

Effect of Interaction Stimuli in Live Streaming Social Commerce on Consumer Shopping Intention: A Conceptual Study

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Abstract

The growing area of live streaming social commerce (LSSC) has significantly affected consumer buying behaviors, highlighting interaction stimuli as a key factor in this change. These interactions, which set LSSC apart from traditional online shopping methods, are recognized as essential but not well-studied elements that motivate consumer engagement and decision-making. The importance of this research lies in its aim to clarify the effect of interaction stimuli in LSSC on consumer shopping intentions, underlining the importance of examining the detailed effects of interaction that go beyond traditional insights. This study applies the Stimulus-Organism-Response (S-O-R) model and Trust Transfer Theory to explore the effect of different types of interaction (anchor-to-consumer, consumer-to-consumer, and machine-to-consumer) on consumers' emotional and cognitive states. These interactions are further divided into informational and emotional interactions (anchor-to-consumer and consumer-to-consumer) and perceived control, response, and personalization (machine-to-consumer). The research investigates the effect of these specific types of interaction on flow experience and trust, which are crucial in forming shopping intentions. Preliminary findings indicate that the detailed interaction environment offered by LSSC has a significant effect on trust and flow experiences among consumers, positively affecting their shopping intentions. A key element is the development of a positive trust environment, supported by the Trust Transfer Theory, where trust in the anchor, other consumers, and the machine collectively enhances product trust within the LSSC ecosystem. The expected contribution of this research is twofold. Academically, it lays a foundation for future empirical studies by setting a detailed research agenda that tests the proposed hypotheses and examines further dimensions of interaction stimuli that could have an effect on consumer behavior in digital marketplaces. Practically, the results offer actionable insights for refining interaction strategies on LSSC platforms, boosting consumer engagement, and fostering growth in the digital economy.

Keywords: LSSC Interaction, Shopping Intention, Flow Experience, Trust in Products, Trust in Anchor, Trust in Other Consumers, Trust in Machine

Introduction

With the emergence of live streaming social commerce (LSSC), a prominent new trend in the competitive realm of digital marketing has become apparent (Wongkitrungrueng et al., 2020). The advancement of mobile internet and the rollout of 5G technology are set to spotlight live streaming, merging real-time interaction, entertainment, and commerce in an exciting way (Liu & Zhang, 2023). This innovative "Live+Social+Shopping" model is more direct, immersive, and tailored to consumer needs compared to traditional online shopping models, thus drawing in numerous consumers (Sun et al., 2020). LSSC has gained immense popularity and proven to be a crucial element in affecting shopping behavior and driving the growth of social commerce sales, marking the emergence of a new cultural phenomenon in consumer purchasing (Ma, 2021).

The 52nd Statistical Report on China's Internet Development indicates that as of June 2023, the user base of LSSC in China had reached 526 million, an increase of 11.94 million from the end of 2022, accounting for 48.8% of the total netizens. A survey conducted in China by iResearch (2021) revealed that LSSC order users constituted 66.2% of users who watched live streaming, and nearly two-thirds of users had watched live streaming and then made purchases. In 2022, some of China's leading brands generated billions of RMB in revenue through LSSC (Bu et al., 2023).

In summary, increasing Chinese consumers prefer purchasing goods and services through LSSC platforms, making LSSC a favored route for retailers seeking to boost sales and reduce inventory (Liu & Liu, 2021).

Diverging from traditional online shopping methods, LSSC merges the allure of live streaming with the ease of digital purchases, establishing a vibrant, interactive platform for customers (Kuzminov, 2023). This greatly enhances customer participation and the overall shopping experience through real-time interaction (Li et al., 2022). LSSC has transformed shopping from a traditionally passive activity into an active social activity, thanks to the use of interactive features (Xu et al., 2020; Xue et al., 2020). These elements range from direct interactions between anchors and consumers to interactions among consumers, and even engagements facilitated by advanced platform technologies and algorithms (Xue et al., 2020). This added dimension of dynamic interactivity gives live streaming an incredible boost in consumer engagement and impacts shopping behavior by establishing a community, immediacy, and personal connection to the product being showcased (Zhang et al., 2020).

LSSC enables high-quality consumer interactions, and its accessibility through the internet, without technical constraints, allows anyone to engage with platforms Wang (2019) easily. However, as the LSSC landscape becomes more crowded with merchants, the level of competition escalates (Qian, 2021). To stay profitable, especially with the anticipated release of China's demographic dividend, merchants need a thorough understanding of the consumer experience and shopping behaviors within LSSC settings (Qian, 2021). As the number of merchants, platforms, and practitioners grows, the LSSC sector in China is nearing saturation, signaling a slowdown in overall growth rates and marking the onset of an era where competition for consumer attention intensifies (Wu & Huang, 2023). In this environment, influencing consumer purchase intentions becomes crucial for the sustainability of LSSC operations (Chen et al., 2022).

According to Sun et al (2020), effectively utilizing LSSC services to boost customer shopping intentions is essential for achieving a competitive advantage. The primary challenge for every merchant or platform now revolves around optimizing LSSC to meet consumer psychology and enhance shopping intentions (Guo et al., 2022). Consequently, studying consumer behavior within LSSC holds significant practical relevance. Recognizing its importance, major Chinese internet corporations like Alibaba and Tencent have advocated for a scholarly investigation into this trend (Aliresearch, 2020).

Although the commercial phenomenon of LSSC is becoming more common in the industry and transforming the shopping experience, research on LSSC in China is still in its infancy (Guo et al., 2022). Research on the effects of interaction stimuli remains limited (Zhou, 2020). Current research has focused on the general effect of LSSC on consumer engagement and sales outcomes and less on distinguishing how different types of interactions, such as anchor-to-consumer, consumer-to-consumer, and machine-to-consumer, affect consumer behavior and shopping intentions (Xue et al., 2020). This research gap highlights the need for a detailed study of these interactions' nuanced role in LSSC environments.

Moreover, interaction stimuli extend beyond mere participation (Xue et al., 2020). Interaction elements can also significantly influence the consumer's perception of the shopping experience, thereby impacting their purchasing intentions (Hewei & Youngsook, 2022). For instance, interactions from the anchor to the consumer can cultivate a sense of authenticity and trust, thereby increasing the likelihood of purchases (Zhu et al., 2021). Interactions among consumers, like comments and reactions during an LSSC session, can create a sense of community and recognition, which in turn can influence buying decisions (Lee & Chen, 2021). Additionally, machine-to-consumer interactions enhance the shopping experience by providing timely and accurate feedback and simplifying the control of actions, thereby boosting trust and the overall experience, which further affects purchase decisions (Zhou, 2020).

Therefore, in this context, the main objectives of this study are to:

- i. To investigate the effect of Anchor-to-Consumer, Consumer-to-Consumer, and Machine-to-Consumer interaction in LSSC on consumer shopping intentions.
- ii. To investigate the effect of trust and flow experience in mediating the LSSC and response behavior of shopping intention.

This study aims to thoroughly examine the effects of interaction stimuli in LSSC environments on consumers' decision-making processes. It seeks to identify how these stimuli affect consumer choices and to develop and implement effective strategies for LSSC interaction stimuli that enhance consumers' intention to purchase.

Literature Review

LSSC and Taobao LSSC

LSSC represents a novel category within social commerce, distinguished by its ability to facilitate real-time social interactions between consumers and merchants (Xu et al., 2020). Given its vast market potential, numerous merchants are adopting live streaming to engage prospective customers (Wongkitrungrueng et al., 2020). Dong et al (2023) noted that most consumers now prefer viewing product presentations by anchors on LSSC platforms before making purchases. This preference has significantly altered consumer shopping behaviors and experiences (Iresearch, 2022).

LSSC enjoys immense popularity in China, prompting many traditional e-commerce and short video platforms to incorporate LSSC features (Yu et al., 2021; Li et al., 2021; Liao et al., 2022). For example, Taobao, Alibaba's largest online shopping platform, launched its LSSC feature in 2016, marking one of China's initial forays into this arena (Ma, 2022). A notable event that year on the Taobao LSSC platform was a ten-hour live sales marathon, which garnered significant attention for its innovative approach and commercial success, heralding the rise of LSSC in China (Young, 2020). Today, Taobao Live has transitioned from being an optional feature to a standard expectation for merchants on the platform, demonstrating its entrenched status. Using LSSC to sell agricultural products has even become a means for farmers to escape poverty (Chou, 2019). This success explains the growing interest in LSSC among online shopping platforms. While Taobao continues to lead in the competitive LSSC space, the industry is witnessing increasing competition (Yiqi & Zhe, 2021).

LSSC interaction

Xue et al (2020) categorized LSSC interactions into three levels: anchor-to-consumer, consumer-to-consumer, and machine-to-consumer. Their findings suggest that these interactions facilitate product discovery, enhance consumers' risk assessment capabilities, and reduce the psychological distance from unknown sellers, thereby fostering greater consumer engagement.

A2C Interaction

Xue et al (2020) identified the interaction between anchors and consumers during live sessions as a critical factor in LSSC's success. This interaction helps consumers mitigate uncertainties about product fit by relating to the anchor's physical and value similarities, positively influencing their intent to purchase within the LSSC environment (Lu & Chen, 2021). Park and Lin (2020) emphasized that the match between "web celebrity" anchors and LSSC products affects consumers' purchase intentions. Zhu et al (2021) found that an anchor's physical attractiveness, social appeal, and expertise during LSSC significantly encourage consumers to heed their recommendations and promote them to others. Xue et al (2020) also identified personalization, responsiveness, and entertainment as stimulating factors for anchor-to-consumer interaction.

Most previous studies on the effects of anchors' interactions with consumers have been biased towards the characteristics of anchors, overlooking the diversity in features and personalities of the anchors themselves, and emphasizing only the "spokesperson" characteristics of anchors (Chan et al., 2022). Although the results of the above studies show that anchors have some effect on stimulating consumers' behavior, there is a need for more detailed and quantitative research to thoroughly explore these dynamics (Yu et al., 2021).

C2C Interaction

Xue et al (2020) highlight the mutual benefits of consumers sharing insights and experiences among themselves, emphasizing the reciprocal nature of these interactions. Zhou (2020) expands on this by noting that interactions between consumers also provide emotional support, such as attention, care, and encouragement, in addition to exchanging information. Furthermore, CASS (2022) reveals that LSSC fosters dynamic and enriched connections between consumers, offering potential buyers access to a broader spectrum of information. The LSSC platform employs various strategies to enhance the emotional connection between anchors and consumers, increasing engagement and immersion (Dong et al., 2023). These

methods are designed to create a more engaging interactive experience that encourages consumers to actively participate in the LSSC, stimulating their emotions and aiding them in making more informed decisions (Chang et al., 2021; Li & Han, 2021).

However, few studies have addressed the impact of interpersonal stimuli on potential consumers in terms of both informational and emotional interactions (Zhou, 2020). Thus, providing rich informational and emotional interactions in consumer-to-consumer dynamics is a crucial area of focus.

M2C Interaction

The entire process of a consumer using an LSSC platform to watch and shop involves machine-to-consumer interaction (Youn & Jin, 2021). Past research has highlighted that perceived response, perceived personalization (Kang et al., 2021), and perceived control (Xue et al., 2020) are significant factors in these interactions (Zhou, 2020). In the context of LSSC studies, the term 'machine' refers to the live streaming platform used (Li et al., 2020). As technology advances, platforms increasingly utilize big data and artificial intelligence to anticipate the implicit needs of consumers, thereby enhancing the perceived ease of operation (Kaczorowska, 2019).

Synthesizing insights from earlier research, this study posits that informational and emotional interactions are the primary stimuli derived from interpersonal interactions for consumers. For machine-to-consumer interactions, perceived control, response, and personalization emerge as the main stimuli. Previous studies have predominantly focused on social commerce in general and have not distinctly addressed the LSSC phenomenon. This study will consider these factors as stimuli for LSSC, and the impact of interaction stimuli on purchase intention within the LSSC environment will be further investigated.

Flow Experience

Flow was originally developed by psychologist Csikszentmihalyi in 1990 to define the experience of an individual engaging in any activity. It is described as "*the state in which people are so intensely involved in an activity that nothing else seems to matter; the experience itself is so enjoyable that people will do it even at great cost, for the sheer sake of doing it*" (Csikszentmihalyi, 1990). Ghani and Deshpande (1994) define the flow experience as a personal sensation that creates a sense of complete fulfillment beyond the pleasure and happiness of the process, characterized by deep concentration and enjoyment. Essentially, individuals are said to be in a state of flow when they are completely absorbed and find psychological enjoyment in an activity, maintaining focus throughout.

The flow experience is also seen as an optimal state, where individuals derive pleasure from undertaking controllable actions (Tuncer, 2021). Within the context of LSSC, the influence of flow on consumer behavior is significant and warrants attention. LSSC facilitates a flow state that encourages consumers to engage for longer durations and streamlines their decision-making journey from awareness to purchase (Arora et al., 2021). Recognized as a crucial precursor to shopping intention in online settings Csikszentmihalyi (1990); Koufaris (2002); Hausman & Siekpe (2009); Gao & Bai (2014), the flow experience suggests that consumers who achieve this state are likely to exhibit a heightened readiness to make purchases (Gao & Bai, 2014).

Trust in Products

In LSSC, product trust is decisive in consumer decisions (Wongkitrungrueng & Assarut, 2020). Research indicates that trust not only facilitates the reliable transmission of information in market transactions, reducing moral hazard and adverse selection problems caused by information asymmetry, but it is also an indispensable element in consumer decision-making (Xu et al., 2022). Consumers' trust in the products displayed on LSSC platforms is directly related to their willingness to make purchases (Shang et al., 2023). Through its unique product display, LSSC can engage consumers' emotions, deepen their trust in the products, and subsequently stimulate purchase intentions (Wu & Huang, 2023). This novel presentation improves product transparency, including traceability and authenticity, effectively reducing consumers' doubts and uncertainties and enhancing their trust in the promoted products (Wu & Huang, 2023).

Shopping Intention

Previous studies on shopping intentions within LSSC have identified factors including social cues (Bhattacharyya & Bose (2020); Cai et al (2021), the trustworthiness and attractiveness of internet celebrities, and dynamic interaction techniques. Celebrities are advised to present and discuss product information while also offering entertainment through activities like games, flash sales, or incentives to maintain viewer engagement and alleviate monotony during live streams (Park & Lin, 2020). Research has also validated the effect of alignment between individual self-concept and product (Park & Lin (2020), as well as IT affordance factors such as visibility, meta-voicing, and guidance in shopping; user interface design; and psychological factors like immersion and presence (Sun et al., 2019b). Additional influences involve decreasing psychological distance and perceived uncertainty (Zhang et al (2020), the effects of perceived values—utilitarian, hedonic, and symbolic (Wongkitrungrueng et al (2020); Ma (2021), and the strength of relationships (Kang et al., 2021).

Park and Lin (2020) discovered that live streaming content positively affects utilitarian and hedonic attitudes, and self-product fit impacts shopping intention. Hou et al (2020) found that sex appeal, humor appeal, and interactivity positively impact continuous watching intention and consumption intentions.

Although previous studies have explored various factors associated with LSSC shopping intentions, few have addressed multi-actor interactions. This suggests an area ripe for further research, emphasizing the complex interplay among different participants in the LSSC environment.

Theoretical**SOR**

The Stimulus-Organism-Response (S-O-R) model, as outlined by Jacoby (2002), includes three components: stimuli, organism, and response (Lee & Yun, 2015). Stimuli refers to external factors like the physical setup of a store, website features, services, and marketing activities that affect consumer behavior (Hu & Chaudhry, 2020; Xiang et al., 2016). This model has been extensively used across various fields, particularly in studying consumer behavior and website experiences, to examine how environmental stimuli affect consumer reactions (Zhang et al., 2014).

Stimuli

In this study, LSSC interaction stimuli are categorized into seven types covering aspects of A2C, C2C, and M2C interactions:

- **A2C Informational Interaction:** Information exchange between the anchor and the consumer.
- **A2C Emotional Interactions:** Establishing an emotional connection between the anchor and the consumer allows the consumer to feel the attention, care, and encouragement of the anchor.
- **C2C Informational Interaction:** Information exchange between consumers.
- **C2C Emotional Interaction:** Consumers form emotional connections with each other, creating a lively and enthusiastic shopping atmosphere because of the attention, concern, and support for their issues felt through interaction with others.
- **M2C Perceived Control:** Consumers' perception of control over the platform.
- **M2C Perceived Personalization:** Consumers' perception of message personalization.
- **M2C Perceived Response:** Consumers' perception of message response.

Organism

The organismic states focused on in this study include:

- **Flow Experience:** Consumers' immersion experience during website interactions, enhancing satisfaction (Liu et al., 2022).
- **Trust in Products:** Level of consumer trust in the products displayed, is crucial for building confidence in LSSC (Wongkitrungrueng & Assarut, 2020).
- **Trust in Anchor:** Consumers' belief in the trustworthiness and quality of services provided by the seller (Xue et al., 2020).
- **Trust in Other Consumers:** Building trust in other consumers is necessary for considering their purchase advice and recommendations (Zhou, 2020).
- **Trust in Machine:** Ensuring the platform's trustworthiness is vital to mitigate transactional and privacy risks (Zhou, 2020).

Response

The behavioral response, consumer intent to shop, indicates whether a consumer is likely to purchase on an online platform (Hewei & Youngsook, 2022).

Trust Transfer Theory

This study incorporates Trust Transfer Theory, which suggests that individuals may transfer trust from a trusted entity to an unfamiliar one where trust has not yet been established (Sharma et al., 2019; Lin et al., 2019). Here, trust can be transferred between various sources such as trust in the anchor, other consumers, and the machine, converging on a common target: trust in LSSC products. The trustee in this context is the consumer's trust in LSSC products, with the trusted parties being the anchors, other consumers, and the platform itself.

Hypothesis

A2C Interaction and Flow Experience

Live streaming interactions can significantly boost consumer engagement, leading to increased attention during live events (Ming et al., 2021). This enhanced attention helps consumers to more effectively absorb and comprehend the information presented during live

streamings (Barta et al., 2023). Anchors, through LSSC, can provide more detailed and accurate information, thus improving the consumer experience (Cai, 2019).

Moreover, interactions with anchors or other consumers offer a blend of comprehensive informational and emotional stimuli (Li, 2019). Such engagement is enjoyable and acts as a stress reliever, allowing consumers to focus entirely on the live streaming content. This intense engagement can trigger a flow experience, temporarily isolating consumers from their surroundings (Dong et al., 2023).

Drawing from these insights, this study proposes the following hypotheses

H1: Anchor-to-Consumer (A-C) informational interaction positively affects flow experience.

H2: Anchor-to-Consumer (A-C) emotional interaction positively affects flow experience.

C2C Interaction and Flow Experience

In LSSC scenarios, customers' shopping intentions are greatly affected by multi-actor interactions, and the exchange of information resulting from such interactions ensures a positive experience (Guo et al., 2021). Consumers believe they are receiving valuable and reliable information and advice by interacting with other consumers. This process not only allows customers to become information sharers and influencers, but it also increasingly affects the shopping experience of other customers (Qin et al., 2023).

The level of access to information significantly affects consumers' flow experience (Zhou, 2013). When consumers exchange information with each other during the purchase decision process, uncertainty, and perceived risk can be effectively reduced. This confidence and reassurance help consumers focus more on the activity itself and make it easier for them to enter the flow state (Zhou, 2019).

Positive emotional interactions between consumers significantly enhance individuals' positive emotions (Lin et al., 2018). This engagement helps consumers enjoy the process of shopping or using a product more, increasing the probability of experiencing a flow state (Ming et al., 2021).

Furthermore, emotional and informational exchanges with other consumers promote empathy and a sense of belonging (Lin et al., 2018). In this state, consumers possess a high degree of focus and enjoyment of the activities they participate in (Ming et al., 2021). When people enjoy in-group activities, they are more likely to experience flow (Zhou, 2019).

Based on these insights, the following hypotheses are proposed:

H3: Consumer-to-Consumer (C-C) informational interaction has a positive effect on flow experience.

H4: Consumer-to-Consumer (C-C) emotional interaction has a positive effect on flow experience.

M2C Interaction and Flow Experience

According to Dong et al (2023), platform technology is the medium and bridge for interaction with consumers. Interactive channels that are convenient and simple to use, can encourage customers to become fully immersed in the buying process, fostering a favorable environment and increasing their inclination to make a purchase.

The consumer's perception of control over the activity is reflected in perceived control (Zhu et al., 2014). Flow theory defines flow as the state in which a customer's skill and the challenges they face are in balance (Chen et al., 2018). Perceived control can enhance

consumers' perceived skills and assist them in achieving balance, although challenges beyond their capabilities may cause anxiety in consumers (Zhou, 2019).

H5: Perceived control has a positive effect on flow experience.

Consumers are more likely to feel valued and understood when they perceive that their questions or comments are responded to quickly and relevantly. Their willingness to engage in activities is positively correlated with increased interaction (Hewei & Youngsook, 2022). When consumers receive prompt, accurate responses, they feel as though their needs and preferences are acknowledged. According to Xue et al. (2020), the personalized interaction experience boosts consumer satisfaction and engagement. Consumers are more likely to be engaged in a live event and have a experience when they perceive their experience as being more tailored to them (Zhou, 2020).

H6: Perceived response has a positive effect on flow experience.

According to Xue et al (2020), consumers' emotional and cognitive experiences increase with perceived responsiveness and personalization. Consumers' sense of flow is positively impacted by perceived personalization in social commerce, which entails customizing interactions for each consumer (Zhang et al., 2014). Consumers are more likely to engage in interactions and experiences in social commerce environments when they believe that content on social media effectively expresses their needs and preferences and when they receive personalized recommendations that are closely related to their tastes (Chen et al., 2017). This feeling of personalization boosts satisfaction, causes a reduction in self-consciousness, and eventually results in a highly immersive flow experience that maintains the consumer's complete engagement (Zhang et al., 2014).

H7: Perceived personalization has a positive effect on flow experience.

Trust in Anchor and Trust in LSSC Products

Shih et al (2024) emphasized the critical importance of anchor trust in fostering trust towards products. During live streaming sessions, anchors present and recommend products, and their credibility significantly reduces product uncertainty. Once consumers build trust in the anchor, they perceive the anchor as capable of presenting and evaluating products comprehensively, revealing the true quality of the products (Chen et al., 2022). This trust in the anchor leads consumers to believe that the anchor will consider their individual needs and preferences, thereby recommending products tailored to them (Zhu et al., 2021). MorketingResearch (2023) further emphasizes the importance of the emotional bond between consumers and anchors, noting that this relationship is key to fostering a preference for products that resonate emotionally with consumers. Trust in the anchor is crucial as it not only influences consumer preferences but also extends to fostering trust in the product itself. Anchor trust is critical in mitigating uncertainty about product fit and quality during live streaming sessions (Xu et al., 2022). Although the psychological state greatly enhances consumers' trust in anchors and their recommended products, trust in the product is primarily increased based on trust in the anchor (Ren et al., 2022).

H8: Trust in anchor has a positive effect on trust in products.

Trust in Other Consumers and Trust in LSSC Products

Consumers post testimonials and reviews through LSSC's live chat feature, making this information public. This behavior provides other consumers with richer product information and knowledge and promotes interaction and shared experiences among consumers (Wongkitrungrueng & Assarut, 2020). Trust in other consumers is based on their interactions and evaluations (Chen et al., 2014). Through interactive exchanges of information, trust among consumers is strengthened, enabling them to obtain valuable suggestions, recommendations, and special offers from the consumer group. This suggests that trust among consumers can have a significant effect on trust in products, as consumers' understanding and trust in products are deepened through mutual recommendations and information sharing among consumer groups (Chen et al., 2014).

H9: Trust in other consumers has a positive effect on trust in products.

Trust in Machine and Trust in LSSC Products

Dong et al (2023) emphasize the importance of machine-to-consumer interactions in enhancing consumer confidence in the product. A smooth, easy-to-control platform enhances the shopping experience. Trust is crucial in all high-tech environments (Li et al., 2018). When consumers trust social commerce platforms, their trust in the merchants' products also increases (Wu et al., 2023).

H10: Trust in machine has a positive effect on trust in products.

A2C Interaction and Trust in Anchor

LSSC allows anchors and consumers to interact instantly, fostering intimacy and engagement. Through this real-time communication, anchors can convey product information, expertise, and values to consumers (Lu and Chen, 2021). Live streaming also allows anchors to answer consumer questions one-on-one, providing a more personalized and targeted understanding of the product (Liao et al.). Zhou (2020) notes that information exchange signals trust and helps build it. When consumers can speak with anchors directly and receive a prompt response, they grow to trust them (Lu & Chen, 2021).

According to Chen et al (2009), emotional interaction is the sharing of sentiments, attitudes, and emotions between customers and anchors. Through LSSC interactions, anchors show concern, encouragement, and care (Guo et al., 2022). This fosters a welcoming and comfortable shopping environment, fosters consumer identification with the anchor, and increases consumer trust (Park and Shin, 2021). Customers feel more comfortable and trusting of the anchor as a result of this emotional connection, which is a necessary component of trust (Zhu et al., 2021).

H11: A-C informational interaction has a positive effect on trust in anchor.

H12: A-C emotional interaction has a positive effect on trust in anchor.

C2C Interaction and Trust in Other Consumers

According to Guo et al (2021), in LSSC scenarios, consumers can build trust by exchanging interactive information. Mutual trust is founded on the information that is obtained during this process (Chen et al., 2014). Customers engage in direct communication with one another to obtain feedback from others in the form of likes, comments, and opinions. This can help

them quickly get the information they need and motivate them to buy (Cai et al., 2018). Consumers can develop trust in the competence and integrity of other consumers through information interactions that convey trust signals, and if they receive helpful advice, recommendations, and offers (Zhou, 2020).

Zhou (2020) posits that emotional interaction is a crucial determinant of consumer trust in social interactions. Consumers' emotional interactions that express care, concern, and encouragement play a crucial role in LSSC. Consumers feel more emotionally connected to each other (Xiao and Guo, 2020), and such interactions deepen their sense of belonging and promote a stronger sense of trust among them (Zhou, 2020).

H13: Consumer-to-Consumer (C-C) informational interaction has a positive effect on trust in other consumers.

H14: Consumer-to-Consumer (C-C) emotional interaction has a positive effect on trust in other consumers.

M2C Interaction and Trust in Machine

According to Hsu and Yeh (2018), perceived control is a reflection of users' perception of control over various platforms and actions. Users may feel powerless and lose faith in the community if the platform is hard to use and has a bad interface (Zhou, 2020). Conversely, users' faith in the community platform rises when they feel like they have good control over the platform (Shanmugam et al., 2016; Hsu & Yeh, 2018).

Perceived risks, like privacy risks, can also be present in social commerce transactions (Lin et al., 2017). Customers frequently have doubts about whether businesses are properly gathering and utilizing their personal data. Perceived controls have the potential to reduce perceived risks, boost platform trust, and enhance their experience (Zhou, 2019; Zhou, 2020). Perceived response reflects how well the platform responds to the consumer's needs in a correct and timely manner (Lee et al., 2015). If a platform provides consumers with a lot of irrelevant information, they will not be able to build trust in the community platform because it requires consumers to invest extra time and effort in searching and reviewing information (Zhou, 2020). Similarly, consumers expect a quick response from an LSSC platform. Otherwise, they may lack trust in the LSSC platform's capabilities. The perceived response allows consumers to feel more active, fun, and immersed in the process of interacting with the machine (platform) (Bawack et al., 2023).

Perceived personalization reflects the platform's ability to provide consumers with information and services that fulfill their individual needs or preferences (Wan et al., 2017), which builds trust and has an effect on shopping intentions (Zhou, 2020). It demonstrates a service platform's benevolence to users' benefits (Zhang et al., 2014). Additionally, personalization can also be used as a sign of the service platform's credibility to guarantee an engaging shopping experience (Guo et al., 2016; Zhou, 2019).

The following hypotheses were formulated.

H15: Perceived control has a positive effect on trust in the machine.

H16: Perceived response has a positive effect on trust in the machine.

H17: Perceived personalization has a positive effect on trust in the machine.

Customers can engage with products more vividly and casually with live streaming's immersive interactions and innovative shopping experiences (Dong et al., 2022). Customers

can view products being used and displayed in real-time by using live streaming (Wongkitrungrueng & Assarut, 2020). Within the digital sphere, "flow" refers to the state in which users are fully engaged with tasks they are doing online, which encourages them to keep doing them (Liu et al., 2022). Customers' inclination to participate in social commerce activities is significantly increased by this flow experience, and this directly affects their intention to shop (Liu et al., 2016).

H18: The flow experience has a positive effect on consumers' shopping intentions.

Interactions with LSSCs are essential for boosting consumer confidence in goods and encouraging purchase intent. According to Dong et al (2022), live streaming interactions between anchors and consumers in LSSC improve product transparency, dependability, and perceived quality, all of which foster consumer confidence. Customers who feel confident in the products that are recommended during live streaming are more likely to make a purchase (Wu & Huang, 2023; Lu & Chen, 2021). consumers' purchasing decisions are significantly affected by their trust in LSSC products, which also strengthens transactional relationships in the marketplace and lessens the effect of unfavorable factors (Wongkitrungrueng & Assarut, 2020).

H19: Trust in LSSC products has a positive effect on consumers' shopping intentions.

Methodology

In this study, survey methods and quantitative research were employed. Users of the Taobao platform who have made use of the LSSC feature make up the target population. The fact that Taobao has more than 60 million daily visitors and nearly 500 million registered users highlights the site's popularity for LSSC in China (Taobao, 2023).

We used judgment-based sampling to select respondents according to specific criteria, focusing on screening for eligible responses. Participants were evaluated based on two criteria to ensure their eligibility for the study:

1. They must be Taobao LSSC users in China.
2. They must have purchased goods using the Taobao LSSC in the last three months.

Eligible respondents are defined as those who have actively engaged with the LSSC within the last three months. Without this restriction, respondents might respond less accurately to LSSC-related questions (Huo et al., 2023). Therefore, the main criteria for selecting Taobao users include regular usage of Taobao LSSC over the past three months and participation in purchasing activities during Taobao LSSC sessions. This includes: (a) using the Taobao LSSC; (b) engaging in interactions on the platform, such as posting messages in the chat box and utilizing specific interactive features; (c) making purchases, i.e., placing orders for items during Taobao LSSC events.

The questionnaires will be distributed daily during the Online Shopping Festival in eight WeChat fan groups (500 people per group) of Taobao merchants. A snowball sampling strategy was also employed.

According to Krejcie and Morgan's sample size scale, the recommended sample size for a population of 100,000 is 384. As the population increases, the sample size diminishes,

stabilizing at just over 380 cases (Krejcie & Morgan, 1970). Therefore, this study will target a sample size of 384 respondents.

Given that the standardized response rate for many similar studies ranges between 70% and 80%, the sample will be increased by 30%, resulting in 500 respondents, to compensate for potential non-responses and ensure robust data collection.

Potential Contributions

The academic contribution of this study lies in its nuanced exploration of LSSC interactions and their psychological effects on consumers. This enriches existing literature in e-commerce, marketing, and consumer psychology by introducing a comprehensive model that integrates various forms of interactions within LSSC environments. The study offers new insights into the dynamics of consumer behavior, thus expanding the academic discourse.

These findings have practical implications as well. They can guide marketers, content creators, and platform developers in designing strategies that leverage interaction stimuli to enhance consumer engagement and purchase intentions. By understanding the roles of informational and emotional support and the significance of perceived control, response, and personalization, stakeholders can craft more engaging and effective live streaming experiences.

Conclusion

This conceptual paper investigates the impact of LSSC interactions on consumer shopping intentions, focusing on the roles of informational and emotional support in anchor-to-consumer and consumer-to-consumer interactions and perceived control, response, and personalization in machine-to-consumer interactions. The methodology outlined in the paper is aimed at investigating these dynamics, emphasizing the potential contributions to both academic understanding and practical application of LSSC interaction and marketing strategies. The expected outcomes of this research include new insights into consumer behavior within LSSC environments, which may confirm, extend, or challenge existing theories.

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