

Impulsive Buying Behavior in E-Commerce Live Streaming Based on the Stimulus Organism Response (SOR) Framework in Women's Clothing Products (Study on Live Streaming Shopee)



Suci Fitria¹, Mahrinasari², Yuniarti Fihartini³

^{1,2,3}Master of Management University of Lampung, Bandar Lampung, Indonesia

ABSTRACT: The development of the digital era has had a big impact on the way of shopping, especially shopping online. Indonesia is a potential market for the development of e-commerce, especially online shopping. Currently, many consumers are taking advantage of the live streaming feature on e-commerce platforms to shop online. It is effective and easy to use, many people use live streaming for entertainment, communication or even promoting products and services. Currently, many marketers use live streaming on various media platforms to sell and promote their products. Supported by advances in information technology, it allows online sellers to showcase their products via live streaming. Live streaming is a form of online interactive multimedia entertainment that is rapidly gaining popularity throughout. It is effective and easy to use, many people use live streaming for entertainment, communication or even promoting products and services. This research adopts the concept of "Social Presence of Broadcaster" to identify its influence on the experience of arousal and pleasure in viewers. In addition, the concept of "Social Presence of Live Streaming" is used to evaluate its impact on the experience of arousal and pleasure in the context of live streaming. Furthermore, researchers consider that the experience of arousal (passion) and pleasure generated through these concepts can influence the urge to buy impulsively. Therefore, this study aims to investigate the relationship between these variables and eventual impulse buying behavior. The sample in this study used 230 respondents from consumer users who had impulsively purchased women's clothing products via Shopee live streaming. The research method will be carried out by testing the Structural Equation Model (SEM) with the help of the LISREL application. The results of this research are that the social presence of broadcasters, the social presence of viewers, and the social presence of live streaming have an influence on arousal and enjoyment. Also, Passion and Fun are the factors that most influence impulse purchases on Shopee live streaming.

KEYWORD: Impulsive Buying, Live Streaming Shopping, Arousal, Pleasure

I. INTRODUCTION

Currently, internet technology has played an important role in changing people's lifestyles. The internet provides various conveniences in everyday life, including in business aspects. For the business world, the internet is currently widely used as a sales promotion tool to launch brands, expand markets for business people, facilitate transactions, and enable sales and purchases through e-commerce. For consumers, the internet has made shopping easier and even encouraged the formation of consumer behavior. The impact is very significant, as can be seen from the increase in the percentage of e-commerce use in Indonesia.

The development of the digital era has had a big impact on the way of shopping, especially shopping online. Indonesia is a potential market for the development of e-commerce, especially online shopping. Currently, many consumers are taking advantage of the live streaming feature on e-commerce platforms to shop online. Live streaming is a form of online interactive multimedia entertainment that is rapidly gaining popularity worldwide (Hilvert-Bruce et al., 2018). It is effective and easy to use, many people use live streaming for entertainment, communication or even promoting products and services. Currently, many marketers use live streaming on various media platforms to sell and promote their products (Silaban et al., 2022). Supported by advances in information technology, it allows online sellers to showcase their products via live streaming (Hu. M. & Chaudhry, SS 2020).

According to research conducted by Zhang et al. (2019), live streaming has an impact on increasing consumer purchasing preferences without the need for face-to-face interaction, as well as reducing consumer doubts. Besides that, various live

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streaming factors, including the influence of stimuli from the physical environment and other factors such as the live streamer, product price, level of comfort, and perceived satisfaction during the live streaming session, can cause impulse purchases in consumers.

Impulse buying refers to unplanned purchases, where a person decides to buy something after being exposed to a certain stimulus. According to research by Ishita (2022), more than 80% of young customers make impulse purchases online. Demographic factors such as age, gender and income level are the most significant factors in influencing impulse purchases, and also have a key role in the process of completing product purchase transactions.

According to Li, M Wang et al (2022), there are three dimensions in Shopee live streaming, namely social presence of broadcaster, social presence of viewers, and social presence of live streaming. The Social Presence of Broadcaster variable refers to how broadcasters use interactive features such as live comments, polls, or virtual gifts to increase engagement and strengthen relationships with viewers. The Social Presence of Viewers variable refers to the extent to which social presence or involvement can be felt by viewers during an activity or event, especially in the context of social media or live streaming platforms. The Social Presence of Live streaming variable refers to the extent to which viewers feel involved, connected, and able to interact with the content or with fellow viewers.

According to Li, M Wang et al (2022), previous research results show that social presence of broadcasters and social presence of live streaming positively influence impulse purchases directly and indirectly through arousal and pleasure, encouraging online consumers' impulse purchases in live streaming, but the social presence of viewers does not have a significant influence.

This research was chosen based on previous research findings which showed that social presence of broadcasters and social presence of viewers in live streaming have a positive influence on impulse buying behavior, both directly and indirectly through arousal and passion. This encourages online consumers to make impulse purchases during Shopee live streaming sessions. However, it should be noted that the social presence of viewers does not have a significant influence on arousal and pleasure.

This research adopts the Stimulus Organism Response (SOR) Framework, which helps in understanding how external stimuli influence customers' emotional responses and behavior. Researchers aim to dig deeper into Impulsive Buying Behavior in Live Streaming E-commerce, especially in women's clothing products. This study will be carried out by focusing on live streaming from the Shopee application as a research object.

Stimulus Organisme Respons (SOR)

According to Chan et al (2017) Stimulus in the context of this research, refers to a trigger that triggers an individual's perception and subsequently influences their response. Stimuli are defined as certain factors that occur at the time and place of observation, these factors are not necessarily related to knowledge about personal attributes and stimuli, but have an identifiable and systematic effect on current behavior. The variables included in the stimulus are social presence of broadcaster, social presence of viewer, and social presence of live streaming.

According to Chang et al (2018), Organism refers to an individual's internal state which is reflected in their affective and cognitive states. Organisms are also considered as intermediaries between stimulus and response. An individual's internal psychological status can be divided into cognitive reactions and affective reactions. Cognitive reactions are the process by which individuals face and process the information they receive. On the other hand, affective reactions reflect individual feelings or emotions, such as levels of satisfaction and happiness. The variables included in the organisms in this study are arousal and pleasure. Research has identified impulsivity as a psychological organism that directly seeks a response. Research also shows that consumers with impulse buying tendencies are more likely to engage in impulse buying behavior compared to those who do not have such tendencies.

Live Streaming

According to C.C. Chen et al (2018), live streaming is a medium that can record and broadcast both sound and images in real time, where the transmission uses one or more communication technologies so that it allows the audience to feel that they are present live. Previously, according to Hilvert-Bruce et al., (2018) live streaming only focused on broadcasting video games and esports, but according to Wongkitrungrueng & Assarut (2020), as time goes by live streaming not only broadcasts things related to video games but also live streaming shopping.

According to Z. Lu et al., (2018), with live streaming shopping, this can make it easier for consumers to see products from various perspectives and can ask relevant questions, because this makes many consumers happy to shop online via live streaming. shopping. This live streaming platform leverages live streaming technology and infrastructure to create a virtual environment that supports real-time interactions, entertainment, social activities, and trading. In this environment, live streamers create their broadcasts, and viewers can watch and interact with them. Usually, a live streamer has many followers on several live streaming platforms. They are content creators who are able to amass a loyal following. Live streaming activities for product sales involve

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streamers presenting products from various perspectives and encouraging viewers to buy them. Interactivity is a key characteristic in the live streaming trading environment, stimulating active user behavior in communication and transactions.

Social Presence

According to Mingwei Li et al (2022), social presence is a concept that refers to the extent to which a person feels the meaning and consequences of the presence of other people in social interactions. This concept first emerged in mediated communication settings and later developed into a research topic in information and communications technology (ICT). As the internet becomes an important retail channel, the concept of social presence has been widely used to understand customer behavior in ICT-enabled virtual environments, such as ICT-mediated communication, online e-commerce, social media, and live streaming commerce.

Social presence plays an important role in the context of online shopping. Nowadays, social presence is often used to measure the extent to which media or technology contributes to people's feelings of socialization through ICT. However, the concept of social presence in one dimension may not be enough to explain the phenomenon in live streaming commerce, because in such cases, customers interact not only with the broadcaster but also with other viewers in the virtual space. Therefore, a multi-dimensional conceptualization may be more appropriate in the context of live streaming commerce.

Arousal

According to Michael et al (2021), pleasure refers to the extent to which people feel good, joyful, happy or satisfied in a particular situation. Meanwhile, according to Eroglu et al (2003), pleasure is usually measured in terms such as happy or unhappy, happy or annoyed, and satisfied or melancholy. For example, Hsieh et al (2021) conducted in-depth research to investigate the influence of fun and passion in building relationships between customers and brands. The concept of dimensional emotional states has an important role in understanding the interactions between emotions and consumer behavior, as well as how positive or negative feelings can influence purchasing decisions and brand-customer relationships.

Pleasure

According to Yang et al (2021), Arousal refers to the degree to which people feel stimulated, active, or alert. It is an active state of an individual's nervous system, which can be divided into high and low levels. High arousal is characterized by concentration, while low arousal is characterized by relaxation. According to Eroglu et al (2003), arousal is usually measured by terms such as stimulated/relaxed, excited/calm, and aroused/not aroused.

In the world of e-commerce, understanding the role of passion in consumer behavior is critical. Various factors, such as website design, product appearance, and promotional offers, can be used to trigger feelings of passion in consumers. An emphasis on elements that increase passion in the online shopping experience can have a positive impact on sales conversion rates and customer satisfaction. Therefore, understanding and managing passion in the context of e-commerce is an important aspect of marketing strategy and customer experience.

Impulsive Buying

According to Chan et al (2017), impulse buying is explained as "an outcome process mechanism in the domain of the individual-psychological approach that occurs when consumers experience a sudden and often persistent urge to immediately buy something". This impulsive buying occurs after experiencing an urge to buy and can stimulate emotional conflict. According to Cakanlar et al (2019), impulse purchases can be divided into four types, namely pure impulse purchases, reminder impulse purchases, suggestion impulse purchases, and planned impulse purchases. In general, impulse buying is described as sudden, unplanned, forced, and hedonic buying behavior that lacks consideration of all available information and alternatives. It is characterized by a lack of rational judgment and is dominated by emotions.

In live streaming shopping situations, Liu et al (2012) stated that consumers are stimulated by interactions with anchors, and evaluate these interactions. During the process, consumers get a good experience so that their positive emotions fluctuate. According to Khachatryan et al (2018), when consumers are in a positive emotional state, they will pay more attention to the product. Thus, they may overestimate their own economic capabilities and needs thereby increasing the likelihood of impulse buying.

II. METHODOLOGY

This research is a quantitative research involving 230 respondents as samples. A sample of 230 respondents was selected representatively to cover the variety of survey to consumer users who had impulsively purchased women's clothing products via Shopee live streaming as criteria. Data collection is carried out through survey methods or questionnaires distributed to

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respondents. Data collection is carried out through survey methods or questionnaires distributed to respondents, and the data collected will be analysed using Structural Equation Modelling (SEM) techniques through the Lisrel 8.8 application.

III. RESULTS, DISCUSSION, AND CONCLUSION

Convergent Validity Test and Reliability Test

Validity tests and reliability tests are carried out to find out whether a set of tools is used measuring is precisely measuring what should be measured. As for the validity test in this research consists of convergent validity and discriminant validity. Parameters used in the convergent validity test using loading factor parameters and Average Variance Extracted (AVE) values. Meanwhile, the parameters used in the reliability test use Cronbach's alpha and Composite Reliability (CR) values. The measurement standard used are Loading Factor > 0.7, AVE > 0.5, Composite Reliability > 0.7 and Cronbach's alpha >0.7 (Hair et al., 2019). The results are shown in table 1 below:

Table 1. Results of Convergent Validity Test and Reliability Test

Variabel	Indikator	Nilai Loading	AVE>0.5	Keterangan
<i>Social Presence Of Broadcaster (X1)</i>	X1.1	0.81	0.667	Valid
	X1.2	0.82		Valid
	X1.3	0.80		Valid
	X1.4	0.81		Valid
	X1.5	0.82		Valid
	X1.6	0.84		Valid
<i>Social Presence Of Viewer (X2)</i>	X2.1	0.80	0.630	Valid
	X2.2	0.77		Valid
	X2.3	0.81		Valid
<i>Social Presence Of Live Streaming (X3)</i>	X3.1	0.79	0.629	Valid
	X3.2	0.80		Valid
	X3.3	0.79		Valid
<i>Arousal (Z1)</i>	Z1.1	0.77	0.624	Valid
	Z1.2	0.80		Valid
	Z1.3	0.80		Valid
<i>Pleasure (Z2)</i>	Z2.1	0.79	0.645	Valid
	Z2.2	0.81		Valid
	Z2.3	0.81		Valid
<i>Impuls Buying In Live Streaming (Y)</i>	Y.1	0.79	0.644	Valid
	Y.2	0.81		Valid
	Y.3	0.80		Valid
	Y.4	0.78		Valid
	Y.5	0.83		Valid

Source: Primary Data (2024)

Structural Model Test Results

Model suitability test results (goodness of fit) in the structural equation modeling (SEM) will be described in the table 2 below:

Table 2. Result of Goodness of Fit

Goodness of Fit	Nilai Hasil	Nilai Standar	Kesimpulan
P value	0.94	≥ 0.05	Good fit
RMR	0.014	< 0.05	Good fit
GFI	0.93	≥ 0.90	Good fit
RMSEA	0.031	< 0.08	Good fit
AGFI	0.92	≥ 0.90	Good fit
CFI	0.97	≥ 0.90	Good fit
RFI	0.95	≥ 0.90	Good fit
IFI	0.97	≥ 0.90	Good fit
NFI	0.96	≥ 0.90	Good fit

Source: Primary Data (2024)

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Hypothesis Testing

The results of the analysis can be seen through the summary in Table 3 below:

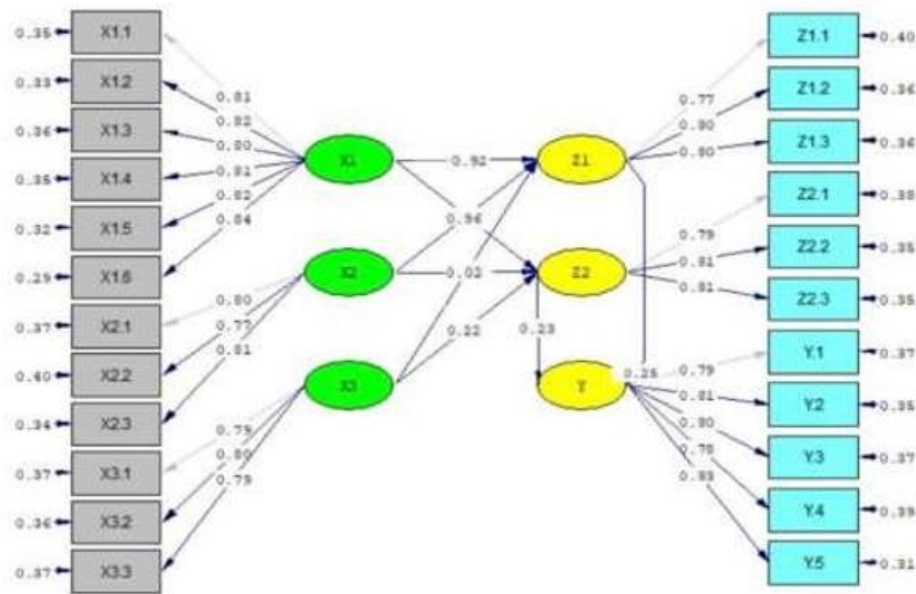


Figure 1. Standardized Solution (Overall Model)

Source: Primary Data (2024)

The results of hypothesis testing in this research used Structural Equation Modeling (SEM) processed through the LISREL application with hypothesis test results as follows:

Based on Figure 1, it shows the results of a positive relationship and significant relationships between variables are described in the table below:

Table 4. Result of Hypothesis Testing

Hypothesis	Path Analysis	Standardized Value	T-value	Decision
H _{1a}	<i>Social presence of broadcaster → arousal</i>	0.92	8.22	Approved
H _{1b}	<i>Social presence of broadcaster → pleasure</i>	0.86	2.11	Approved
H _{2a}	<i>Social presence of viewer → arousal</i>	0.12	3.52	Approved
H _{2b}	<i>Social presence of viewer → pleasure</i>	0.02	9.94	Approved
H _{3a}	<i>Social presence of live streaming → arousal</i>	0.06	5.97	Approved
H _{3b}	<i>Social presence of live streaming → pleasure</i>	0.22	2.16	Approved
H ₄	<i>Arousal → impulse buying in live streaming</i>	0.85	8.21	Approved
H ₅	<i>Pleasure → impulse buying in live streaming</i>	0.23	9.21	Approved

Source: Primary Data (2024)

DISCUSSION AND CONCLUSION

1. The broadcaster's social presence has an influence on passion and enjoyment. The broadcaster's social presence is the factor that has the greatest influence on passion. This includes the broadcaster's ability to speak persuasively, attract attention, and respond to comments or questions from viewers in real-time, thereby influencing consumers

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to buy the women's clothing products on offer. This means that the better the social presence of the Shopee live streaming broadcaster, the better the passion and enjoyment of customers watching the live streaming.

2. The audience's social presence has an influence on arousal and enjoyment. This includes the ability to increase viewer engagement and influence consumers to purchase women's clothing products offered by the broadcaster. This means that the better the viewer's social presence on Shopee's live streaming, the better the excitement and enjoyment of customers watching the live streaming.
3. The social presence of live streaming has an influence on passion and enjoyment. This creates strong interaction and engagement between broadcasters and viewers during live streaming sessions which creates a more personal and emotional experience for viewers, which can influence consumers' decisions to purchase the women's clothing products offered. This means that the better the presence of Shopee's live social streaming, the better the excitement and enjoyment of customers watching the live streaming.
4. Passion is the most influential factor in impulsive purchases on Shopee live streaming. This includes individual interests or desires that can influence a person's behavior and involvement in a situation, so that it can influence consumers to purchase women's clothing products during live streaming. This means that Shopee live streaming customers make impulse purchases due to the enthusiasm they feel when watching Shopee live streaming.
5. Enjoyment has an influence on impulse purchases on Shopee live streaming. This refers to the degree to which an individual feels good, full of joy, happy, or satisfied in a shopping environment which makes the shopping atmosphere more enjoyable. This means that the happier and enjoyed customers are in live streaming, the more it will encourage viewers to make impulse purchases.

IV. MANAGERIAL IMPLICATION

This research uses the SOR framework which consists of several variables, namely social presence of broadcaster, social presence of viewers, and social presence of live streaming which are part of the stimulus, arousal and pleasure variables are part of the organism, and impulse buying in live streaming is part from the response.

The results of this research show that social presence of broadcaster, social presence of viewers, and social presence of live streaming can encourage interaction between consumers as viewers and other audience interactions and the features presented in Shopee live streaming are able to increase the excitement and tension felt by the audience. Apart from that, the results of this research also show that arousal can make consumers feel excited and happy when watching Shopee live streaming and pleasure can make consumers feel pleasure and satisfaction when watching Shopee live streaming, thereby triggering consumer reactions to make purchases spontaneously and unplanned.

In this research, the role of the social presence of broadcasters is very large in creating pleasure and excitement for the audience, thereby making consumers really enjoy Shopee's live streaming. Besides that, the excitement that arises can trigger impulse purchases in Shopee live streaming.

Based on the findings in this research, it is known that consumers have impulsive buying behavior on Shopee live streaming. Consumer impulse buying behavior is determined by passion and pleasure. Consumer arousal and pleasure are influenced by the social presence of broadcasters, the social presence of viewers and the social presence of live streaming.

This research can help Shopee companies and women's clothing sellers on Shopee to better understand their customers who buy via live streaming as well as the factors that make them make impulse purchases, feel feelings of passion and pleasure when watching Shopee live streaming compared to its competitors. This research can also help Shopee companies and women's clothing sellers on Shopee to take strategies for future developments and improvements regarding live streaming on Shopee.

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