



A Study of Live Streaming Shopping Platforms' Influence on Customer Repurchase Intention in China

THESIS TO APPLY FOR MASTER'S DEGREE IN MARKETING

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ABSTRACT

Live streaming shopping is becoming more and more popular in China as a newly emerged shopping form in recent years. The live streaming platform, a critical bond between vendors and customers, has made outstanding contributions to the development and prosperity of live streaming shopping. This study investigated how the live streaming shopping platform influences customer repurchase intention through familiarity, rapid entry, flow, immersion, presence, and trustworthiness. The result shows that familiarity can influence customer repurchase intention through the rapid entry, flow, immersion, presence and trustworthiness. This research indicates the importance of the live streaming shopping platform in live streaming shopping commerce. The theoretical and practical implications are presented in more detail in the study.

1. INTRODUCTION

Live streaming shopping is a shopping model that has emerged and become popular in recent years. It is like traditional TV shopping but compared to the one-way information transmission of TV shopping, live streaming shopping adds a real-time interactive communication function which means that consumers can communicate directly with sellers, streamers, and other audiences in the live streaming virtual room to get requested information (M. Zhang et al., 2020; Qian, 2021). Moreover, owing to the rapid development of mobile terminals such as cell phones, and the innovation and expansion of Internet technology, shopping is no longer restricted by time, place, and medium. More and more consumers are free to shop the way they like, and live streaming shopping is one of the new forms of shopping that they prefer in China. According to AlixPartner's (2020) survey, two-thirds of Chinese consumers said they had bought products via live streaming from October 2019 to October 2020. Between 2017 and 2020, China's live-commerce industry grew at a compound annual growth rate of more than 280 percent, reaching an estimated \$171 billion in value and the COVID-19 epidemic has accelerated this rise, and Chinese sales are estimated to reach \$423 billion by 2022 (Arora et al., 2021). Besides the considerable success of live streaming shopping in China, people are also beginning to apply this innovative shopping model to other countries. For example, some social media giants adopted and launched live streaming shopping services such as Facebook Live, Instagram Live, YouTube Live; retailers like Amazon and Walmart also participate in the competition of live streaming shopping; others launched live streaming shopping applications just as Brandlive, Talkshop Live, Popshop Live, Livescale, Buywith to satisfy the need of live streaming shopping consumers.

The popularity of live streaming shopping has caused a stir in the business world and has also received attention from scholars. Most early studies, as well as current work, focus on studying the live streaming shopping consumer's purchase intention, the impact of live streaming in building consumer trust in the product and seller on customer engagement, customer live streaming shopping usage motivation; the influence of consumer's uncertainty, perceived risk and information transparency on the purchase intention (Cai et al., 2018; Z. Chen et al., 2017; Lu & Chen, 2021; Park & Lin, 2020; Song & Liu, 2021a; Sun et al., 2019; Xu et al., 2021). In the meantime,

other research has conducted investigations on the importance of live streaming strategy adoption for online product sales (C.Chen et al., 2019), the consumers' attitudes toward internet celebrities, and their live streaming content (Park & Lin, 2020). However, very few investigators have concentrated on the consumer repurchase intention in live streaming shopping. The author thinks it is becoming increasingly important to study consumer repurchase intention in the live streaming commerce context, especially in China, because 46% of live streaming shopping Chinese consumers watch live streaming more than three times a week, and 23% of these consumers watch live streaming every day (Nilsen, 2020). It follows that how to retain existing customers amid fierce competition is a subject that live streaming sellers need to understand. We must raise trust, which has been seen as an essential influencing variable for retaining extant consumers for a long time (Daisy & Deqing, 2014; Gefen, 2000; Herrera & Blanco, 2011; Qureshi et al., 2009). Although Qian (2021) found that trust positively affects repurchase intention in live streaming shopping, the influence of live streaming platforms' trustworthiness on consumer repurchase intention is still unclear, which is an indispensable medium for interaction between sellers and consumers. Moreover, considering that trustworthiness is proved can be positively impacted by familiarity (Benedicktus et al., 2010). Familiarity may provide rapid entry, a sense of flow, immersion, and presence to the live streaming shopping audience; the author proposes that familiarity could influence the live streaming shopping platform's trustworthiness through the rapid entry, flow, immersion, and presence.

This study analyzes how the live streaming shopping platforms impacts customer repurchase intention through familiarity, rapid entry, flow, immersion, presence, and trustworthiness.

In addition, this study expects to make several theoretical and practical contributions to the live streaming commerce investigation. First, the author clarifies the importance of researching the consumer repurchase intention in live streaming commerce and examines the influence of the live streaming commerce platforms' trustworthiness on it, which extends the previous literature on this area while prior studies mainly identify the motivation of why consumers use or prefer live streaming (Cai et al., 2018; C. C. Chen & Lin, 2018) and how live streaming influences the purchase intention, consumer trust and customer engagement (Sun et al., 2019;

Wongkitrungrueng & Assarut, 2020). Next, the author adopts the concept of rapid entry developed by Siebert et al. (2020), which means the firms provide customers immediate access to their service in the initial service cycle in the sticky journey model, to the investigation of the live streaming shopping context and develops its measure scale which is tested reliable and valid.

Then, this study is a pioneer in studying the influence of live streaming platforms' trustworthiness on repurchase intention in live streaming shopping as far as the author is concerned. Knowing the impact would help live streaming shopping mechanisms to gain more customer stickiness, and the results can also be used as a reference for future research.

The remaining part of this study is divided into the following sections. The author performs a literature review of the current research, presents a research model, and discusses the associated constructs and hypotheses. The next part discusses the study methodology in further detail and defines the research place wherein empirical data was acquired. The author describes the statistical analysis and explains the findings in specific. Finally, the investigation contributions, deficiencies, and possible future paths were summarized.

2. LITERATURE REVIEW

2.1 Live streaming shopping

Live streaming shopping is defined as a development of e-commerce that combines real-time social interaction (S. Kim & Park, 2013) to offer audiences the opportunity to communicate with streamers like video chat applications while live streaming. This feature enables potential buyers to obtain answers to pressing queries and receive a complete view of the merchandise, enhancing the persuasiveness and effectiveness of promotional operations (Agency China, 2020). Eight reasons why consumers prefer live streaming shopping compared with traditional online shopping have been described by Cai et al. (2018): product demonstration and information, excitement about the freshness of live streaming, interaction, convenience, and promotion of the product, expecting other's perspective and deals. Furthermore, Cai and Wohn (2019) identified three distinct scenarios about motivations and behavioral intentions in the

live streaming commerce context: general watching, product search, and internet celebrity, and they found that a watching scenario and product search scenario, consumers seek for personal examinations could be substituted, in celebrity scenario audiences expect enjoyment of interaction and trendsetting related to all systems. In addition, live streaming shopping can positively influence purchase intention by reducing product uncertainty and increasing trust between streamers and audiences (Lu & Chen, 2021). Adopting a live streaming strategy increases online product sales volume by 21.8% (C. Chen et al., 2019). Live streaming is expected to take a leadership role in retailing's future growth (Qian, 2021). In the existing studies of live streaming commerce, several put their focus on consumer purchase intention or customer engagement in live streaming commerce. Wongkitrungrueng and Assarut (2020) demonstrated that customer engagement could be affected directly or indirectly by symbolic value via trust, and utilitarian and hedonic value can indirectly influence customer engagement through consumers' trust in products and sellers. Song and Liu (2021) found that the perceived risk negatively affects consumer purchase intention. The streamers' trustworthiness has a partial role in coordinating the link between perceived risk and purchase intention. However, as far as the author knows, no study has examined how live streaming shopping platform influences consumer repurchase intention in live streaming.

2.2 Live streaming shopping platform

A live streaming shopping platform is a sharing market, channel, or system that allows users to publish and live stream videos to viewers. Sellers upload videos on internet video platforms to generate leads, increase brand recognition, advertise, and offer paid real-time access streaming (Wilbert, n.d.). Live streaming shopping users are presented to many sellers and content generated by other users in real streaming video. They can communicate directly with streamers, watch other users' questions and comments, select the goods they want to buy, submit the order, and process the payment instantly (Wang & Wu, 2019). The structure of a live streaming shopping platform can be divided into two categories based on S. Kim and Park's (2013) research. The first one is that live streaming can be implemented into e-commerce platforms (S. Kim & Park, 2013) such as Amazon; Taobao, an online marketplace of

Alibaba Group (J. Zhang, 2021) which is an e-commerce platform in China; JD.com, an online retailer giant in China; Pinduoduo, a completely mobile-based marketplace that links millions of customers and merchants (Raghunath, 2021). The second one is that e-commerce platforms can be mixed into live streaming platforms (S. Kim & Park, 2013), such as Facebook; Live.me, and Douyin (TikTok) both are short video apps; Kuaishou, a leading company in short-form video and live streaming with 776 million monthly active users (Chitkara, 2021).

Nonetheless, in addition to the above two live streaming platform types, according to 36KR (2020), a different kind of live streaming shopping integrates with a shopping sharing community platform. For example, Mogujie, one of China's most extensive fashion-focused e-commerce services, also known as a Chinese version of Pinterest, and Xiaohongshu, a community of user-generated content that concentrates on international shopping experiences and with its development, the functions of e-commerce and live broadcast have been added (Millward Steven, 2012; Osawa, 2016; Xiaohongshu, n.d.). During 2015 and 2017, over 700 live streaming platforms had to compete for users in China (Ruether 2020). Still, just a few live streaming commerce platforms, which are Alibaba Group (Taobao), Kuaishou, Pinduoduo Inc., and Douyin (TikTok), mainly have occupied this market (Research and market, 2021). These studies and data show us a general situation of live streaming shopping platforms and the competitive situation of this industry. Still, they haven't guided the guidelines on developing the live streaming e-commerce platform to retain their consumers and inspire them to repeat the purchase.

2.3 Familiarity

Familiarity is an inevitable reality in life and arises from good communication between the customer and the producer; it can reflect the degree of the closeness of the relationship between them (Luhmann, 2000; Zaid, 2020). It also could be comprehended as the method that consumers use to decrease confusion and reduce complexity in their interaction with others (Gefen, 2000). In the context of live streaming shopping, the familiarity with the platform refers to the consumer's cognizance resulting from their previous interaction with the platform, such as learning how to start to use it and other processes in case of knowing it better (Gefen,

2000).

2.4 Rapid entry

In the research of Siebert et al. (2020), he analyses customer experience journeys from the perspective of loyalty loops and involvement spirals. It shows that in the smooth journey, firms provide decision support to customers to enroll them in loyalty loops during the initial service cycle and simplify over future service cycles, while in the sticky journey model, firms offer rapid entry in the initial service to customers to enroll them in involvement spirals (Siebert et al., 2020). These two journey models fit different categories of service; for example, the smooth journey model is more suitable for instrumental service, and sticky journey model is more appropriate for recreational service (Siebert et al., 2020). Rapid entry, defined as a quick access provided by firms to let customers get the service immediately in order to eliminate customer decision making, is a relevant principle because customers in this category search adventures based on impulsive urge (Siebert et al., 2020). The author of this study proposes that the sticky journey model is more fit for live streaming shopping because live streaming shopping customers seek entertainment which affects their buying behavior. Several extant investigations support this point, such as Park and Lin (2020) have proved hedonic attitude positively impacts intention to buy, C. H. Lee and Chen (2021) have found that perceived enjoyment is significantly associated with urge to buy impulsively and Qian (2021) has concluded perceived enjoyment has an evidential effect on repurchase intention. Hence, to study rapid entry into live streaming shopping environment, the author adopted its definition in the study of Siebert et al. (2020). Consumers can start to use live streaming shopping service immediately.

2.5 Flow

Flow is the state in which a participant is engrossed in an activity. The degree of concentration determines people's ability in real-time to filter out the perception of other irrelevant matters (Csikszentmihalyi, 1975). When the participant maintains concentrating and enjoying the activity, there is a flow state (Ghani & Deshpande, 1994). The research of flow in an online context is frequent. Such as investigations of

the impact of university students' flow experience on online shopping intention (Korzaan, 2003) and flow's effects on live-stream usage intention (C.-C. Chen & Lin, 2018). However, the impact of flow on customer repurchase intention in live streaming shopping has not been known.

2.6 Immersion

Immersion is a psychological state and represents the perception of being immersed by, included in, and interacting with a continuous stream of stimuli and experiences (Witmer & Singer, 1998). It is also defined as a sense of assuming as blocking out stimuli from their physical world environment (Biocca & Delaney, 1995). There have been numerous studies to investigate immersion in online context since it makes customers feel that the product that they see is authentic. In addition, it also has significant impact on media usefulness and enjoyment (K. M. Lee, 2004). According to Yim et al. (2017), immersion provides customers more pleasure in a virtual shopping environment. Moreover, previous research has shown that immersion is significantly connected with event viewing engagement on Facebook Live, Periscope, and Snapchat (Haimson & Tang, 2017). It significantly impacts customer purchase intention in live streaming shopping (Sun et al., 2019). However, it is still unclear whether immersion affects customer repurchase intention in live streaming shopping environment. Therefore, this study investigates the impact of immersion on customer repurchase intention in live streaming shopping.

2.7 Presence

Presence is the perception of immediacy and intimacy between customers and vendors, including telepresence and social presence (Ou et al., 2014). Telepresence represents the physical distance and social presence express the psychological distance (Ou et al., 2014). In the online shopping context, the former is defined as a feeling of shopping in a brick-and-mortar store and the latter (Shih, 1998). The latter is explained as a perception of closeness with vendors through human interaction, sensitivity, and warmth (Ou et al., 2014). There are various relevant findings from studies of telepresence and social presence. For example, telepresence is positively associated with attitudes (Klein, 2003), engagement (Mollen & Wilson, 2010), social presence has a positive impact on perceived fun (Su, 2019), and can impact visit intention mediating by destination trust (W. Zhang et al., 2021), both telepresence and social presence have positive influence on the autonomy and stickiness, thereby impact purchase intention (Gao et al., 2018). In addition, it has been tested that presence is positively connected with customer purchase intention in live streaming shopping (Sun et al., 2019). All these results indicate that presence, telepresence, and social presence could influence consumers' attitudes, and behaviors and satisfy their specific psychological needs.

2.8 Trustworthiness

Trustworthiness is the quality of being trusted by trustors (Kate, 2009). It can be strengthened by previous positive interactions between the trustor and trustees (Mayer et al., 1995). Most consumers chase novelty solutions that can offer unpredictable, charming, and trusty experiences due to the unique feature of services: intangible and invisible (Pavlou, 2003). Previous research on live streaming shopping related to trust and servals has significant findings. Wongkitrungrueng and Assarut (2020) brought forward that live streaming can impact customer trust in products and trust in vendor and influence directly and/or indirectly on customer engagement. Lu and Chen (2021) concluded that the customers' trust could affect customers' perceived product unfit uncertainty and product quality uncertainty and change the customer purchase intention. Park and Lin (2020) considered that source trustworthiness has an important influence on intention to buy, and perceived risk affects consumers' purchase intention negatively (Song & Liu, 2021a). As it can be recognized, previous research focused on consumers' trust in products and in sellers. The trustworthiness of live streaming shopping platforms has not been investigated. Since the interaction and the connection between consumers and sellers are transmitted by live streaming shopping platforms, the live streaming platforms' trustworthiness also deserves to be studied. In this study, the author will explain whether the trustworthiness will be influenced by familiarity, rapid entry, flow, immersion, and presence, and if it will affect customer repurchase intention in live streaming shopping.

2.9 Repurchase intention

Repurchase intention is recognized as one of the various dimensions of loyalty (S. S. Kim, 2009; Srinivasan et al., 2002) and it is regarded as the principal indication of allegiance because it represents the most significant direct guarantee of financial benefit, which is very attractive and financially feasible for online merchants (Oliver, 1999; Otim & Grover, 2006). In addition, according to the reasoned action theory, declared by Fishbein and Ajzen (1980), intention has become the most direct factor in the correlation between attitude and behavior, and it is a suitable way to predict customer behavior in the research (Y. Fang et al., 2014).

Live streaming shopping has exploded in popularity in recent years in China and started to emerge in the rest of the world. As live streaming commerce has grown the most, China will generate more than \$60 billion in sales in 2021 (Gregory, 2021). Wen et al. (2011) proposed it is essential to research online repurchase intention when most consumers have an online shopping experience, and the customer segment has advanced from initial adoption to post-adoption. Live streaming shopping corresponds to online shopping, and two-thirds of Chinese consumers said they had bought products via live streaming (AlixPartner, 2020). Lee et al. (2009) proved that every increase of 5% in customer retention could benefit the income increase from 25% to 75%; hence all the above findings show that it is valuable for the academic and live streaming shopping platform providers to study consumer repurchase intention. The previous studies concentrated on the factors that can influence the initial adoption of live streaming shopping; meanwhile, very little research has been made to investigate the repurchase intention in live streaming shopping. Although Qian (2021) found that consumers' live streaming shopping repurchase intention could be positively affected by customer satisfaction and perceived enjoyment, still exist research gaps waiting to be filled in by future investigators.

3. OBJECTIVES

3.1 General Objective

The purpose of this study is to examine how live streaming shopping platform impacts customer repurchase intention through familiarity, rapid entry, flow, immersion, presence, and trustworthiness.

3.2 Specific Objective

- (a) Assess the reliability and validity of new developed rapid entry scale and other scales used in this study.
- (b) Identify the relationships between familiarity, rapid entry, flow, immersion, presence, trustworthiness, and repurchase intention.

4. HYPOTHESES

4.1 Familiarity, rapid entry, flow, immersion, and presence

Familiarity may result from customers' efforts to gather information (Zaid, 2020). The consumers could be familiar with the product's usage, composition, and potential risks through experience, promotion, and other interactions (Yao & Li, 2009). In the competition between online retailers, more consumers are familiar with the brand, or the retailer obtain more advantages because these consumers may demonstrate a wide range of beneficial qualities (Edwards et al., 2009). Moreover, familiarity is a benefit to strengthen the feeling of ownership because when an individual has more information about an object, the closer they feel to it (Pierce et al., 2001) and prefer to engage and use the same brand repetitively (Acharya, 2021).

Familiarity could be a specific activity-based awareness derived from experience or knowing how to utilize the interface, reducing complexity (Gefen 2000) and helps consumers get the service they are looking for more rapidly. By contrast, if firms cannot provide consumers a rapid entry to their service, they may lose consumers' attention (Siebert et al., 2020). Therefore, this study proposes the following hypothesis:

H1: Familiarity can positively impact rapid entry in live streaming shopping.

Apart from this, Liu et al. (2016) found that perceived familiarity is positively associated with the flow because familiarity reduces uncertainty (Luhmann, 1979) and increases interactions (Liu et al., 2016). These interactions promote the purchase of products and make consumers feel self-efficacy (H. Zhang et al., 2014). Then they will involve, enjoy, and immerse themselves in the activities (Animesh et al., 2011; Pagani & Mirabello, 2011). Hence, a sense of flow emerges. Based on this, the author hypothesizes the following:

H2: Familiarity can positively impact flow in live streaming shopping.

According to Qin et al. (2009), familiarity is tested to be one of the dimensions of user immersion and is positively related with immersion in computer game narrative environment. Due to live streaming shopping and computer game narrative both are high human-computer interactions, the author proposes the following hypotheses:

H3: Familiarity can positively impact immersion in live streaming shopping.

In live streaming shopping, familiarity facilitates consumers' access to the service to get the product information as if they were in the local place of live streamers (Ou et

al., 2014). Then, the sense of telepresence generates. On the other hand, familiarity provides fast access but also enables interaction between customers, live streamers, and other viewers. This interaction leads to customer perception of social presence since they could feel that the person they are communicating with are real people (Sun et al., 2019). Owing to telepresence and social presence composed of presence (Ou et al., 2014), the author proposes the following hypothesis:

H4: Familiarity can positively impact presence in live streaming shopping

4.2 Rapid entry, flow, immersion, presence, and live streaming platforms' trustworthiness

Rapid entry provides consumers with faster access to live streamers who can attract them. When consumers find the live streamers attractive, perceived enjoyment is generated (C. H. Lee & Chen, 2021). Then, customer satisfaction and trust are also increased because perceived enjoyment can positively impact customer satisfaction and customer satisfaction can significantly affect trust (Qian, 2021). In addition, considering that live streamers can entertain customers by enhancing their shopping experience and making it pleasant, the hedonic value is produced (Jarvenpaa & Todd, 1997). Hence, the trust in products also appears as a result of the hedonic value has a positive influence on trust in products (Wongkitrungrueng & Assarut, 2020). Consequently, the author posits:

H5: Rapid entry can positively impact live streaming shopping platforms' trustworthiness in live streaming shopping.

The sense of flow is produced when customers are concentrating and enjoying in the activity (Ghani & Deshpande, 1994). Thus, its existence is more possible to generate more interactions. If these interactions are positive, they will promote trust (Lambe et al., 2000). In other words, the trustworthiness will be increased. Hence, the author proposes that:

H6: Flow can positively impact live streaming shopping platforms' trustworthiness in live streaming shopping.

Immersion helps consumers to understand better the value and benefit of the products that they are concerned about (J. Fang et al., 2018). Consumers can adjust their product expectations based on these and make their expectations at a relatively

realistic level. Then the utilitarian value can be increased. The augment of utilitarian value generates more customer trust in products and sellers (Wongkitrungrueng & Assarut, 2020). Since sellers and their products are presented to consumers through a live streaming shopping platform, the trustworthiness of the platform is affected when consumers' trust in sellers and products changes. Therefore, the hypothesis is proposed:

H7: Immersion can positively impact live streaming shopping platforms' trustworthiness in live streaming shopping.

Presence includes telepresence and social presence (Ou et al., 2014). The former helps consumers to get more product information as if they were in the live streamers' place (Ou et al., 2014), and the latter makes them chat with live streamers and other audiences in real time which enhances their perception that live streamers and other audiences are actual persons (Li, 2019). Therefore, presence can reduce consumers' uncertainty in products and sellers. Thus, leads to more trustworthiness. For this reason, the author hypothesizes the following:

H8: Presence can positively impact live streaming shopping platforms' trustworthiness in live streaming shopping.

4.3 Live streaming shopping platforms' trustworthiness and repurchase intention

Trustworthiness reflects the trustors' willingness to trust the trustee and the possibility of trustees obtaining trust (Akter et al., 2011; Chopra & Wallace, 2003; Rusman et al., 2007). According to S. X. Komiak and Benbasat (2004), various entities are composed of consumer trust in online commerce: firms, agents, products, and markets. As the focus of this study is on live streaming shopping platforms, the market entity will be examined. In addition, Qureshi et al. (2009) proposed that in the online repurchase context, it's necessary to keep evaluating the customers' trust in their repurchase behaviors because trust makes the connection between an individual's psychological state and the deliberate action of an organization (Opanayake & Sirisena, 2020). Consequently, the following hypothesis is proposed:

H9: Live streaming shopping platforms' trustworthiness can positively impact repurchase intention in live streaming shopping.

The research model is shown in Figure 1.

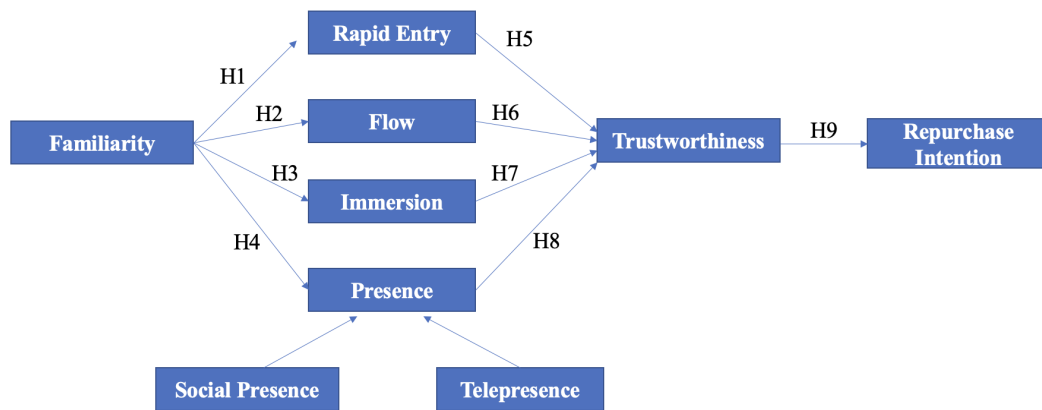


Figure 1. Research model

5. DATA COLLECTION AND METHODOLOGY

This study contains eight variables: familiarity, rapid entry, flow, immersion, social presence, telepresence, trustworthiness, and repurchase intention. Social presence and telepresence form a constructive variable of second order named presence (Sun et al., 2019). The author adopts the survey method and designs a questionnaire divided into two parts. The first part comprises seven items to measure the demographic information and the live streaming shopping habit of the participants, which are gender, age, education level, monthly income, live streaming shopping platform type, platform usage breadth, and purchase frequency. The second part consists of 33 self-report items, measured using a 7-point Likert Scale from 1 ‘strongly disagree’ to 7 ‘strongly agree.’ The respondents can answer these questions basing on their prior live streaming shopping experience. Most measurement scales adopted in the questionnaire are designed based on previous studies with minor adjustments to match this research context. The items of familiarity (FA) are adapted from Gefen (2000). The flow (FL) items are adapted from Liu et al. (2016). The immersion (IM) items are adapted from Witmer & Singer (1998). The items of social presence (SP) and telepresence (TP) are adapted from (Ou et al. (2014). The items of trustworthiness (TR) are adapted from Palvia (2009). The items of repurchase intention (RI) are adapted from Qian (2021). The items of rapid entry (RE) are developed by the author based on an analysis with experts. All the measurement items of this study are listed in Appendix A.

Due to the original questionnaire being devised in English, the author translated it to Chinese for participants' reading convenience. Then ten live streaming shopping consumers with more than one year of live streaming shopping experience were invited to see if the questionnaire could be understood easily and clearly. After gathering the opinions of these ten persons, it showed that this questionnaire didn't have ambiguity caused by translation, and the Chinese version of the questionnaire was very similar to what is expressed in English.

This questionnaire is distributed on the Wenjuanxing website (<https://www.wjx.cn/>), one of China's largest professional online survey websites. Wenjuanxing platform helped us randomly select and sent the questionnaire to the target sample of live streaming shopping consumers. Only the respondents with at least one live streaming shopping purchase experience could be authorized to continue filling out the questionnaire. To augment the validity of the questionnaire, one question (FA5), which has a semblable sentence structure, but opposite meaning to item FA3, was added to the construct of familiarity. The answer received is considered invalid if the respondent gives the score of questions F3 and F5 is less than or equal to 3 at the same time or greater than or equal to 5 at the same time. In addition, to ensure that respondents have filled out the questions carefully, those answers with a total answer time of fewer than 120 seconds are also considered invalid. A total of 476 valid questionnaires were collected from December 22, 2021, to January 31, 2022.

Table 1 displays the demographics data of this research's respondents. All the 476 respondents, 63.24% are female (n=301) and 34.87% are male (n=166). Most respondents are aged between 26-30 (n= 174, 36.55%), 19-25 (n= 126, 26.47%) or 31-40 (n= 100, 21.01%) and most of them have a bachelor's degree (n=301, 63.24%). Concerning about the monthly income, 36.76% of respondents' salary is 6001-10000 RMB (n=175). The most used live streaming shopping platform by respondents are Taobao (n=136, 28.57%), Douyin (n=109, 22.90%) and Kuaishou (n=69, 14.5%). 40.13% of respondents (n=191) use 2 live streaming shopping platforms and 24.16% (n=115) use 3 platforms. In terms of frequency of using live streaming shopping platform, 39.50% of the respondents (n=188) buy products through them 1-3 times per month and 26.26% (n=125) are purchase 1 time every two to three months.

Table 1. Demographic profile of respondents (N=476)

Items	Categories	N	Percent (%)	Cumulative Percent (%)
Gender	Male	166	34.87	34.87
	Female	301	63.24	98.11
	Transgender	4	0.84	98.95
	Decline to answer	5	1.05	100.00
Age	18 and under	12	2.52	2.52
	19-25	126	26.47	28.99
	26-30	174	36.55	65.55
	31-40	100	21.01	86.55
	41-50	49	10.29	96.85
	51 and over	15	3.15	100.00
Highest degree currently obtained	Elementary School	11	2.31	2.31
	Middle School	42	8.82	11.13
	High School/Junior High School	66	13.87	25.00
	Undergraduate / College	301	63.24	88.24
	Master	43	9.03	97.27
	Doctorate and above	13	2.73	100.00
Monthly income (RMB)	2000 and less	44	9.24	9.24
	2001-6000	109	22.90	32.14
	6001-10000	175	36.76	68.91
	10001-15000	90	18.91	87.82
	15001-20000	29	6.09	93.91
	20000 and more	29	6.09	100.00
The most used live streaming shopping platform is (single choice)	Taobao	136	28.57	28.57
	Kuaidou	69	14.50	43.07
	Douyin	109	22.90	65.97
	JD.com	58	12.18	78.15
	Xiaohongshu	34	7.14	85.29
	Pinduoduo	39	8.19	93.49
	Mogujie	10	2.10	95.59
	Yangmatou	13	2.73	98.32

	Suning	5	1.05	99.37
	Others	3	0.63	100.00
The number of live streaming shopping platforms you use regularly	1	86	18.07	18.07
	2	191	40.13	58.19
	3	115	24.16	82.35
	4	68	14.29	96.64
	5 and more	16	3.36	100.00
Frequency of using live streaming shopping platform	4 times a month and above	93	19.54	19.54
	1-3 times per month	188	39.50	59.03
	1 purchase every two to three months	125	26.26	85.29
	1 time every 3-4 months	43	9.03	94.33
	One time every six months	27	5.67	100.00

6. DATA ANALYSIS AND RESULTS

The author used SPSS23.0, Amos 26, and SmartPLS3.3.7 to analyze the data. SPSS tests average interitem correlations, exploratory factor, and average variance extracted (AVE). Amos is utilized to evaluate confirmatory factor analysis (CFA). SmartPLS is adopted to examine the results of reflective-formative high-order construct using the repeated indicator and the two-stage approach.

6.1 Dimensionality, reliability, and validity of rapid entry scale

Since rapid entry is a newly developed measurement scale, according to the suggestion of Slavec and Drnovšek (2012), its dimensionality, reliability, and construct validity are tested in this study.

To evaluate the dimensionality, average interitem correlations and exploratory factor analysis (EFA) are utilized (Slavec & Drnovšek, 2012). Table 2 shows that all the correlations are statistically significant at the 0.01 level. In addition, Table 3 shows the results of EFA analysis indicating that KMO is 0.782, which is above the limit suggested value of 0.5 (Hair et al., 2010), and Bartlett's Test of Sphericity is 0.0001,

which is very significant. Furthermore, the variables of the rapid entry factor explain 65.654% of the variance as described in Table 4.

Table 2. Rapid entry interitem correlations

		RE1	RE2	RE3	RE4
RE1	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	476			
RE2	Pearson Correlation	.634**	1		
	Sig. (2-tailed)	.000			
	N	476	476		
RE3	Pearson Correlation	.516**	.597**	1	
	Sig. (2-tailed)	.000	.000		
	N	476	476	476	
RE4	Pearson Correlation	.418**	.516**	.562**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	476	476	476	476

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

Table 3. KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.782
Bartlett's Test of Sphericity	Approx. Chi-Square	693.407
	df	6
	Sig.	.000

Table 4. Total variance explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.626	65.654	65.654	2.626	65.654	65.654
2	.614	15.355	81.010			
3	.415	10.364	91.374			
4	.345	8.626	100.000			

Extraction Method: Principal Component Analysis.

The reliability is assessed based on internal consistency analysis, and then Cronbach's coefficients alpha is tested. Table 5 shows that Cronbach's alpha is 0.824, higher than the minimum limit of 0.7 (Hair et al., 2010). In addition, according to Table 6, deleting the item won't improve Cronbach's Alpha. Hence, all four items are kept.

This measurement is reliable.

Table 5. Reliability statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.824	.825	4

Table 6. Cronbach's alpha if item deleted

	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
RE1	.620	.434	.790
RE2	.711	.525	.748
RE3	.678	.464	.764
RE4	.587	.368	.807

To test the rapid entry's construct validity, convergent validity is realized and assessed with confirmatory factor analysis (CFA) and average variance extracted (AVE). Table 7 shows the factor loadings of each item. All of them are significant ($p < 0.0001$), and the standard loadings are above 0.6 (Awang et al., 2015). Table 8 shows the AVE value is 0.542, which is higher than 0.5 (Slavec & Drnovšek, 2012), and the Composite Reliability (CR) is 0.825, which is above 0.7 (Hair Jr et al., 2020). Hence, the measurement is valid.

Table 7. Factor loadings

Factor	Indicator	Std. Estimate	<i>p</i>
RE	RE1	0.723	-
RE	RE2	0.826	0.00
RE	RE3	0.747	0.00
RE	RE4	0.649	0.00

Table 8. Average variance extracted (AVE) and Composite reliability (CR)

Factor	AVE	CR
RE	0.546	0.827

6.2 Measurement model

6.2.1 Factor loading

The researcher used exploratory factor analysis (EFA) to assess the dimensionality of the measure of this study. The result of EFA shows the homogeneity of items and main dimensions (Netemeyer et al., 2003). To get a more interpretable factor matrix, it adopted the Varimax with Kaiser Normalization rotation method, as shown in Table 9. All items in this study were kept because their factor loadings values are more than 0.5 (Hair et al., 2010).

Table 9. Rotated component matrix- Factor loadings

Rotated Component Matrix ^a								
	Component							
	1	2	3	4	5	6	7	8
FA1	0.783	0.102	0.124	0.131	0.166	0.186	0.196	0.168
FA2	0.782	0.105	0.141	0.128	0.084	0.174	0.241	0.166
FA3	0.761	0.100	0.138	0.179	0.149	0.207	0.155	0.131
FA4	0.808	0.093	0.081	0.141	0.059	0.237	0.205	0.138
RE1	0.371	0.152	0.093	0.043	-0.030	0.193	0.657	0.186
RE2	0.323	0.133	0.070	0.176	0.107	0.172	0.709	0.198
RE3	0.183	0.097	0.119	0.210	0.163	0.130	0.715	0.208
RE4	0.142	0.127	0.230	0.227	0.354	0.161	0.582	0.142
FL1	0.272	0.133	0.146	0.191	0.147	0.166	0.203	0.730
FL2	0.215	0.101	0.124	0.200	0.138	0.199	0.229	0.754
FL3	0.165	0.222	0.212	0.235	0.163	0.194	0.215	0.648
FL4	0.127	0.407	0.165	0.171	0.346	0.150	0.214	0.496
IM1	0.279	0.215	0.123	0.225	0.659	0.181	0.166	0.232
IM2	0.142	0.269	0.213	0.183	0.715	0.183	0.163	0.143
IM3	0.108	0.357	0.261	0.213	0.647	0.149	0.082	0.129
IM4	0.039	0.309	0.351	0.183	0.684	0.090	0.087	0.126
SP1	0.206	0.195	0.693	0.222	0.187	0.164	0.063	0.206
SP2	0.102	0.215	0.759	0.188	0.180	0.107	0.101	0.215
SP3	0.104	0.232	0.705	0.158	0.180	0.258	0.080	0.215
SP4	0.121	0.253	0.715	0.098	0.204	0.067	0.183	-0.066
TP1	0.172	0.770	0.216	0.169	0.303	0.104	0.085	0.138
TP2	0.073	0.764	0.209	0.215	0.241	0.123	0.151	0.160
TP3	0.108	0.718	0.261	0.219	0.235	0.183	0.126	0.136

TP4	0.118	0.650	0.376	0.220	0.189	0.157	0.134	0.120
TR1	0.198	0.168	0.217	0.659	0.159	0.170	0.229	0.180
TR2	0.146	0.236	0.154	0.735	0.153	0.159	0.168	0.222
TR3	0.164	0.190	0.151	0.729	0.240	0.195	0.100	0.181
TR4	0.160	0.208	0.192	0.717	0.169	0.213	0.143	0.117
RI1	0.302	0.139	0.141	0.227	0.104	0.717	0.122	0.162
RI2	0.240	0.109	0.084	0.201	0.122	0.743	0.130	0.212
RI3	0.220	0.105	0.193	0.170	0.126	0.747	0.189	0.135
RI4	0.209	0.275	0.218	0.132	0.269	0.585	0.240	0.101
Extraction Method: Principal Component Analysis.								
Rotation Method: Varimax with Kaiser Normalization.								
a. Rotation converged in 7 iterations.								

6.2.2 Indicator multicollinearity

Variance Inflation Factor (VIF) is used in this research to assess the multicollinearity in the indicators. It can represent insufficiency of orthogonality among indicators (Alin, 2010). Table 10 shows that all the indicators have VIF value closing to 3 and according to Hair et al. (2014), VIF values of 4 and above may indicate multicollinearity issue. Thus, the VIF level in this study is acceptable.

Table 10. Variance inflation factor (VIF) for indicators

Indicator	VIF	Indicator	VIF
FA1	2.661	RI1	2.288
FA2	2.849	RI2	2.212
FA3	2.360	RI3	2.199
FA4	3.009	RI4	1.841
FL1	2.340	SP1	2.148
FL2	2.366	SP2	2.404
FL3	2.110	SP3	2.154
FL4	1.815	SP4	1.691
IM1	2.098	TP1	3.085
IM2	2.507	TP2	2.833
IM3	2.299	TP3	2.693
IM4	2.277	TP4	2.255
RE1	1.767	TR1	2.027
RE2	2.104	TR2	2.399
RE3	1.865	TR3	2.353
RE4	1.584	TR4	2.186

6.2.3 Reliability

Cronbach's alpha and Composite Reliability (CR) are utilized to assess the reliability of the model. Table 11 presents that Cronbach's alpha ranged from 0.825 to 0.907, and CR ranged from 0.884 to 0.935. Both are above 0.7, the required value recommended by Hair Jr et al. (2020). Hence, construct reliability is tested.

Table 11. Cronbach's alpha and Composite reliability

	Cronbach's Alpha	Composite Reliability
FA	0.907	0.935
FL	0.865	0.908
IM	0.878	0.916
RE	0.825	0.884
RI	0.863	0.907
SP	0.862	0.906
TP	0.903	0.932
TR	0.877	0.915

6.2.4 Validity

The researcher uses convergent validity and discriminant validity to test the construct validity.

6.2.4.1 Convergent validity

The average variance extracted (AVE) is utilized for testing convergent validity. All the AVE values ranged from 0.656 to 0.782, which satisfy the required threshold of 0.5 (Hair et al., 2019). Hence, the construct validity is acceptable.

Table 12. Average variance extracted (AVE)

	Average Variance Extracted (AVE)
FA	0.782
FL	0.712
IM	0.732
RE	0.656
RI	0.709
SP	0.707

TP	0.774
TR	0.730

6.2.4.2 Discriminant Validity

Fornell-Larcker Criterion, cross loadings and Heterotrait- Monotrait Ratio of correlation (HTMT) are 3 methods can be used to evaluate discriminant validity (Janadari et al., 2016). Table 13 shows the square roots of AVE are greater than the highest correlation coefficient of each latent variable. Hence, discriminant validity can be confirmed (Hair et al., 2013). Table 14 shows loadings for indicators in each component are greater than the cross loadings. Hence, discriminant validity can be confirmed (Chin, 1998). Table 15 shows the HTMT values ranged from 0.467 to 0.779 which are lower than the threshold value of 0.85, suggested by Henseler et al. (2015). Hence, discriminant validity is evidenced.

Table 13. Fornell-Larcker criterion

	FA	FL	IM	RE	RI	SP	TP	TR
FA	0.884							
FL	0.572	0.844						
IM	0.470	0.628	0.856					
RE	0.645	0.658	0.546	0.810				
RI	0.628	0.615	0.568	0.601	0.842			
SP	0.447	0.572	0.656	0.488	0.547	0.841		
TP	0.423	0.603	0.731	0.505	0.540	0.677	0.880	
TR	0.517	0.646	0.637	0.581	0.613	0.585	0.624	0.854

Table 14. Cross Loading

	FA	FL	IM	RE	RI	SP	TP	TR
FA1	0.886	0.518	0.449	0.579	0.554	0.410	0.388	0.461
FA2	0.890	0.516	0.398	0.589	0.543	0.405	0.373	0.448
FA3	0.864	0.499	0.435	0.547	0.558	0.408	0.387	0.475
FA4	0.895	0.488	0.375	0.565	0.566	0.356	0.347	0.441
FL1	0.524	0.858	0.488	0.565	0.516	0.455	0.460	0.529
FL2	0.496	0.859	0.480	0.563	0.519	0.436	0.426	0.528
FL3	0.473	0.851	0.528	0.557	0.532	0.515	0.522	0.569
FL4	0.435	0.806	0.627	0.535	0.51	0.526	0.632	0.555
IM1	0.503	0.597	0.853	0.532	0.534	0.514	0.583	0.576
IM2	0.408	0.530	0.877	0.49	0.502	0.564	0.627	0.539
IM3	0.363	0.514	0.855	0.427	0.472	0.576	0.662	0.545

IM4	0.310	0.497	0.837	0.401	0.422	0.601	0.640	0.512
RE1	0.556	0.485	0.338	0.788	0.470	0.339	0.341	0.381
RE2	0.577	0.551	0.436	0.856	0.509	0.373	0.397	0.488
RE3	0.484	0.535	0.443	0.823	0.458	0.389	0.406	0.480
RE4	0.470	0.559	0.547	0.771	0.507	0.481	0.489	0.531
RI1	0.561	0.518	0.456	0.499	0.859	0.450	0.440	0.531
RI2	0.521	0.514	0.440	0.484	0.843	0.413	0.403	0.503
RI3	0.518	0.503	0.453	0.500	0.854	0.464	0.419	0.506
RI4	0.514	0.537	0.561	0.538	0.812	0.515	0.555	0.522
SP1	0.433	0.516	0.572	0.429	0.498	0.860	0.577	0.534
SP2	0.361	0.506	0.558	0.419	0.440	0.872	0.581	0.504
SP3	0.380	0.524	0.574	0.418	0.520	0.857	0.591	0.513
SP4	0.318	0.357	0.496	0.371	0.366	0.770	0.528	0.401
TP1	0.392	0.532	0.675	0.430	0.458	0.582	0.896	0.534
TP2	0.341	0.538	0.637	0.448	0.456	0.573	0.881	0.549
TP3	0.376	0.531	0.647	0.452	0.498	0.594	0.887	0.561
TP4	0.380	0.521	0.615	0.446	0.489	0.634	0.856	0.554
TR1	0.469	0.556	0.531	0.535	0.526	0.514	0.520	0.834
TR2	0.433	0.574	0.544	0.501	0.515	0.492	0.551	0.871
TR3	0.432	0.559	0.568	0.468	0.525	0.488	0.532	0.866
TR4	0.431	0.520	0.534	0.482	0.528	0.503	0.532	0.845

Table 15. Heterotrait- Monotrait Ratio of correlation (HTMT)

	FA	FL	IM	RE	RI	SP	TP	TR
FA								
FL	0.645							
IM	0.517	0.718						
RE	0.745	0.779	0.634					
RI	0.710	0.712	0.646	0.711				
SP	0.501	0.657	0.756	0.578	0.628			
TP	0.467	0.684	0.824	0.584	0.611	0.768		
TR	0.579	0.743	0.723	0.682	0.704	0.668	0.702	

6.2.5 Construct validity of Higher Order Construct

In this research, presence is a higher-order construct formed by Social Presence and Telepresence. Table 16 shows the higher-order construct validity Outer Weights, Outer Loading, and VIF. Outer Weights ranging from 0.510 to 0.581 are not close to 0. Hence, they are significant (Hair et al., 2019). Outer Loadings are above the minimum value of 0.5 (Sarstedt et al., 2019). In addition, VIF is lower than 3.0, and multicollinearity is probably not an issue (Hair Jr et al., 2020).

Table 16. Construct validity of higher-order construct

HO C	LOC	Outer Weights	T Statistics	P Value	Outer Loading	VIF
PR	SP	0.510	6.248	0.000	0.904	1.848
	TP	0.581	7.200	0.000	0.927	1.848

6.3 Structure model

The author follows Sarstedt et al. (2019) by using SmartPLS to calculate path coefficient, T value, P-value, and R square to assess the structure model.

6.3.1 Hypotheses testing

First, the impact of familiarity on rapid entry, flow, immersion, and presence is evaluated.

H1: Familiarity can positively impact rapid entry in live streaming shopping.

H1 assesses whether familiarity can impact rapid entry in live streaming shopping.

The result shows that familiarity impacts rapid entry ($\beta = 0.645, t = 0.646, \rho < 0.001$). Thus, H1 is supported.

H2: Familiarity can positively impact flow in live streaming shopping.

H2 assesses whether familiarity can impact flow in live streaming shopping. The

result shows that familiarity impacts rapid entry ($\beta = 0.572, t = 0.573, \rho < 0.001$). Thus, H2 is supported.

H3: Familiarity can positively impact immersion in live streaming shopping.

H3 assesses whether familiarity can impact immersion in live streaming shopping.

The result shows that familiarity impacts rapid entry ($\beta = 0.469, t = 0.471, \rho < 0.001$). Thus, H3 is supported.

H4: Familiarity can positively impact presence in live streaming shopping.

H4 assesses whether familiarity can impact presence in live streaming shopping. The

result shows that familiarity affects rapid entry ($\beta = 0.474, t = 0.477, \rho < 0.001$). Thus, H4 is supported.

Then the researcher tests the effects of rapid entry, flow, immersion, and presence on trustworthiness.

H5: Rapid entry can positively impact live streaming shopping platforms'

trustworthiness in live streaming shopping.

H5 assesses whether rapid entry can impact trustworthiness in live streaming shopping. The result shows that rapid entry impacts trustworthiness ($\beta = 0.175, t = 0.175, \rho \leq 0.005$). Thus, H5 is supported.

H6: Flow can positively impact live streaming shopping platforms' trustworthiness in live streaming shopping.

H6 assesses whether the flow can impact trustworthiness in live streaming shopping. The result shows that flow impacts trustworthiness ($\beta = 0.241, t = 0.240, \rho < 0.001$). Thus, H6 is supported.

H7: Immersion can positively impact live streaming shopping platforms' trustworthiness in live streaming shopping.

H7 assesses whether immersion can impact trustworthiness in live streaming shopping. The result shows that immersion affects trustworthiness ($\beta = 0.183, t = 0.180, \rho \leq 0.005$). Thus, H7 is supported.

H8: Presence can positively impact live streaming shopping platforms' trustworthiness in live streaming shopping.

H8 assesses whether presence can impact trustworthiness in live streaming shopping. The result shows that presence impacts trustworthiness ($\beta = 0.272, t = 0.277, \rho < 0.001$). Thus, H8 is supported.

Finally, trustworthiness's impact on repurchase intention is tested.

H9: Live streaming shopping platforms' trustworthiness can positively impact repurchase intention in live streaming shopping.

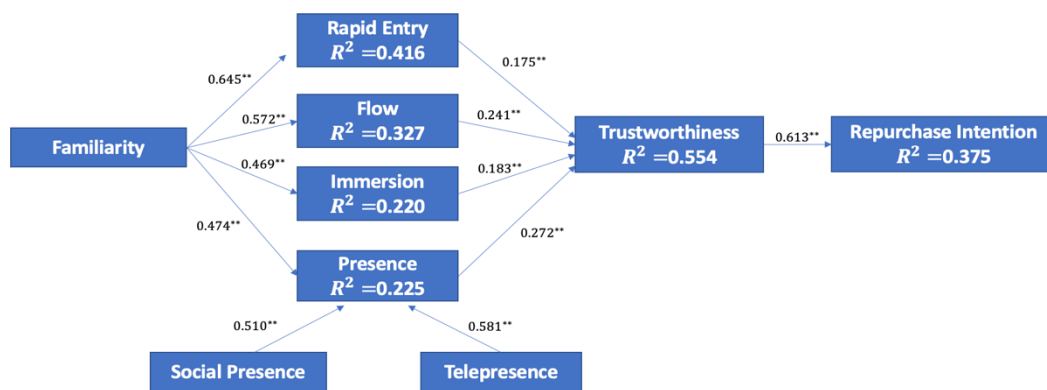
H9 assesses whether trustworthiness can impact repurchase intention in live streaming shopping. The result shows that trustworthiness impacts repurchase intention ($\beta = 0.613, t = 0.613, \rho < 0.001$). Thus, H9 is supported. This result shows that trustworthiness has a significant impact on repurchase intention.

Table 17. Path coefficient

	Original Sample (O)	Sample Mean (M)	P Values
FA -> FL	0.572	0.571	0.000
FA -> IM	0.469	0.467	0.000
FA -> PR	0.474	0.474	0.000
FA -> RE	0.645	0.645	0.000

FL -> TR	0.241	0.240	0.000
IM -> TR	0.183	0.185	0.005
PR -> TR	0.272	0.273	0.000
RE -> TR	0.175	0.174	0.005
TR -> RI	0.613	0.610	0.000

R-square of repurchase intention is 0.375, revealing that trustworthiness can explain about 37.5% of repurchase intention. R-square of trustworthiness is 0.554, indicating that about 55.4% of trustworthiness can be explained by rapid entry, flow, immersion, and presence. Among rapid entry, flow, immersion, and presence, 41.6% of rapid entry can be explained by familiarity while others may exist other factors which can influence the latter three besides familiarity.



Note: **: $p < 0.01$

Figure 2. Model testing results

6.3.2 Mediation analysis

Mediation analysis was run to evaluate the mediating role of rapid entry, flow, immersion, and presence between familiarity and trustworthiness. The results are shown in Table 18. Rapid entry mediates the impacts of familiarity on trustworthiness ($\beta = 0.113$, $t = 0.112$, $\rho < 0.01$). Flow mediates the effects of familiarity on trustworthiness ($\beta = 0.138$, $t = 0.137$, $\rho < 0.005$). Immersion mediates the impacts of familiarity on trustworthiness ($\beta = 0.086$, $t = 0.087$, $\rho < 0.01$). Presence mediates the impacts of familiarity on trustworthiness ($\beta = 0.129$, $t = 0.129$, $\rho < 0.001$).

The mediation role of rapid entry, flow, immersion, presence, and trustworthiness between familiarity and repurchase intention is also verified. Table 18 shows the results. Rapid entry and trustworthiness mediate the impacts of familiarity on

repurchase intention ($\beta = 0.069, t = 0.068, \rho < 0.01$). Flow and trustworthiness mediate the impacts of familiarity on repurchase intention ($\beta = 0.085, t = 0.084, \rho < 0.01$). Immersion and trustworthiness mediate the impacts of familiarity on repurchase intention ($\beta = 0.053, t = 0.053, \rho < 0.05$). Presence and trustworthiness mediate the impacts of familiarity on repurchase intention ($\beta = 0.079, t = 0.079, \rho < 0.001$).

Table 18. Specific indirect effect

	Original Sample (O)	Sample Mean (M)	P Values
FA -> RE -> TR	0.113	0.112	0.006
FA -> FL -> TR	0.138	0.137	0.001
FA -> IM -> TR	0.086	0.087	0.008
FA -> PR -> TR	0.129	0.129	0.000
FA -> RE -> TR -> RI	0.069	0.068	0.008
FA -> FL -> TR -> RI	0.085	0.084	0.002
FA -> IM -> TR -> RI	0.053	0.053	0.011
FA -> PR -> TR -> RI	0.079	0.079	0.000

7. CONCLUSIONS

This study aimed to investigate how live streaming shopping platforms impact customer repurchase intention. To achieve this goal, a research model that included familiarity, rapid entry, flow, immersion, presence, trustworthiness, and repurchase intention was developed. This research shows that familiarity can significantly impact rapid entry, flow, immersion, and presence. Furthermore, rapid entry, flow, immersion, and presence greatly influence live streaming platforms' trustworthiness, and the latter has a considerable effect on customer repurchase intention. In addition, new developed rapid entry scale is tested as reliable and valid.

8. IMPLICATIONS

8.1 Theoretical implication

Firstly, this paper introduced live shopping platforms into the field of live shopping research, where most of the attention has been focused on consumers and sellers in

previous studies. This provides a new perspective for future research and fills the current research gap.

Next, the author adopted a rapid entry construct to the live shopping context study, created and confirmed its measurement was reliable and valid. Future researchers could utilize this measurement to investigate rapid entry construct in their studies.

8.2 Practical implication

Firstly, this study shows that familiarity can significantly impact rapid entry, flow, immersion, and presence. Therefore, vendors and providers of live streaming shopping platforms should consider the argument of customers' familiarity to make their consumers get rapid entry to the service and generate a sense of flow, immersion, and presence. For example, they can simplify the registration and provide simple tips to help new users to start and offer a personalized user experience while avoiding apparent modifications to complicate customers' use.

Secondly, since rapid entry, flow, immersion, and presence can mediate the impact between familiarity and trustworthiness, the live streaming shopping platform provider should design and launch platforms that can provide rapid entry, such as simply registration, visitor access, and quick view of context recommended according to the customers' interest; a sense of flow, for example, design practical and appealing interactive function; a sense of immersion, for instance, improve live streaming quality to make it looks more attractive and strengthen customers' attention; a sense of presence including facility of communication between customer and streamer, the stable transmission of live streaming, etc.

Finally, this study shows live streaming shopping platforms' trustworthiness has a significant impact on customer repurchase intention, which suggests live streaming platform providers should take measures to obtain more customer trustworthiness of their platforms to support vendors get more customers to repurchase intention and make sales.

9. LIMITATIONS AND FUTURE RESEARCH

This study has several limitations. On the one hand, live streaming shopping platforms were taken entirely in this study. However, each platform has its characteristics, such as Douyin (Tiktok), primarily used for entertainment, while Taobao is a professional shopping platform. These features may lead to different levels of customers trustworthiness. More work will need to investigate the relationship between live streaming shopping platforms' features and trustworthiness. On the other hand, the sample for this survey was collected in China, where the development of live shopping is more mature compared to other countries. If a similar study was done in other countries, the results might differ because people's thoughts may vary in the industry's development. Future studies could be conducted in multiple countries to obtain more generalized findings. Finally, in the future, the rapid entry scale used in this study could be analyzed through an exhaustive process recommended for these cases.

APPENDIX A

Construct	Item	Question	Reference
Familiarity (FA)	FA1	I am familiar with searching products and/or service on live streaming shopping platform	(Gefen, 2000)
	FA2	I am familiar with buying products and/or service on live streaming shopping platform	
	FA3	I am familiar with live streaming shopping platform	
	FA4	I am familiar with the processes of purchasing products and/or service live streaming shopping platform	
Rapid Entry (RE)	RE1	The live streaming shopping platform allows me to access quickly.	(Developed by the author)
	RE2	The live streaming shopping platform gives me all the support I need to access the service provided	
	RE3	The live streaming shopping platform is designed for quick access	
	RE4	The live streaming shopping platform has everything solved and resolved for me to easily access the service	
Flow (FL)	FL1	It is fun to interact through live streaming shopping platform	(Liu et al., 2016)
	FL2	The interaction on live streaming shopping platform is interesting	
	FL3	When shopping on live streaming shopping platform, I feel the excitement of exploring	
	FL4	I am absorbed when shopping on live streaming shopping platform	
Immersion (IM)	IM1	Do you easily become deeply involved in live streaming shopping platform?	(Witmer & Singer, 1998)
	IM2	Do you ever become so involved in the live streaming shopping that people have problems getting your attention?	
	IM3	How good are you at blocking out external distractions when you are involved in live streaming shopping platform?	
	IM4	Do you ever become so involved in a live streaming shopping platform that you are not aware of things happening around you?	

Social Presence (SP)	SP1	There is a sense of human contact in live streaming shopping platform	(Ou et al., 2014)
	SP2	There is a sense of personalness in live streaming shopping platform	
	SP3	There is human warmth in live streaming shopping platform	
	SP4	There is a sense of human sensitivity in live streaming shopping platform	
Telepresence (TP)	TE1	When watching live streaming shopping via live streaming shopping platform, my body was in the room, but I felt my mind was inside the world created by this Streamers	(Ou et al., 2014)
	TE2	When watching Live streaming shopping through live streaming shopping platform, I felt that I was immersed in the world this Streamers had created	
	TE3	This live streaming shopping platform-generated world seemed to me to be “somewhere I visited” rather than “something I saw”	
	TE4	I felt I was more in the “real world” than the “computer world” when I was watching live streaming shopping on live streaming shopping platform	
Trustworthiness (TR)	TR1	I like to trust live streaming shopping platform	(Palvia, 2009)
	TR2	I find live streaming shopping platform trustworthy	
	TR3	I like the reliability of live streaming shopping platform	
	TR4	I value the trustworthy characteristics of live streaming shopping platform	
Repurchase Intention (RI)	RI1	I intend to continue purchasing in live streaming shopping platform rather than discontinue its use	(Qian, 2021)
	RI2	If I were to buy something, I would consider buying it from live streaming shopping platform	
	RI3	I expect repurchase from live streaming shopping in the future	
	RI4	I intend to recommend live streaming shopping platform to other people around me	

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