

HOW REAL-TIME INTERACTIVITY INFLUENCES IMPULSE BUYING BEHAVIOUR IN GENERATION Z'S DURING LIVE STREAMING SHOPPING: THE MEDIATING ROLE OF PERCEIVED ENJOYMENT

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ABSTRACT

Live streaming is a new experience for customers to make online purchases because it is real-time, this has led to a surge in live shopping in e-commerce. The purpose of this study investigates the impulsive shopping behavior of Generation Z during live streaming, which is influenced by real-time interaction variables and bridged by stimulus, cognitive and emotional pleasure. The research method used a purposive sampling technique to collect 119 participants through an online survey. Data analysis was carried out using Smart-PLS software. The test results in this study state that real-time interactivity has a positive and significant effect on perceived enjoyment felt by consumers when watching live streaming shopping and perceived enjoyment has a positive - significant effect on consumer impulse buying behavior when live streaming. The indirect finding of the perceived enjoyment variable can bridge the gap in the relationship between real-time interactivity and impulse buying behavior. The contribution of this research provides an understanding of the impulsive buying behavior of the live-streaming shopping domain by increasing the interesting interaction through Stimulus Organism Response Theory. Business implications could focus on improving the quality of real-time interactions and promoting limited-time live-streaming intent using live streaming e-commerce platforms.

Keywords: Real-time Interactivity, Perceived Enjoyment, Impulsive Buying, Live Streaming Shopping

1. INTRODUCTION

Rapid technological changes and COVID-19, have accelerated the innovation process and influenced the way businesses of the future with online and virtual already replacing conventional businesses. Digitalisation is a must (Mićić & Mastilo, 2022). One of digital business is live streaming. Live-streaming commerce emerged as a new e-commerce trend in 2015, and it continued to grow in 2019 (C. H. Lee & Chen, 2021; K. H. Lee, Cin, & Lee, 2016). Nowadays, live streaming is regarded as the newest e-commerce trend and has evolved into a new channel, way, and experience for customers to make purchases where many e-commerce platforms have lived streaming capabilities on their apps. As of 2022, 83.7% of Indonesians had watched Shopee live-streaming, making Shopee become the e-commerce platform with the most popular live-streaming shopping feature.

Live-streaming has become one of the main factors that not only increases people's shopping activities, but also becomes a leading strategy for businesses, including local brands and MSMEs. Seeing the changes in the digital market landscape, multinational market research and consulting firm IPSOS conducted a survey titled E-commerce Live-Streaming Trends for Sellers. The survey involved most local brand owners and MSMEs in Indonesia who use various live-streaming features on e-commerce platforms. Live-streaming is widely used by e-commerce because it is highly interactive with consumers as it is done in real-time. Displays, features, and other related product introductions are presented live by the streamer.

The influence of live-streaming shopping is having impacts the psychological situation of consumers in impulsive buying (Shang, Ma, Wang, & Gao, 2023). This phenomenon causes a lot of impulse buying behavior because customer behavior in impulsive buying can be influenced by live streamer responses based on live content. When customers see offers of goods and services offered by streaming providers, they pay more attention to streaming providers and then unwittingly place orders (Ma, 2023). One of the important elements that influence customers' online shopping experience is interactivity, which improves customer attitudes and behaviors in communication and transactions. In live-streaming, the interactivity that occurs between the customer and the host can trigger impulsive buying.

Previous researchers such as (Khasanah & Kuswanto, 2023) and (Y. Y. Lee, Gan, & Liew, 2023) who examined the effect of interactivity variables on impulsive buying, stated that there was a positive influence between interactivity on impulsive buying. Meanwhile, research conducted (Zhichao & Qian, 2020) and (Moes, Fransen, Fennis, Verhagen, & van Vliet, 2022) shows that interactivity is an insignificant predictor of impulsive spending. The gap in the research results of previous researchers made this research use the variable perceived enjoyment as an intervening variable (Marza, Idris, & Abror, 2019). Interactivity can generate perceived enjoyment in consumers which will influence consumers to make impulsive buying. So that researchers use the variable perceived enjoyment as an influencing variable that either strengthens or weakens the relationship between the independent and dependent variables.

2. LITERATURE REVIEW

2. 1. STIMULUS-ORGANISM-RESPONSE THEORY (SOR THEORY)

The Stimulus-Organism-Response model is a framework used as a basis for studying consumer behaviour. This theory aims to clarify how environmental cues (stimulus) affect people's (organisms) cognitive and emotional reactions, which in turn affect their behaviour (reactions). The theory behind the SOR model, first proposed is Mehrabian and Russell in 1974, is that environmental cues will set off the organism's individual cognitive and affective reactions, which will then result in a sequential response. Accordingly, there are three fundamental components to the S-O-R paradigm (Li, Wang, & Cao, 2022).

First, the element stimulus indicates influences that arouse individuals or triggers that arouse a person's feelings or perceptions to make impulsive buying. Study (Chan et al., 2017) research divides the stimuli related to impulsivity in online purchases into two categories: external stimuli derived from environmental factors (like website features, marketing strategies, and product availability) and internal stimuli derived from human traits (like hedonic motivation, impulsivity, and informational social influence). Situational factors are taken in by customers in live streaming commerce as stimuli that impact customers' affective and cognitive perceptions.

Second, the element organism which refers to the buyer's emotional condition (cognitive and affective reactions), which includes thinking, feeling, and perceptual processes, is referred to as "organism" (Do, Shih, & Ha, 2020). Intermediaries and processes that mediate the relationship

between stimulus and response are used to implement the organism represented by cognitive and affective reactions (Gao, Chen, Gao, & Yu, 2022). Affective reaction is an emotional response that arises during interaction with the surrounding environment, whereas cognitive reaction is the mental process of analysing information related to the product.

Third, the element response is primarily the desire to enter or depart from a particular environment, specifically avoidance or approach behaviour. In other words, the response element refers to the outcome of a stimulus and an organism. It talks about the behavioural activities that customers engage in because of assessing their mood and surroundings. The communicator will then modify behaviour based on the response they have received, considering what each person understands by the message.

2. 2. REAL-TIME INTERACTIVITY

Key to successful innovation leading to firm success and economic growth is an understanding of the nature of changing consumer demands. All touchpoints and key purchase factors resulting from the explosion of digital products and channels, coupled with the emergence of increasingly savvy and knowledgeable consumers, products and digital channels, coupled with the emergence of increasingly savvy and knowledgeable consumers. Business has changed with the changing consumer (Gillpatrick, 2019). Businesses now have a fantastic chance to engage with customers more closely and offer a more unique and personalized shopping experience due to advancements in digital technology (Lyu, 2021). The future of e-commerce identification of continued use of livestreaming commerce is influenced by social presence, perceived crowdedness, need for arousal, susceptibility to informational influences, and perceived value, while trust in the broadcaster is treated as a moderating factor (Chong, Hashim, Osman, Lau, & Aw, 2023).

Consider real-time interactivity in live-streaming shopping, for instance. This interactivity is thoroughly explored in the context of live streaming shopping within the framework of the customer-streamer interaction, reflecting the user's capacity to actively engage in and interact directly with the environment they experience. One way to effectively support online customers and facilitate two-way communication between businesses and customers is through real-time interactivity. The interactive component evaluates shopping as a social encounter in which consumers can use virtual tools to interact with e-commerce streamers and other shoppers. This allows customers to get additional information during the shopping process (Gulfraz, Sufyan, Mustak, Salminen, & Srivastava, 2022).

2. 3. PERCEIVED ENJOYMENT

Study (Wang & Lee, 2020) perceived enjoyment is the result of interactions between one's experiences and the environment around them, leading to a sense of fulfilment or happiness. The subjective experience of perceived enjoyment is pleasant and gratifying, and it generates a positive impulse that may amplify the urge to buy impulsively to satisfy oneself. Empirical studies have consistently demonstrated that strengthening consumers' satisfaction with online shopping is positively correlated with their purchase intentions and the development of favourable consumer attitudes (Punuindoong, Syah, & Anindita, 2020) and (Wen, Prybutok, & Xu, 2011). Consumer behaviour may be influenced by the subjective pleasure and emotional component of perceived enjoyment. One example is the way in which customer satisfaction can modify or enhance the correlation between the degree of in-the-moment engagement and the inclination towards impulsive buying.

2. 4. IMPULSIVE BUYING

The term impulsive buying refers to hedonistic, impulsive, unplanned, and urgent purchasing behaviours. According to the findings of (Feng, Al Mamun, Masukujjaman, Wu, & Yang, 2024) research, impulsive buying can be defined as a process mechanism within the individual-psychological approach, wherein consumers encounter an unexpected and frequently persistent desire to purchase a product immediately. Impulsive buying is frequently typified by an emotional component predominating over rational consideration. This purchasing behaviour is the result of consumers' weak cognitive control and emotional impulses. Live streaming combined with e-commerce has the potential to make for a more engaging, real, and visual shopping experience that will bring in more customers and encourage more impulsive buying (Chan et al., 2017). Impulse buying in e-commerce occurs when paying attention to social media influencers and live content influence customer's (Shao, 2024). Stimulus-Organism-Response (S-O-R) theory in live streaming context and other studies related to impulse buying behaviour as an outcome (Pereira, de La Martinière Petroll, Soares, Matos, & Hernani-Merino, 2023).

2. 5. HYPOTHESIS DEVELOPMENT

Real-time interactivity is explained as a useful tool for helping online shoppers and facilitating two-way communication between businesses and consumers. This is since the primary characteristic of streaming shopping platforms is their real-time interactive feature, which enables users to communicate directly with the host and purchase featured items through streaming video right away. Additionally, customers can interact in a variety of other ways, such as sending virtual gifts, chatting, placing online orders, and giving likes (Wei, Abdullah, & Shiwen, 2024).

This active interaction experience then creates perceived enjoyment for consumers experiencing a dynamic, fun, and personalized shopping atmosphere, consumers are more likely to feel happy and emotionally engaged in the shopping process. In addition, the ability to interact directly with the streamer and get an immediate response also increases consumers' sense of satisfaction, as they feel valued and cared for by the service provider (Punuindoong et al., 2020) conducted research results showed that interactivity had a significant effect on the perceived enjoyment felt by live shopping audiences. Thus, it is suspected that interactivity in live-streaming shopping influences the perceived enjoyment felt by consumers.

H1: The higher the influence of Real-time Interactivity, the higher the Perceived Enjoyment.

Enjoyment in shopping is the happiness felt by a person during the shopping process. Perceived Enjoyment refers to the feeling of satisfaction or excitement that a person experiences because of interacting with their surroundings when they are shopping (Dwitya & Hartono, 2023). The feelings of happiness and satisfaction generated by perceived enjoyment can reinforce the positive drive to satisfy oneself by making impulsive buying (Saad & Metawie, 2015). According to research (Moreno, Fabre, & Pasco, 2022) on the impact of perceived enjoyment on impulsive purchasing in the Philippines, there is a positive correlation with perceived enjoyment and impulsive buying behaviour. Therefore, the enjoyment one perceives from live-streaming their purchases may influence impulsive purchases.

H2: The higher the influence of Perceived Enjoyment, the higher the Impulsive Buying.

Customers benefit from an enhanced sense of local presence due to the enhanced real-time interactivity, which allows them to gain a deeper understanding of the product. Customers are more likely to act quickly to make purchases online when they have a deeper comprehension of the product (Rehman, Parvaiz, Shakeel, Iqbal, & Zainab, 2024). The degree of real-time interaction between shoppers and streamers during live streaming has a big influence on impulsive

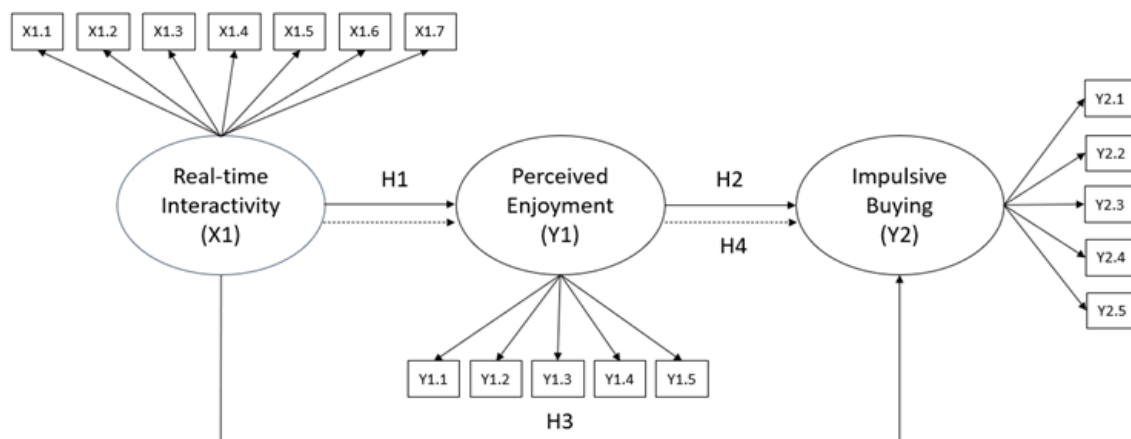
purchasing. Customers are more likely to participate fully in the purchasing process and feel a stronger emotional connection to the good or service when they have direct contact with the streamer. Because of the streamer's proximity, customers may feel strongly motivated and encouraged purchase because of this interaction. The research conducted (Gulfraz et al., 2022) in China had the result that interactivity significantly affects online impulsive buying from e-commerce platforms. Thus, it is suspected that interactivity in live streaming shopping influences on impulsive buying.

H3: The higher the influence of Real-time Interactivity, the higher the Impulsive Buying

Real-time interactivity in live-streaming shopping empowers consumers to engage directly with broadcasters and products, enabling feedback, inquiries, and real-time information exchange. This interaction fosters a sense of involvement and emotional connection, leading to perceived enjoyment (Marzuki, Abdullah, Bahri, & Kamal, 2016). This enjoyment, stemming from dynamic interactions within the online shopping environment, indirectly influences impulse buying behaviour. When consumers feel happy and engaged during these interactions, they are more inclined towards impulsive purchases. Research (Baskaran, Yuen, Mahmood, Mahadi, & Dalayga, 2019) supports this notion, highlighting the impact of perceived enjoyment on impulsive buying tendencies in online shopping. Thus, real-time interactivity not only enhances the shopping experience but also drives consumer behaviour, ultimately influencing purchasing decisions in live streaming shopping contexts. (Yang & Shen, 2018) in their research on the influence of interactivity we show the results that interactivity significantly affects perceived enjoyment. Thus, it is suspected that interactivity in live-streaming shopping has an indirect effect on impulsive buying.

H4: The higher the influence of Real-time Interactivity, the higher the indirect effect on Behaviour Impulsive Buying mediated by Perceived Enjoyment.

Figure 1. Research Conceptual Framework



Sources: Own Concept

3. METHODOLOGY

This research uses quantitative methods to measure large amounts of numbers and data to test research hypotheses. The data collection technique used is using online questionnaire distribution (Google Form) distributed to Generation Z in Samarinda, East Kalimantan. The data used in this research are secondary data obtained from second parties in the form of journals and articles and used primary data in the form of questionnaire results with a total of 119 respondents. The sampling technique used is purposive sampling, this technique is used because it has

characteristics that have been determined intentionally by this study. Characteristics in sampling are respondents who were born in 1997-2012 and respondents who have made purchases while watching live streaming shopping. The data analysis technique used is SEM (Structure Equation Modeling) using Smart-PLS as an analysis tool. Rating and interpretation of the questioners start from 1 strongly disagree until 5 strongly agree.

Real-time interactivity is a concept that describes the level of engagement and two-way information exchange between the parties involved, especially in the context of this research to interact directly, to receive information, the feeling that the streamer cares, leaving messages on live streaming shopping, being friends with the streamer, feeling a sense of community, the ability to interact with streamers can fulfil my needs (Wei et al., 2024). Perceived Enjoyment refers to a person's subjective perception of the level of pleasure or satisfaction derived from an activity or experience is makes me happy, I can feel the happy atmosphere, very happy to be able to interact directly with the online streamer, enjoy watching live streaming shopping (Y. Y. Lee et al., 2023). Impulsive buying is a phenomenon of consumer behaviour that involves making spontaneous and sudden purchasing decisions, without in-depth planning or evaluation. The indicators: to buy has a time limit, to own it impulsively, buy is limited, to urge to buy impulsively. The atmosphere will increase my desire to buy immediately. When many consumers express their willingness to buy, I feel would prefer to buy it quickly, Promotions in live streaming shopping makes me want to buy items impulsively (Huo, Wang, Sadiq, & Pang, 2023).

3. 5. 1. DATA ANALYSIS RESULT

Descriptive Statistical Analysis

The personal information of the participants in this research is as follows. With the total 119 respondents used in this research, respondents who was born in 1997 was 1 person with a percentage of 0.84%, respondents who were born in 1998 were 4 people with a percentage of 3.36%, respondents who were born in 1999 were 8 people with a percentage of 6.72%, respondents who were born in 2000 were 7 people with a percentage of 5.88%, respondents who were born in 2001 and 2005 were 10 people each with a percentage of 8.40%, respondents born in 2002 were 15 people with a percentage of 12.61%, respondents born in 2003 were 39 people with a percentage of 32.77%, respondents born in 2004 were 17 people with a percentage of 14.29%, respondents born in 2006 were 2 people with a percentage of 1.68%, and respondents born in 2007 and 2008 were 3 people each with a percentage of 2.52%.

There is 119 people with a 100% percentage who have made purchases on live streaming shopping. In the terms of Impulsive Buying When Watching Live-Streaming Shopping, 99 people often make impulsive buying when watching live streaming shopping with a percentage of 83.19% and there are 20 people who do not often make impulsive buying when watching live streaming shopping with a percentage of 16.81%. The platform most often used by respondents to watch live streaming shopping is tiktok as many as 67 people with a percentage of 56.30%, then followed by Shopee as many as 45 people with percentage of 37.82%, and Tokopedia as many as 7 people with 5.88%. And also there are 6 categories chosen by respondents when watching live streaming shopping. A total of 3 people chose the electronic tools category with a percentage of 2.52%, 2 people chose the motorcycle tools category with a percentage of 1.68%, 47 people chose the beauty, care, & health category with a percentage of 39.50%, 7 people chose the daily product & food category with a percentage of 5.88%, 59 people chose fashion & accessories with a percentage of 49.58%, and 1 person chose all categories mentioned with a percentage of 0.84%.

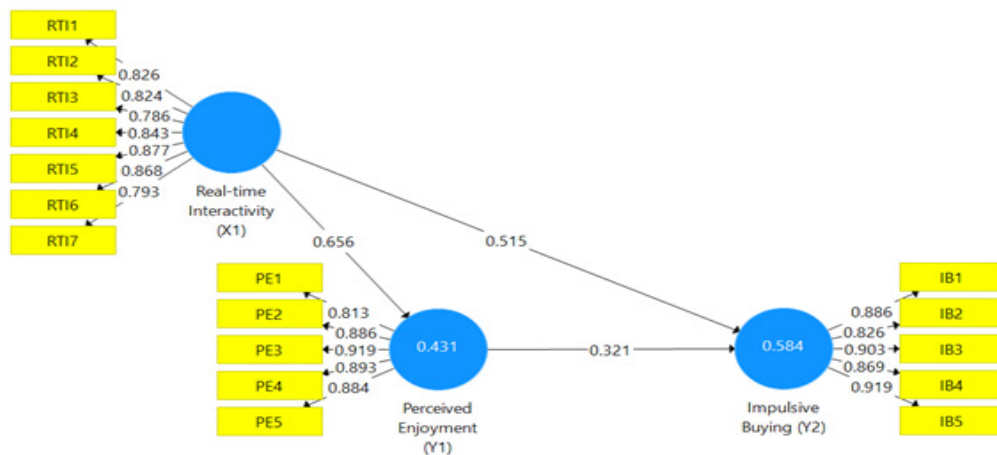
Outer Model Testing

Research instruments must have standardized quality and must be in accordance with the criteria for validity and reliability testing techniques. The level of reliability of a measuring instrument on an instrument can be measured by validity and reliability testing. The following presents the results on the measurement model.

Validity Test

Validity testing is divided into two parts, namely convergent validity, and discriminant validity. convergent validity is determined using the loading factor parameter and the AVE (Average Variance Extracted) value.

Figure 2. Outer Loading Factor



Sources: own calculation

Measurement can be said to have convergent validity if the loading factor value is more than 0.7 and the AVE value is more than 0.5. Measurement of discriminant validity is determined by looking at the cross loading of each variable. Measurement can be said to have discriminant validity if it has a cross-loading value of more than 0.7.

All statement items from the real-time interactivity, perceived enjoyment, and impulsive buying variables in this research are declared valid because they have a loading factor value > 0.7 . This shows that variable indicators that have a loading factor value > 0.7 have high validity thus fulfilling the Convergent Validity test.

Table 1. Average Variance Extract

Variables	AVE	Description
Real-time Interactivity (X1)	0.692	Valid
Perceived Enjoyment (Y1)	0.774	Valid
Impulsive Buying (Y2)	0.776	Valid

Source: Own data processed, 2024, Notation: AVE > 0.5

The AVE value of each variable has a value of > 0.5 , which means that it is fulfilling the validity requirements based on AVE. Based on the results of the outer loading and AVE values, it can be concluded that the real-time interactivity, perceived enjoyment, and impulsive buying variables in this research have fulfilled the requirements of convergent validity.

Table 2. Outer Loading

Indicators	Impulsive Buying (Y2)	Perceived Enjoyment (Y1)	Real-time Interactivity (X1)
IB 1	0.886	0.533	0.620
IB 2	0.826	0.480	0.546
IB 3	0.903	0.664	0.670
IB 4	0.869	0.501	0.588
IB 5	0.919	0.683	0.741
PE 1	0.414	0.813	0.435
PE 2	0.565	0.886	0.544
PE 3	0.598	0.919	0.595
PE 4	0.660	0.893	0.662
PE 5	0.612	0.884	0.609
RTI 1	0.596	0.519	0.826
RTI 2	0.627	0.476	0.824
RTI 3	0.601	0.474	0.786
RTI 4	0.547	0.518	0.843
RTI 5	0.623	0.669	0.877
RTI 6	0.613	0.625	0.868
RTI 7	0.613	0.513	0.793

Source: Own calculations; Notation: Outer Loading >0.7

It shows that all indicators that form each variable in this research have a cross loading value > 0.7, which means that they have fulfilled the discriminant validity requirements, namely the cross-loading value > 0.7.

Table 3. Composite Reliability Test

Construct Reliability and Validity

Matrix	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extract...	Copy to Clipboard:	Excel Format	R Format
	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)			
Impulsive Buying (Y2)	0.928	0.939	0.945	0.776			
Perceived Enjoyment (Y1)	0.927	0.939	0.945	0.774			
Real-time Interactivity (X1)	0.925	0.928	0.940	0.692			

Sources: Own calculation; Notation: Composit Reliability Test >0.7

All variables in this research have fulfilled the requirements, namely the Composite Reliability value > 0.7. And, it shows that all variables in this research have fulfilled the requirements, namely the Cronbach's Alpha value > 0.7. Thus, it can be said that all latent variables have a good level of reliability.

Inner Model Testing

Testing the inner model or structural model is evaluated by looking at the percentage of variance explained by looking at the R-square (R^2).

Table 4. Inner Model Testing

Variables	R-square (R ²)
Perceived Enjoyment	0.431
Impulsive Buying	0.584

Source: Own calculations

The result of the perceived enjoyment variable has a value of 0.431, which means that the perceived enjoyment variable can be influenced by the real-time interactivity variable by 43.1% and the remaining 56.9% is influenced by other variables outside of this research. Furthermore, the impulsive buying variable has a value of 0.584, which means that the impulsive buying variable can be influenced by the real-time interactivity and perceived enjoyment variables by 58.4% and the remaining 41.6% is influenced by other variables outside of this research.

Hypothesis Testing

Hypothesis testing is the result of the correlation between constructs which is measured by looking at the significant value, p-value, and t-statistic. In the bootstrap resampling method in this study, the hypothesis is accepted if the p-value must be ≤ 0.05 and has a t-statistic value > 1.96 .

Table 5. Hypothesis Testing

Variables	Original Sample (O)	T Statistics	P Value	Results
Real-time Interactivity → Perceived enjoyment	0.656	11.858	0.000	Significant
Perceived enjoyment → Impulsive Buying	0.321	3.039	0.002	Significant
Real-time Interactivity → Impulsive Buying	0.515	5.136	0.000	Significant

Source: Own calculations; Notation: ** $p < 5\%$

Each variable has a t-statistic value greater than 1.96 and each variable has a p-value smaller than 0.05. This means that H1 which states Real-time Interactivity influences Perceived Enjoyment is proven and accepted, H2 states Perceived Enjoyment has an effect on Impulsive Buying is proven and accepted, and H3 states Real-time Interactivity has an effect on Impulsive Buying is proven and accepted.

Table 6. Pathway Analysis

Variables	Original Sample (O)	T Statistics	P Value	Results
Real-time Interactivity → Perceived Enjoyment → Impulsive buying	0.210	2.911	0.004	Significant

Source: Own calculations; Notation: ** $p < 5\%$

Based on the table above, it shows that the variable has a t-statistic value greater than 1.96 and has a p-value smaller than 0.05. Which means H4 that states Real-time Interactivity has an indirect influence on Impulsive Buying mediated by Perceived Enjoyment, is proven and accepted. The methodology of an article outlines the procedures employed to conduct the research, including the type of study, sample selection, data collection and analysis methods, ethical considerations, and limitations of the study. Its detailed and transparent description is essential to guarantee the replicability and reliability of the results, in addition to providing a solid basis for the interpretation and generalization of the findings.

4. RESULTS AND DISCUSSIONS

The test results in this research state that real-time interactivity has a positive and significant effect on the perceived enjoyment felt by consumers when watching live streaming shopping, perceived enjoyment has a significant effect on impulsive buying and has a positive value, real-time interactivity has a positive and significant effect on impulsive buying, and that real-time interactivity indirectly has a positive and significant effect on impulsive buying through perceived enjoyment. This can be seen from the t-statistic value and p-value in this variable relationship which shows significant and the original sample (O) value which shows positive results.

In this research, real-time interactivity serves as a stimulus that prompts consumers to make impulsive buying. When consumers engage directly in live streaming shopping, such as chatting with streamers or discussing products, real-time interactivity stimulates cognitive and emotional responses (Do et al., 2020). Perceived enjoyment, in turn, represents the emotional and cognitive state of consumers in response to this stimulus. It arises from the enjoyable experience during interaction, signifying a heightened level of engagement and emotional attachment to the products or services (Kuciapski, 2020) and (Y. Y. Lee et al., 2023). Impulsive buying, as a response, occurs when consumers, influenced by the stimulus of real-time interactivity and the organism of perceived enjoyment, make purchase decisions without thorough consideration, driven by emotional impulses (Marzuki et al., 2016). This illustrates how the Stimulus-Organism-Response theory elucidates the connection between real-time interactivity, perceived enjoyment, and impulsive buying in live streaming shopping (Moreno et al., 2022).

5. CONCLUSION

The contribution of this research is to analyse the relationship between real-time interactivity and impulse buying behaviour when consumers view live streaming on e-commerce platforms. Impulse buying behaviour will increase because consumers feel enjoyment when deciding to shop, unconsciously this behaviour is influenced by S-O-R Stimuli-Organism-Response by influencing the cognitive - affective - emotional strength of consumers who live stream.

The results show that perceived enjoyment is able to bridge the gap that occurs between real-time interactivity and impulse buying behaviour due to the pleasure of watching live streaming and the feeling of happiness when interacting with online streamers. This shows the importance of sellers providing interesting interactions for consumers as live streaming viewers. It is hoped that businesses in the future will be able to create imaginative and interesting interactive features, such as live voting, interactive question and answer sessions, quizzes, and promotion of live streaming intent and with limited time will increase impulse buying. Impulse buying in e-commerce occurs when paying attention to social media influencers and live content influence customer's.

This research has limitations, where the research was only conducted on one generation (Z gen only), in one city only and with small data sample. In the future, research can be carried out on other generations such as millennials or others, as well as conducted with several samples from other cities or countries. Live streaming is an interactive platform in the world of profitable e-commerce that takes place in cyberspace and real time. Business implications could focus on improving the quality of real-time interactions and promoting limited-time live-streaming intent using live streaming e-commerce platforms.

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