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The influence of B2C e-commerce live streaming on consumers' online purchasing behavior among Malaysian and Chinese consumers

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Abstract

Nowadays, e-commerce live streaming is one of the most popular shopping methods worldwide. This study explores the relationship between five dimensions of e-commerce live streaming and consumers' online purchasing behavior. This research analyzes e-commerce live streaming as a new shopping method and determines the relationship between the five dimensions of e-commerce live streaming with perceived value and the relationship between consumers' online purchasing behavior and perceived value using a questionnaire. The stimulus-organism-response (SOR) model was employed to assess the influence of B2C e-commerce live streaming on consumers' online purchasing behavior. Questionnaires were sent to 200 consumers each in China and 200 consumers in Malaysia. The results show that product diversification, promotional sales, online consumer reviews, and cross-border cooperation have significant positive impacts on the perceived value of Chinese and Malaysian consumers in B2C e-commerce live streaming. This study suggests (i) increasing and improving product diversity, (ii) improving promotional activities, (iii) encouraging online consumer reviews, and (iv) promoting cross-border cooperation. This study makes significant contributions to the SOR model.

Keywords:

SOR model;
B2C e-commerce;
Live streaming;
Consumers' online purchasing behaviour;
Malaysia and China.

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1. Introduction

The most popular new shopping method, e-commerce live streaming, has significantly changed the lives of many people worldwide. The spread of COVID-19 towards the end of 2019 has made this business platform a success. E-commerce live streaming has created seamless interaction between businesses and consumers through the Internet live real-time real scene all-round displays of commodity information. E-commerce live streaming enhances the effectiveness of information delivery, revitalizes the shopping experience for consumers, and aligns with consumers' needs and preferences (Ryan, 2020 & Forrester, 2021). This study examines the influence of live streaming on purchasing behavior among consumers in China and Malaysia.

China has become a saturated market for e-commerce live streaming. In contrast, Malaysia is still in its growth stage and calls for improvement in numerous areas. China is currently the world's largest e-commerce live-streaming market, accounting for nearly half of the global market. In

China alone, the country's e-commerce live streaming industry has exceeded 1.2 trillion Renminbi and has become an important form of business to promote economic development. In 2023, a total of 373.7 million digital buyers in China made purchases through e-commerce live streaming, representing a 42.1% penetration rate. In comparison to Asia, e-commerce live streaming shopping is relatively in its infancy in European countries and the United States. The US market contributed less than USD 1 billion out of the USD 60 billion sales generated worldwide (Kharif and Townsend, 2020). However, this trend is soon to change drastically in the US, as prominent social media and shopping platforms such as Facebook, Shopee, Amazon, TikTok, X, and Instagram have begun transitioning into livestream shopping (Koetsier, 2022).

On the one hand, consumers in the European market are not keen on live video shopping (Andersson & Pitz, 2021). Forrester (2021) carried out an online survey involving 14,460 adults across France, Poland, Spain, and the United Kingdom about livestream shopping. It was found that 64% of consumers bought products or services in-store on a weekly basis, indicating that shopping in-store remains a favorite choice for consumers in Europe. European companies need to embrace, adjust, and implement this new shopping approach to stay competitive in the marketplace (Andersson and Pitz, 2021). Therefore, live streaming for e-commerce must be enhanced to increase global reach and accessibility.

Live streaming is an important feature of e-commerce because of the inherent challenges in e-commerce business models. First, data security is one of the biggest challenges in e-commerce, as it involves dealing with a large amount of information and data, and technical problems in processing data may cause serious damage to the daily operations and brand image of retailers (Team Vue.ai, 2023). Second, the quality of products varies, and the difficulty of protecting consumer rights is high. These include false publicity, quality problems, and after-sale disputes. Third, the prevalence of "lazy economy" which helps to push further online shopping, increases consumers' demand for a simpler, more convenient, and more personalized shopping experience. The current e-commerce live streaming model is still in a progressive state, with new innovative breakthroughs every day. Hence, understanding the factors influencing consumers' online live-streaming shopping or purchases is the main objective of this research. Specifically, this study aims to examine (i) the factors that affect Malaysian and Chinese consumers' perceived value in B2C e-commerce live streaming, and (ii) the relationship between perceived value and online purchasing behavior of Chinese and Malaysian consumers in B2C e-commerce live streaming.

2. Stimulus-Organism-Response (SOR) Model

The Stimulus-Organism-Response (SOR) model was first introduced by Mehrabian and Russell in 1974. It is based on the "stimulus-response" theory of Watson, the founder of behavioral psychology. According to this theory, a statement is delivered to individuals, and the material or nonmaterial needs of individuals should be met. Emotional support, informational support, and service quality are affected by this theoretical framework (Wang et al., 2023). This study expands the SOR theoretical framework to integrate product diversification, consumer experience, promotional sales, online consumer reviews, and cross-border cooperation, which serve as stimuli (S), consumers' perceived value serves as the organism (O), and consumers' online purchasing behavior serves as the response (R). In the context of e-commerce live streaming, consumers are affected to a certain extent by certain stimulating factors. These include emotional or cognitive changes in the body's consumption of B2C e-commerce live streaming, ultimately producing consumption intentions and behaviors.

2.1 Relationship between product diversification and perceived value

Dodgson (2021) stated that product diversification in B2C e-commerce live streaming refers to the use of big data and other technologies to provide consumers with diversified, differentiated,

and personalized products to enhance their perceived value. Increasing product diversity improves businesses' competitive advantage across all stages of the supply chain, reduces market equilibrium prices, and thereby increases consumers' perceived value (Ding et al., 2023). Hence, broader and better product diversification promotes an increase in consumers' perceived value. Thus, the first hypothesis is as follows.

H1: There is a positive relationship between product diversification and the perceived value of Chinese and Malaysian consumers in B2C e-commerce live-streaming.

2.2 Relationship between sense experience and perceived value

Sense experience is the experience of users related to their perceived value. For example, attractive, well-functioning, and high-tech e-commerce platforms are demonstrated through their product pages, website designs, high-quality after-sales services, logistics services, and the application of 3D and VR technologies. It was found that 86% of customers were willing to pay more to achieve better customer experience. On the one hand, 92% of companies that focus on customer experience have observed increased customer loyalty, and 84% of companies that focus on customer experience have observed increased revenue (Heubel, 2021). Thus, the second hypothesis is as follows.

H2: There is a positive relationship between sense experience and perceived value of Chinese and Malaysian consumers in B2C e-commerce live streaming.

2.3 Relationship between promotional sales and perceived value

Promotional sales could trigger positive emotions, such as excitement, joy, or even fear of missing out in consumers. When the difference between the expected psychological price and the actual price exceeds the acceptable range, consumers' perceived value will also change, and the different ranges of promotion will also affect the value of e-commerce live-streaming. E-commerce live streaming aims to enhance consumers' perceived value through promotional activities to promote loyalty and online purchase behavior (Zheng et al., 2022). Thus, the third hypothesis is as follows.

H3: There is a positive relationship between promotional sales and the perceived value of Chinese and Malaysian consumers in B2C e-commerce live-streaming.

2.4 Relationship between online customer reviews and perceived value

In e-commerce live-streaming, customers' (or consumers') online comments and the real-time interaction of anchors can enhance consumers' perceived value. E-commerce live streaming provides accurate and effective replies in real time, which decreases the time consumers spend searching for relevant information and improves their perceived value. Simultaneously, e-commerce's live online comments set consumers' perceptions of product value, thereby enhancing consumers' perceived value (Song et al., 2022). Thus, the fourth hypothesis is as follows.

H4: There is a positive relationship between online consumer reviews and the perceived value of Chinese and Malaysian consumers in B2C e-commerce live streaming.

2.5 Relationship between cross-border cooperation and perceived value

Cross-border cooperation is described as the collaboration or cooperation between an e-commerce live streaming platform and film/television/literary circles to achieve a win-win situation. This scenario helps consumers perceive product value and promotes products during live streaming (Lu et al., 2022). This kind of cooperation helps the platform become outstanding, provides consumers with unique, informative, and attractive content, and enhances their

perceived value of the products sold. This also helps to increase the conversion rate of e-commerce live-streaming products and drive sales (Ruether, 2019). Thus, the fifth hypothesis is as follows.

H5: There is a positive relationship between cross-border corporations and the perceived value of Chinese and Malaysian consumers in B2C e-commerce live-streaming.

2.6 Relationship between perceived value and online purchasing behavior

Perceived value is consumers' preconceived idea of the value of a product or service, and a distillation of how much consumers are willing to pay for certain products (Team, 2023). After consumers understand the product information presented in e-commerce live streaming, they will mentally compare the perceived benefits and costs, thus generating an evaluation of the product, which will directly affect their purchase intention (Wu and Huang, 2023). Factors that can enhance perceived value include brands, luxury goods, and consumer utility (Smith, 2016). Additionally, perceived value relates to the usefulness and pleasurable shopping experience associated with a product or service, which is perceived by consumers based on a variety of characteristics such as interactivity, recommendations, and feedback. To increase repurchase intention, businesses can enhance consumers' perceived value by increasing benefits and reducing costs (Singh et al., 2021). Thus, the sixth hypothesis is as follows.

H6: There is a positive relationship between the perceived value and online purchasing behavior of Chinese and Malaysian consumers in B2C e-commerce live streaming.

According to the framework shown in Figure 1, this study mainly analyses product diversification, sense experience, promotional sales, online consumer reviews, and cross-border cooperation as "stimulus factors" in SOR model, perceived value as the intermediary variable is the "organism" of SOR model, and online purchasing behavior is the "response" of SOR model. In view of the above hypotheses, this study adopts the SOR model as theoretical support to carry out the research.

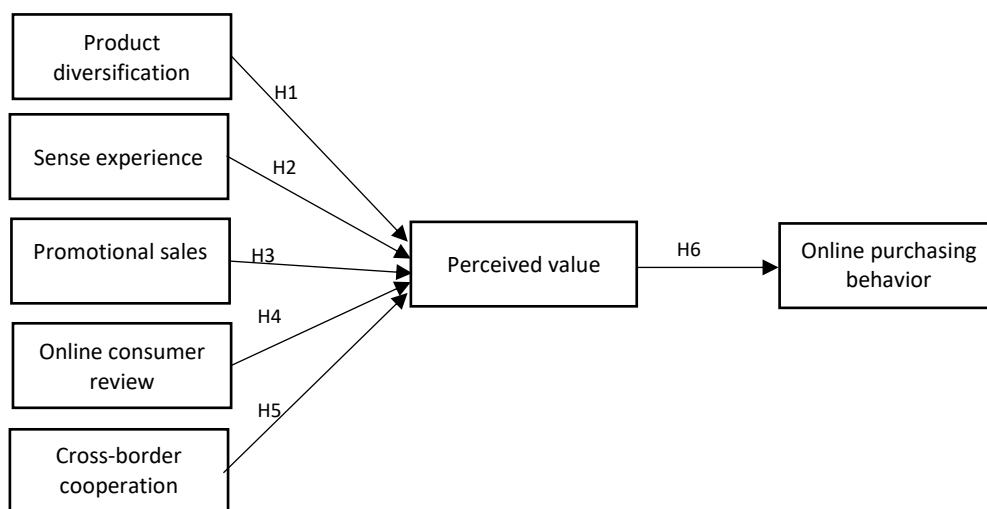


Figure 1: The research framework

3. Research methods

Quantitative research was used in this research to obtain objective and repeatable data, ensuring the accuracy and credibility of the research, to facilitate statistical analysis (Bhandari, 2020). The target respondents of this study were consumers of e-commerce live streaming above 18 years of age from China and Malaysia. The sampling frame for this study was unavailable because the consumers' personal information was confidential. Therefore, this study used nonprobability sampling.

The number of respondents required for the regression analysis should be 10 times the number of variables (Sekaran, 2003). Since the population was unknown and infinite, the Cochran formula was used to determine the sample size. Cochran (1977) created a formula for calculating the representative sample size as follows:

$$n = \frac{(1.96)^2(0.5)(0.5)}{(0.05)^2} = 384$$

According to the results, the sample size needs to be at least 384; therefore, a total of 400 questionnaires were considered sufficient.

In this study, the researchers collected primary data through questionnaires to ensure that first-hand information was obtained. An online questionnaire was developed and shared via social media platforms frequented by Malaysian and Chinese consumers. An online survey was conducted between September and December 2023. The research questionnaire comprises three main sections: Section A collects demographic data of respondents, Section B elicits data on the five independent variables, and Section C draws data for the mediating and dependent variables.

4. Results

Prior to full data collection, a pilot test was performed to identify any inaccuracies and unknown errors in the questionnaire. A reasonable sample size range for conducting pilot tests is 10%-20% of the actual sample size (Hazzi & Maldaon, 2015). This pilot test involved 40 respondents: 20 from China and 20 from Malaysia. Cronbach's alpha was used to measure the constructs' reliability. Cronbach's alpha values above 0.6 are considered acceptable (Matkar, 2012). Table 1 shows that the Cronbach's alphas of the constructs are acceptable in both the pilot tests and full data, as their values are all above 0.6. Table 1 shows the results of the normality tests for the full data. The constructs were found to be normally distributed because the skewness and kurtosis values fell within the recommended values of ± 3 and ± 10 , respectively (Kline, 2005), respectively.

Table 1: Reliability and normality tests

Constructs	No of Items	Pilot data		Full Data	
		Cronbach's Alpha	Cronbach's Alpha	Skewness	Kurtosis
Product diversification (PD)	5	0.947	0.941	-1.902	3.896
Sense experience (UES)	5	0.938	0.933	-1.585	2.685
Promotional sales (PS)	5	0.927	0.935	-1.290	1.316
Online consumer review (OCR)	5	0.925	0.919	-1.258	1.516
Cross-border cooperation (CBC)	5	0.911	0.915	-1.151	1.554
Perceived value (PV)	5	0.918	0.942	-0.879	-0.291
Online purchasing behavior (OPB)	5	0.820	0.947	-0.807	-0.277

4.1 Demographic profile of respondents

Table 2 shows the demographic profiles of the respondents. A total of 143 men (36%) and 257 women (64%) participated in this study. There were 151 (38%) aged 18 to 24, 108 (27%) aged

25 to 34, 79 (20%) aged 35 to 44, and 62 (16%) aged 45 and over. Of these, 200 were Chinese and 200 were Malaysian, each representing 50%. In terms of educational background, the study found that 55 had a high school certificate (14%), 41 had a diploma (10%), 206 had a bachelor's degree (52%), and 98 had a master's degree or above (25%). In terms of monthly income, 54 respondents (14%) earned less than RM1000/CNY1500 and 151 respondents (38%) earned between RM1001/CNY1501 and RM3000/CNY4500. A total of 130 (32%) earned between RM3001/CNY4501 and RM5000/CNY7500, whereas 65 (16%) earned more than RM5000/CNY7500. This is consistent with the nature of knowledge workers, who need to be highly skilled, better educated, and trained.

According to the survey, 102 people spent less than 2 hours per week online shopping (26%), 137 people spent 2–5 hours per week online shopping (34%), 116 people spent 6–9 hours per week online shopping (29%), and 45 people spent more than 9 hours per week online shopping (11%). Finally, the survey revealed their online purchasing habits. Daily necessities were at the top of the list (253 responses), followed by clothing items (225 responses) and food (184 responses). Books and stationery were the least popular items (165 responses).

Table 2: Demographic profile

		<i>n</i>	%
Sex	Male	143	36
	Female	257	64
Age	18-24	151	38
	25-34	108	27
	35-44	79	20
	45 and above	62	16
Nationality	Chinese	200	50
	Malaysian	200	50
Highest education completed	High school	55	14
	Diploma	41	10
	Degree	206	52
	Master and above	98	25
Monthly income level	Below RM1,000 / CNY1,500	54	14
	Between RM1,001/ CNY1,501 and RM3,000/CNY4,500	151	38
	Between RM3,001/ CNY4,501 and RM5,000/CNY7,500	130	32
	Above RM5,000/CNY7,500	65	16
Weekly time spent on online shopping (e.g.: Shopee, Lazada, Taobao, etc.).	Less than 2 hours	102	26
	2 hours to 5 hours	137	34
	6 hours to 9 hours	116	29
	More than 9 hours	45	11
Product purchased through live streaming e-commerce:	Clothing, shoes, and hats	225	
	Daily necessities	253	
	Food	184	
	Cosmetics and skincare products	156	
	Home applications	150	
	Toys and games	123	
	Books and stationery	165	
	Others	99	

4.2 Pearson's correlation coefficient analysis

Table 3 presents the correlation results for the variables. The highest correlation between perceived value and online purchasing behavior was 0.821. All correlation results are less than

0.9, confirming that there is no problem with multicollinearity, a condition in which two or more independent variables are too closely correlated with one another (Daniels & Minot, 2020).

Table 3: Correlation results

	PD	ES	PS	OCR	CBC	PV
Product diversification (PD)	1					
Sense experience (ES)	0.795**	1				
Promotional sales (PS)	0.799**	0.777**	1			
Online consumer review (OCR)	0.755**	0.741**	0.827**	1		
Cross-border cooperation (CBC)	0.737**	0.736**	0.788**	0.790**	1	
Perceived value (PV)	0.700**	0.649**	0.747**	0.721**	0.708**	1
Online purchasing behaviour (OPB)	0.606**	0.581**	0.661**	0.635**	0.653**	0.821**

** Correlation is significant at the 0.01 level (2-tailed).

4.3 Inferential analysis

The interpretation of results was divided into two parts. The first is multiple linear regression, which analyzes the relationship between the independent variables (PD, UES, PS, OCR, and CBC) and the mediating variable (PV). The second is a simple linear regression that analyzes the relationship between the mediating variable (PV) and dependent variable (OPB).

Table 4 shows the results of the multiple linear regression analysis. R^2 has a value of 0.620, which means that 62.0% of consumers' perceived value is explained by changes in the independent variables (PD, UES, PS, OCR, and CBC). The remaining 38.0% of the difference in online purchasing behavior was further described by other factors excluded from the research model.

Table 4: Multiple linear regression results

Variable	β	t	p	Tolerance	VIF
(Constant)	0.384	3.913	0.000		
Product diversification (PD)	0.186	3.126	0.002	0.272	3.677
Sense experience (UES)	-0.020	-0.343	0.732	0.294	3.404
Promotional sales (PS)	0.301	4.526	<0.001	0.219	4.576
Online consumer review (OCR)	0.191	3.090	0.002	0.253	3.949
Cross-border cooperation (CBC)	0.197	3.451	<0.001	0.296	3.376
R^2	0.620				
Adjusted R^2	0.615				
F	0.615				
p	0.001				

Dependent variable: PV

F -value was calculated using multiple linear regression to test if the regression model was significant. A higher F -value indicated a more significant influence of the explanatory variables of the regression model on the response variables. Table 4 shows that the F -value is 128.362. This is significant, with p -value of ≤ 0.05 . This model is suitable for this study, and the independent variables are significantly correlated with consumers' online purchasing behavior.

Table 4 also displays the p -values of the variables PD, PS, OCR, and CBC, which are all less than 0.05, with positive β s. This shows that all four variables are significantly positively correlated with the mediating variable (PV). The p -value of the variable UES is greater than 0.05; thus, the correlation between this variable and the intermediate variable (PV) is not significant. The regression formula based on these results is as follows:

$$PV = 0.384 + 0.186PD - 0.020ES + 0.301PS + 0.191OCR + 0.197CBC$$

Table 5 shows the results of the simple linear regression, where $R^2 = 0.674$, indicating that 67.4% of consumers' changes in online purchasing behavior using B2C e-commerce are explained by changes in consumers' perceived value, and the remaining 32.6% are explained by other factors excluded in the research model. When the F value is 822.216 and the p -value is less than 0.05, the model proves a significant relationship between consumers' perceived value and online purchasing behavior. The model is well fit.

A positive β of 0.821 and a p -value less than 0.5, it indicates that there is a significant positive relationship between consumers' perceived value and consumers' online purchasing behavior. Hence, a simple linear equation was developed as follows:

$$OPB = 0.724 + 0.821PV$$

Table 5: Simple linear regression results

Variable	β	t	p	Tolerance	VIF
(Constant)	0.724	7.845	0.000		
Perceived value (PV)	0.821	28.674	<0.001	1.000	1.000
R^2	0.674				
Adjusted R^2	0.673				
F	822.216				
p	0.001				

Dependent variable: OPB

A t -test was performed to examine the difference between Malaysian and Chinese consumers for all variables, as summarized in Table 6. Levene's test was used to determine the assumption of equal variances. The results were reported based on Levene's test. Equal variances are assumed for the variables OPB, UES, and OCR, and equal variances are not assumed for PV, PD, PS, and CBC. The results show that Malaysian and Chinese consumers differ in all the variables tested. Malaysian consumers were found to rate each variable significantly higher than Chinese consumers, with PV and UES showing the highest difference (mean difference = 0.216 and 0.200, respectively).

Table 6: Independent samples test

	Mean values		T-test for Equality of Means						
	Malaysian consumers	Chinese consumers	t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.	95% Confidence interval of the Difference	
								Lower	Upper
OPB	4.3565	4.2175	1.991	398	0.047	0.139	0.070	0.002	0.276
PV	4.5275	4.3113	3.490	383.378	<0.001	0.216	0.062	0.094	0.338
PD	4.7700	4.5838	3.631	364.747	<0.001	0.186	0.051	0.085	0.287
UES	4.6738	4.4738	3.690	398	<0.001	0.200	0.054	0.093	0.307
PS	4.6500	4.4563	3.559	386.127	<0.001	0.194	0.054	0.087	0.301
OCR	4.6063	4.4413	3.094	398	0.002	0.165	0.053	0.060	0.270
CBC	4.5588	4.3900	3.267	381.684	0.001	0.169	0.052	0.067	0.270

Table 7 summarizes the results of the hypothesis tests. Five hypotheses, that is, H1, H3, and H6, are supported by the collected data with p -values greater than 0.05, while the p -value of H2 is less than 0.05; thus, the result is not supported.

Table 7: Summary of the hypothesis-testing results

Hypothesis	<i>p</i> -value	β	Result
H1	0.002	0.186	Supported
H2	0.732	-0.020	Not Supported
H3	<0.001	0.301	Supported
H4	0.002	0.191	Supported
H5	<0.001	0.197	Supported
H6	<0.001	0.821	Supported

5. Discussion

The data show that PD has a significantly positive impact on the perceived value of online purchases by consumers in China and Malaysia ($p < 0.05$). First, consumers in China and Malaysia believe that the diversification of e-commerce products can improve shopping convenience. Consumers can shop online through e-commerce live streaming, which provides them with a variety of high-quality and cost-effective products to meet their individual needs. The study made by Qi et al. (2021) confirms this significant positive correlation. Chen et al. (2019) proved that PD is a direct premise for consumers to gain perceived value.

Second, because PS has the highest β value among the independent variables at 0.301, it has the highest positive impact on perceived value. This means that consumers in China and Malaysia believe that promotional activities in e-commerce live streaming can make the product price more attractive through coupons and other means, and the mode of buying gives them a sense of urgency and excitement. Online shopping can be used to obtain the added value of a product. Lu et al. (2022) confirms a significant positive correlation. Akram et al. (2021) proved that PS is a direct premise for consumers to gain perceived value.

Third, OCR had a significant positive relationship with perceived value, with a β value of 0.191. This also indicates that consumers in China and Malaysia believe that online consumer comments in live e-commerce can inform consumers about the real situation of products through real-time comment sections and bullet screens, and that real-time feedback and suggestions can enhance consumers' trust in products and brands. Wu and Huang (2023) confirm a significant positive correlation. Shang et al. (2023) also proved that OCR is a direct premise for consumers to gain perceived value.

Fourth, Chinese and Malaysian consumers believe that cross-border cooperation in e-commerce live streaming integrates professional knowledge and resources in different fields, presents more innovative and diversified products, and enhances consumer loyalty towards brands through brand cooperation. Wang et al. (2022) confirm a significant positive correlation. Lee and Chen (2021) also proved that CBC is the direct premise for consumers to gain perceived value.

Fifth, PV had a significant positive relationship with OPB, with a β value of 0.821. This means that consumers in China and Malaysia believe that the perceived value of consumers in e-commerce live streaming encourages them to shop online through e-commerce live streaming through the perception of product quality, product price, consumer experience, and convenience. Qi et al. (2021) confirm a significant positive relationship. Consumers' perceived value is the direct premise of their online purchasing behavior on e-commerce live streaming platforms.

The data show that UES had no significant impact on the perceived value of online purchases by consumers in China and Malaysia ($p > 0.05$). Gulfranz et al. (2022) proved that UES are not a prerequisite for consumers to gain perceived value. This is mainly because consumers in China and Malaysia believe that the sense of shopping experience varies from one person to another (Lindercrantz et al., 2020), and inappropriate shopping experience has a negative impact on consumers' perceived value. People from different backgrounds have different requirements for a sense of user experience (Gonzalez, 2023). To create a positive user experience, user testing

must be incorporated throughout the design process to identify areas for improvement and ensure a user-friendly design (Pilcher, 2018).

This study assessed the influence of B2C e-commerce live streaming on consumers' online purchasing behavior from the perspective of consumers in China and Malaysia. The behavior of these two types of consumers largely contrasts because of their different purchasing behaviors. E-commerce live streaming is already a mature market in China, whereas in Malaysia, it is still in its growing stage with much room for development (Malaysia Cross-Border eCommerce Insights and Analysis, 2019). This could be the reason why online live streaming in Malaysia has a higher perceived value than in China. In China, live streaming is a very common selling method. Conversely, online live streaming is relatively new in Malaysia, and can be appreciated more by consumers. Moreover, Malaysia is a multiracial country, with the majority of citizens being Malay, followed by Chinese and Indian, which may contribute to different purchasing behaviors.

6. Significance, limitations, and future research

The findings of this study have made significant contributions to academics, researchers, and students. This study applied the SOR psychological theory to understand consumers' online purchasing behavior in today's modern and dynamic business environment. The application of the SOR model to B2C e-commerce live streaming also includes PD, UES, PS, OCR, and CBC as the stimulus factors. In this sense, consumers' perceived value serves as "organism" and consumers' online purchase behavior serves as "response."

Currently, all countries are recovering from the economic losses caused by the COVID-19 pandemic. In many countries, e-commerce live-streaming is viewed as one of the most popular and significant shopping methods. Most importantly, this research serves as a reference for future academics and researchers interested in delving deeper into the e-commerce live-streaming business scene. Specifically, this research has outlined a clear vision for Chinese and Malaysian companies to consider this effective and useful business platform and to focus on making continuous improvements. Finally, consumers can use this research as a reference model to better understand e-commerce live-streaming.

This study has several limitations. First, the results cannot simply be generalized to understand consumer behavior in all regions around the world, as different countries are in different stages of development of an e-commerce live-streaming platform. Second, the use of cross-sectional studies means that only one survey was conducted simultaneously. It does not consider the perceived value and online purchasing behavior of consumers in China and Malaysia over a longer period (Setia, 2016). Third, self-administered questionnaires are considered controversial, as the respondents may not be taking the research seriously; therefore, they did not think through and provide the best possible answers. Therefore, the collected data may be inaccurate (Cook, 2010).

In addition, the differences in the development of e-commerce live streaming in different countries may lead to differences in cognition and consumers' online purchasing behaviors because the popularity and benefits of e-commerce live streaming are different, which will have an impact on consumers' perceived value and purchasing behaviors. Finally, the sample size was relatively limited, comprising 200 Chinese and Malaysian consumers. This study can only show the results to a certain extent and does not yet represent the online purchasing behavior of all Chinese and Malaysian consumers.

Future research can be conducted on a global scale to achieve more accurate and effective findings in different geographical contexts. A vertical approach is recommended, and future researchers should identify differences based on variables such as income, age, and education. Finally, future studies could expand the sample size and conduct face-to-face interviews to

produce more accurate and generalized findings (Knott et al., 2022; DeJonckheere and Vaughn, 2019).

The SOR model was used in this study to analyze the effects of e-commerce live streaming on consumers' online shopping behavior in China and Malaysia. The findings can be used as a reference and guidance for enterprises, e-commerce platforms, and consumers for future improvement. The analysis conducted in this study is also applicable to different environments across different sectors and business types in e-commerce live streaming.

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