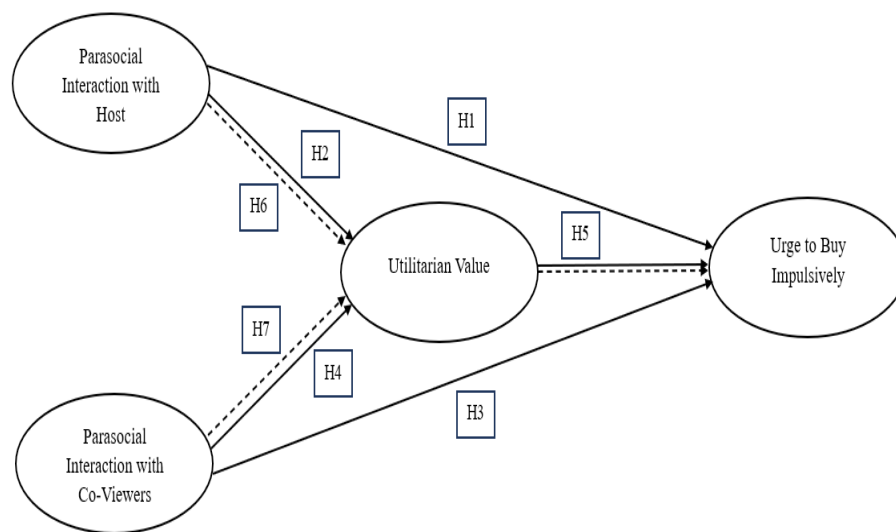


Figure 1. Research Framework

The Mediating Effect of UV in the Relationship of PSI with Co-Viewers to UBI

PSI with co-viewers is the social bonds and perceived relationships formed with other participants during the live-streaming session. Herein, PSI with co-viewers facilitates a sense of belonging and social validation (Luo, 2005), where viewers are motivated by the perceived endorsement and behavior of their peers. When they comment on each other, social cues and feedback become additional drivers for the perceived utilitarian value of the product (Fu & Hsu, 2023). This increased perception of practicality and functional benefits, combined with the social influence from co-viewers, amplifies the urge to make impulsive purchases. Therefore, PSI with co-viewers may increase the practical value of products, resulting in an increased level of impulsive buying. Chen & Lin (2019) proved that PSI in co-viewers' companies enhances a social sense of presence and validation, influencing purchase intentions. Thus, we hypothesized that:

H7: Utilitarian value mediates the influence between parasocial interaction with co-viewers on UBI.

Based on the developed hypotheses, a conceptual framework has been constructed, as shown in Figure 1. This framework explores the relationships between PSI with the Host, PSI with Co-Viewers, UV, and UBI

METHOD

This study focuses on Shopee Live-Streaming users, although the precise number is not specified. Purposive sampling is used to select participants based on the criterion that they have made spontaneous purchases during live streaming on Shopee. This criterion is consistent with impulsive buying, defined as making an immediate and spontaneous purchase "without prior consideration and acquiring items without a previously identified need" (Sohn & Ko, 2021). This study applies the Lemeshow (1997) formula with a significance level of 5%, resulting in a required sample size of 385. The sample size has been rounded up to 400 to accommodate potential limitations and errors.

Researchers employed the method of approaching respondents using the survey community @collegemenfess on Twitter.

An online questionnaire was administered using Google Forms. In the screening question, we inquired about the purposive sampling criterion related to the spontaneous and immediate purchase aspect of impulsive buying, specifically:

Have you ever felt the urge to purchase a live-streaming event on Shopee that you had not planned for beforehand?

Have you ever felt the urge to buy an item on the spot during a live stream on Shopee without thinking about it beforehand or recognizing a need for it?

For respondents to proceed with the questionnaire, both criteria must be answered "Yes." If the respondent does not satisfy these conditions, the questionnaire will be promptly terminated, and they will not be required to complete any more questions. The researcher will distribute more questionnaires until the sample size requirement is achieved.

The indicators used in this study are as follows:

Parasocial Interaction with Host (Hu et al., 2017)

As I watched, the streamer recognized my reactions to them.

As I watched, the streamer responded to my comments or actions.

Parasocial Interaction with Co-viewers (Xiang et al., 2016)

Through this live video stream, I get to observe the behavior of other members.

I noticed that I was evaluating my thoughts on products and brands against the opinions of other members.

I trust the information shared by other participants during this live video stream

Utilitarian Values (Park et al., 2012)

I tune in to this live stream to identify items that are better in price or quality.

I view this live video stream to collect details about products.

I tune into the live video to extract the highest possible value.

I engaged in this live video stream to make

my online shopping more efficient.

Urge to Buy Impulsively (Xiang et al., 2016)

While watching live streaming on Shopee Live, I felt several spontaneous urges to purchase.

During Shopee Live streams, I noticed numerous products I wished to purchase, even though they weren't on my list.

I felt a significant urge to buy items on impulse while viewing live streams on Shopee Live.

RESULT AND DISCUSSION

This study will describe the respondents' gender, occupation, age, and duration of watching Shopee Live. Table 1 provides valuable information on the profile of the study respondents. Out of 400 respondents, most were female, representing 75.5% of the sample. This shows that females are more interested in using Shopee Live. Hence, the platform may effectively reach and resonate with women. Regarding occupation, the sample comprised mostly of students, constituting 51% of responses. This high percentage reflects that younger, potentially more tech-savvy individuals, particularly those still in educational settings, are the primary audience. Other occupations, such as civil-service employees, freelancers, entrepreneurs, and the unemployed, are also represented to a much lesser extent. This diverse occupational representation, although skewed towards students, highlights the broad appeal of Shopee Live across different employment statuses. Age-wise, most respondents were young, with 64% being between 18 and 25 years old. These percentages indicated that the higher proportion of these students coupled with this young age profile would not be uncommonly found using Shopee Live, a relatively young and interactive online shopping platform fit for audiences of a younger age. Additional-

Table 1. Respondent Characteristic

Characteristic		Total	Percentage
Gender	Male	98	24.5%
	Female	302	75.5%
	Total	400	100%
Occupation	Students	204	51%
	Civil-service Employee	11	2.75%
	Freelancer	11	2.75%
	Entrepreneur	30	7.5%
	Unemployed	58	14.5%
	Total	400	100%
Age	<18 years old	37	9.25%
	18 – 25 years old	256	64%
	26 – 35 years old	100	25%
	>35 years old	7	1.75%
	Total	400	100%
Has been watching Shopee Live since	<6 months	119	29.75%
	>6 - 12 months	150	37.5%
	>12 months	131	32.75%
	Total	400	100%

Source: Data processed (2024)

Table 2. Outer Loading

Variable	Item	Loading Factor	Description
Parasocial Interaction with Host	PSIH1	0.907	Valid
	PSIH2	0.876	Valid
Parasocial Interaction with Co-Viewers	PSIC1	0.836	Valid
	PSIC2	0.937	Valid
	PSIC3	0.923	Valid
Utilitarian Value	UV1	0.926	Valid
	UV2	0.953	Valid
	UV3	0.862	Valid
	UV4	0.921	Valid
Urge to Buy Impulsively	IB1	0.926	Valid
	IB2	0.927	Valid
	IB3	0.822	Valid

Source: Data processed (2024)

Table 3. Cronbach Alpha and Composite Reliability

Variable	Cronbach Alpha	Composite Reliability	Description
Parasocial Interaction with Host	0.744	0.886	Reliable
Parasocial Interaction with Co-Viewers	0.881	0.927	Reliable
Utilitarian Value	0.936	0.954	Reliable
Urge to Buy Impulsively	0.874	0.922	Reliable

Source: Data Processed (2024)

Table 4. Fornell-Lacker Test

	PSIC	PSI Host	UBI	UV
PSI Co-Viewers	0.900			
PSI Host	0.818	0.892		
Urge to Buy Impulsively	0.513	0.468	0.893	
Utilitarian Value	0.687	0.528	0.434	0.916

Source: Data Processed (2024)

Table 5. Predictive Relevance (Q^2) Test

	SSO	SSE	$Q^2 (=1-SSE/SSO)$
PSI Co-Viewers	1.200.000	1.200.000	
PSI Host	800.000	800.000	
Urge to Buy Impulsively	1.200.000	945.162	0.136
Utilitarian Value	1.600.000	970.986	0.364

Source: Data Processed (2024)

Table 6. Hypothesis Testing

Hypothesis	Path Coef	t-statistic	p-value	Decision
H1 PSIH -> UBI	0.147	1.417	0.157	Rejected
H2 PSIH -> UV	-0.103	1.800	0.073	Rejected
H3 PSIC -> UBI	0.392	3.680	0.000	Accepted
H4 PSIC -> UV	0.771	14.761	0.000	Accepted
H5 UV -> UBBI	0.165	2.727	0.007	Accepted
H6 PSIH -> UV -> UBI	-0.017	1.383	0.167	Rejected
H7 PSIC -> UV -> UBI	0.127	2.589	0.010	Accepted

Source: Data Processed (2024)

Table 7. Inner Model Evaluation with Coefficient of Determination (R^2)

Variable	Adjusted R Square
Utilitarian Value	0.279
Urge to Buy Impulsively	0.473

Source: Data Processed (2024)

ly, the 26-35 age group accounts for 25% of the total audience, yet a small number falls below 18 or exceeds 35 years, signifying that Shopee Live appeals strongly to young adults. Regarding the viewing duration, the findings reflect a balanced distribution.

The SEM-PLS is utilized in this study for data analysis, involving two stages: assessing the Outer Model and analyzing the Inner Model. The Outer Model evaluation focuses on the validity and reliability of the research instrument, with construct validity measured by loading factors and reliability assessed using Cronbach's Alpha and Composite Reliability.

According to Hair et al. (2019), a common guideline for assessing convergent validity is that loading factor values should exceed 0.70. In this study, every item met this criterion, indicating that all items are deemed valid.

All variables have exceeded the 0.70 threshold for Cronbach's Alpha and Composite Reliability, as per Hair et al. (2019). Therefore, the outer analysis establishes that all items in this study are valid and reliable.

Table 4 shows that each variable's AVE root value is greater than its correlation value with other factors, which indicates that all variables meet the discriminant validity test.

If the Q^2 predictive relevance value for a latent variable is greater than 0, the model has predictive relevance. A positive Q^2 value (> 0) suggests that the model possesses strong predictive capability, meaning it can accurately forecast variations in endogenous variables based on the provided exogenous (independent) and mediator variables.

Inner Model Analysis

The next phase of data analysis is the inner model analysis, also known as hypothesis testing. This phase employs path

coefficients to evaluate significance levels. Additionally, the study will examine the role of UV as a mediating variable in the indirect relationship between PSI with the Host and Co-Viewers and the UBI.

Table 6 indicates that parasocial interaction with the host (PSIH) does not significantly influence the urge to buy impulsively (UBI) or utilitarian value (UV), leading to the rejection of H1 and H2. However, parasocial interaction with co-viewers (PSIC) has a significant positive impact on both UBI and UV, resulting in the acceptance of H3 and H4.

Utilitarian value (UV) positively influences the urge to buy impulsively (UBI), supporting H5. The interaction between PSIH and UV on UBI is insignificant, leading to the rejection of H6. Lastly, the hypothesis that PSIC positively influences UBI through UV is accepted, supporting H7.

According to Table 7, the R^2 value for UV is 0.279, indicating a weak model. This suggests that PSI with the Host and Co-Viewers accounts for 27.9% of the variance in UV, with the remaining 72.1% influenced by factors not included in the model. In contrast, the R^2 value for UBI is 0.473, reflecting a moderate model. This means that PSI with the Host and Co-Viewers, along with UV, explains 47.3% of the variance in the UBI, while the other 52.7% is attributable to external variables, such as Hedonic Shopping Motivation (Lee & Wu, 2017), and Local Presence (Vonkeman et al., 2017).

Parasocial Interaction with Host Towards the Urge to Buy Impulsively

Based on the results of the hypothesis testing, it can be concluded that the first hypothesis is rejected. This finding aligns with previous research (Wang et al., 2020; Yi Yong Lee & Chin Lay Gan, 2020) suggested that PSI with the Host does not directly affect the UBI. PSI is fundamentally

a one-sided relationship in which consumers perceive an attachment to the host without reciprocal interaction, meaning that while viewers may feel connected to a host, the relationship is largely one-sided and lacks mutual engagement (Hartmann & Goldhoorn, 2011). This one-sidedness can make viewers aware that their connection with the host lacks personal validation, which dilutes the psychological urgency needed to drive impulsive actions (Labrecque, 2014).

Consumers might also be skeptical of the host's intentions because they view them as primarily motivated by commercial interests rather than sincere recommendations (Fu & Hsu, 2023). This skepticism can undermine the impact of PSI in stimulating impulsive buying behaviors (Wang et al., 2020). In addition, viewers' reasons for participating in live streams can vary greatly, including seeking entertainment, social interaction, or information (Lin et al., 2021). These diverse motivations mean that not all viewers are equally susceptible to PSI or inclined toward impulse purchases (Hu et al., 2017). For instance, viewers focused on information gathering are likely to engage critically rather than react impulsively. This suggests that PSI with Host alone is insufficient to universally drive impulse buying, as only a subset of viewers may experience the level of emotional attachment required for impulse-driven decisions.

Parasocial Interaction with Host Towards the Utilitarian Value

The results of the hypothesis testing indicate that the second hypothesis is rejected. This aligns with research conducted by Fu & Hsu (2023) since viewers may gain limited utilitarian shopping value through PSI with the host. This suggests that consumers might be resistant to accepting suggestions or recommendations provided by marketers or merchants

(Fu & Hsu, 2023). This scepticism can be attributed to the commercial nature of the streamer's role, where viewers might question the authenticity of the recommendations. This scepticism can lead to a diminished utilitarian value offered through PSI. Furthermore, PSI tends to create an emotional, rather than rational value between the viewer and the host. Utilitarian value emphasizes rational, functional benefits such as efficiency, quality, and price advantage (Babin et al., 1994). Since PSI with a host is generally more about fostering a sense of connection, consumers may find that it lacks the detail they need to make fully informed decisions. According to Rezaei et al. (2016), utilitarian value is associated with logical decision-making, which viewers might feel is inadequately supported by the host's often broad discussions. Thus, viewers may be more discerning and critical about what is being delivered in a marketing context when they focus on their research and evaluations rather than relying solely on the host's recommendation (Chen & Lin, 2019).

The boundary between authentic recommendations and commercial promotion can become blurred in live-streaming shopping. This ambiguity may lead viewers to believe that the information passed down by the host is biased or driven by profit motives, thus reducing utilitarian perceived value (Labrecque, 2014). As a result, PSI with the host does not necessarily translate into rational benefits that are essential for utilitarian value.

Parasocial Interaction with Co-Viewers Towards the Urge to Buy Impulsively

Hypothesis testing indicates that the third hypothesis was accepted. PSI with co-viewers positively and significantly influences the UBI impulsively due to creating a sense of social validation of community among viewers (Luo, 2005). In

addition, the higher the level of peer influence there is through parasocial behavior towards the other co-viewers whom a viewer interacts with during live-streaming sessions, the purchasing behavior of that viewer will also change in a higher proportion. This communitarian environment would enable the view of others' real-time feedback, endorsements, and purchase actions that could work with the social proof effect to yield impulsive buying decisions (Xiang et al., 2016). Real-time interaction with co-viewers may offer instantaneous feedback and social cues to make it more desirable to conform to the group. Watching other people make impulsive purchases can evoke a fear of missing out, whereby individuals feel pressured to make faster decisions to keep up with others. Moreover, the interactions entail emotional contagion due to those excited viewers; a high degree of emotional involvement is realized for the viewer, reducing self-control and increasing the chances of making impulsive purchases (Zheng et al., 2020).

Parasocial Interaction with Co-Viewers Towards Utilitarian Value

Hypothesis testing shows that the fourth hypothesis was supported. PSI with co-viewers positively and significantly impacts UV by improving the practical and functional benefits that viewers perceive during live-streaming shopping. Involvement with co-viewers allows the sharing of information, opinions, and experiences about the product showcased (Luo, 2005). This collective exchange of knowledge allows viewers to gather useful and diverse perspectives to make informed purchasing decisions. This interaction with co-viewers helps reduce uncertainty and ambiguity regarding product features, quality, and benefits, heightening perceived utilitarian value (Fu & Hsu, 2023).

Furthermore, utilitarian value is also reinforced by the sense of community and social support among co-viewers. Consumers often rely on the opinions and behaviors of their peers, perceiving them as credible sources of information. Such social validation helps the viewer feel more confident in making purchase decisions, knowing very well that others with similar interests have benefited from the product (Luo, 2005). Besides, live streaming is interactive since viewers can ask questions and receive answers from other viewers, increasing the sense of practical benefits and functional understanding of the product (Xiang et al., 2016).

Utilitarian Value towards the Urge to Buy Impulsively

The results of the hypothesis testing indicate that the fifth hypothesis is supported. When viewers perceive high utilitarian value in the products presented during a live stream, such as better quality, efficiency, or cost-effectiveness, they are more likely to feel confident in making quick purchasing decisions. This confidence lowers the level of hesitation typically associated with impulsive buying, as the product's practical benefits provide a strong rationale for the purchase (Chen et al., 2016). Live streaming offers an interactive and engaging environment (Hilvert-Bruce et al., 2018) where viewers can see a real demonstration, ask questions, and receive immediate feedback about a product's features and benefits.

The interactive nature of live streaming amplifies these effects because it creates excitement and urgency, which enforce the urge to buy impulsively among consumers (Wang et al., 2020). Furthermore, combining visual demonstrations and social proof from co-viewers enhances the perceived utilitarian value, making the product seem more reliable and ne-

cessary. Seeing others buying and recommending products enhances the utilitarian value and, in that effect, increases the tendency to buy impulsively.

Utilitarian Value mediates the Influence between Parasocial Interaction with the Host on the Urge to Buy Impulsively

The hypothesis suggesting that utilitarian value mediates the relationship between PSI with the Host and the urge to buy impulsively has been rejected. One possible explanation for this is that the illusory connection fostered with the Host does not necessarily translate into tangible rational benefits (Labrecque, 2014). Furthermore, these connections do not inherently boost the products' perceived practical benefits or economic value. Viewers may like a host's personality and feel attached to them, but this does not mean they perceive additional utilitarian value in the products being promoted. In fact, the commercial nature of the host's role can make viewers skeptical of the practical benefits claimed, seeing the host's recommendations as biased or profit-driven rather than as genuinely informative (Fu & Hsu, 2023).

Moreover, it has been found that PSI mainly elicits hedonic responses rather than rational ones (Fu & Hsu, 2023). PSI develops a sense of intimacy with the host, which increases the emotional involvement of viewers. These emotive reactions are more directly connected to impulsive buying behaviour through the gratification derived from a hedonic perspective rather than from a utilitarian perspective. Studies demonstrate that factors such as perceived enjoyment and social climate significantly moderate impulse buying tendencies in social commerce settings, even though the role of utilitarian value is lower (Xiang et al., 2016).

Utilitarian Value mediates the Influence between Parasocial Interaction with the Host on the Urge to Buy Impulsively

The hypothesis that UV mediates the influence between PSI and Co-Viewers on the UBI is accepted. When viewers engage with co-viewers during the live-streaming events, they often share information, opinions, and reviews that underscore the functional aspects of products. This information exchange will help create a rational basis for impulsive purchase decisions, thereby bridging the emotional connection fostered by parasocial interactions with a sense of utilitarian justification. According to Luo (2005), consumers often view the opinions and actions of their co-viewers as credible due to social validation or a sense of "safety in numbers." Consequently, they may use the visible opinions, behaviors, and purchases of others as cues to align with social expectations.

Empirical results suggest that utilitarian value, which is derived from the informational and functional values that are shared among co-viewers, influences impulse buying urges significantly. For example, Fu and Hsu (2023) demonstrated that in the live-streaming context, the utilitarian value plays a more important role than the hedonic value. Coinciding with this, Xiang et al. (2016) proved that perceived usefulness, as part of utilitarian value, affects impulse buying tendencies positively through enhanced parasocial interaction on a social commerce platform.

CONCLUSION AND RECOMMENDATION

The research findings indicate that Parasocial Interaction with the host does not affect either utilitarian value or the urge to buy impulsively, nor does utilitarian value mediate the relationship between PSI with the host and impulsive buying. In contrast, PSI with co-viewers influences both utilitarian value and the impulse

to make purchases. Moreover, utilitarian value affects the urge to buy impulsively and mediates how PSI with co-viewers impacts this impulse.

To better understand PSI in the live-streaming shopping environment, it is essential to address the emotional, cognitive, and social dimensions of these interactions to gain more insight into how they affect consumer behavior. Future research may expand on possible alternative mediating variables, such as emotional attachment and hedonic value, to give an understanding of the mechanisms that drive impulsive buying behavior. Comparative studies across different live-streaming platforms and cultural contexts would offer a more comprehensive view of PSI's impact. Understanding the boundary conditions and contextual factors, such as platform-specific features and product types, will further enhance the theoretical framework.

Based on the hypothesis testing results, it is evident that enhancing viewer interactions, particularly among co-viewers, is crucial in driving impulsive buying behavior. Therefore, marketers need to foster a strong sense of community and social validation by enabling real-time interaction among viewers via real-time features, such as live chat, polls, and viewers' testimonials. This communal atmosphere enables viewers to share opinions and experiences about the products being showcased, which enhances the perceived utilitarian value and drives impulsive purchases.

Some actionable steps suggested for marketers to follow up on the results of this study are as follows: marketers are advised to utilize real-time interactive features such as voting, polling, reactions, and purchase notifications by other users during live streaming to increase engagement. Marketers are also recommended to emphasize product benefits that represent utilitarian value through real-time demonstrations of product benefits by

addressing consumers' Frequently Asked Questions (FAQ) points. Furthermore, marketers are also recommended to train live-streaming hosts to drive co-viewers' involvement by asking about their previous experience with the product in a live-streaming setting to strengthen community influence, as well as make the live-streaming shopping experience more persuasive.

Despite all the potential contributions the study may have, some limitations require further examination. This relates to self-reported screening questions, which may contain a recall bias. Participants might have over- or under-reported their behaviors and interactions, affecting the accuracy of the findings. Additionally, there is a potential for under-identified factors following the limited indicators of PSI with the host that requires further investigation.

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