

Enhancing Purchase Intention in E-Commerce Live Streaming: The Moderating Role of Narrative Transportation

Pan Meizhen^{1,2}, Lim Ming-Fook^{2*}, Li Xiaoqing³, Rudy Ansar², Suddin Lada², Brahim Chekima²

¹School of Economics and Management, Jilin University of Chemical Technology, Jilin, China

²Faculty of Business, Economics and Accountancy, Universiti Malaysia Sabah, 88400, Kota Kinabalu, Sabah, Malaysia.

³Guangzhou College of Technology and Business, 510800, Guangzhou, China

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ABSTRACT

Live streaming commerce has emerged as a dominant force in China's e-commerce landscape, driven by its immersive and interactive nature. While prior studies emphasize the roles of product quality and promotional strategies, the interplay between entertainment, psychological engagement (e.g., flow experience), and narrative strategies in shaping consumer behavior remains underexplored. This study addresses this gap by integrating Stimulus-Organism-Response (S-O-R) theory and flow theory to investigate how live streaming characteristics influence purchase intentions. The study aims to examine the direct effect of live streaming entertainment on consumers' flow, analyze the role of flow in translating entertainment into purchase intentions, and elucidate how narrative transportation moderates the relationship between entertainment and flow. Empirical analysis confirms that entertainment provided through streamer performance, interactive features, and engaging content significantly enhances consumers' flow state. This heightened flow state, which is characterized by deep concentration and detachment from distractions, subsequently exerts a strong positive influence on purchase intention. Furthermore, the study reveals that narrative transportation acts as a significant positive moderator: effective storytelling techniques strengthen the relationship between entertainment and flow. These findings advance theoretical understanding by integrating narrative transportation theory into the S-O-R model for live streaming, highlighting the interplay between hedonic stimuli, psychological immersion, and narrative form. Practically, the results offer actionable insights: businesses and platforms should prioritize streamer training in performance, incorporate interactive entertainment elements, tailor content to audience demographics, optimize technical quality for seamless immersion, and leverage narrative techniques to amplify the entertainment-flow link, thereby boosting consumer engagement and purchase conversion rates.

Keywords: E-commerce live streaming, Purchase Intention, Entertainment, Flow, Narrative Transportation

INTRODUCTION

E-commerce live streaming offers consumers a more innovative and immersive online shopping experience compared to traditional e-commerce platforms while also establishing a new interactive communication channel between sellers and consumers (Wang et al., 2022). According to the latest data from the "China New E-commerce Development Report (2025)," China's online retail sales are projected to reach 15.5 trillion RMB in 2024, a year-on-year increase of 7.2%, maintaining its position as the world's largest online retail market for 12 consecutive years. With a user base of about 600 million and a penetration rate that jumped from 4.9% in 2019 to 37.8% in 2024, livestreaming e-commerce has done exceptionally well and is now the primary driver of consumer market growth. An increasing number of businesses and enterprises are choosing to collaborate with platforms to market their products via live streaming (Wongsunopparat & Deng, 2021). Consequently, identifying effective strategies to drive consumers' purchase intention and enhance the conversion rate in live

streaming e-commerce has become crucial. It is therefore essential to investigate the factors that influence consumer purchasing behavior within the context of the live streaming e-commerce model.

Among the multidimensional characteristics of live e-commerce, entertainment as a key external stimulus variable has a primary impact on consumer decision-making. According to Yang et al. (2014), perceived satisfaction from entertainment, information searching, expressive information sharing, cool and new trends, and social connection were all factors that predicted Chinese consumers' intentions to engage in social commerce. Live streaming shopping is often characterized as "shoppertainment," referring to a form of mobile commerce where consumers engage in online shopping while simultaneously viewing video content (Chen et al., 2022). By combining entertainment and retail within a single platform, this format is perceived as more attractive to consumers. For instance, interactive features such as games and real-time conversations are frequently incorporated into live streaming sessions to enhance user engagement (Woodcock & Johnson, 2019). Moreover, to increase the entertainment value of live streaming, some businesses attempt to improve the animation effects (Cai & Wohn, 2019).

Entertainment plays a pivotal role in shaping consumers' immersive experiences during live streaming, as it fosters a deep state of flow that heightens engagement. This heightened flow not only amplifies users' sense of involvement but also enhances their perceived value of the experience, which in turn drives their behavioral intentions, such as purchase decisions or continued platform use (Lu et al., 2022; Joo & Yang, 2023). Although the direct correlation between entertainment and flow has been partially verified, the gap in the relationship between the two factors is still unclear. This paper introduces narrative transportation as a moderating variable to explore how it affects the path from entertainment to flow. Narrative transportation refers to the method through which a story is conveyed, encompassing formats such as written text, audio, video, and interactive media (Braverman, 2008). Chen et al. (2024) also describe that narrative transportation is essential and continually impactful throughout the live streaming process, underscoring its fundamental importance.

This study uses entertainment and flow as core independent variables, focusing on the impact of consumers' emotional immersion and interactive experience in live streaming scenarios on their purchase intentions. It can complement existing research on the lack of attention paid to non-price drivers of e-commerce live streaming. By introducing narrative transportation as a moderating variable, it reveals the boundary conditions of content expression form on consumer decision-making, providing a new perspective for consumer behavior theory in the context of live e-commerce. The research findings can guide businesses to enhance consumer immersion by increasing live streaming entertainment and optimizing narrative structure, thereby improving conversion rates.

Study Objectives

The main objectives of this study were

To examine the relationship between entertainment and flow.

To examine the relationship between flow and purchase intention.

To examine the moderation effect of narrative transportation between entertainment and flow.

Problem Statement

The majority of the research now in publication concurs that live streaming e-commerce has many advantages to offer businesses, especially in terms of increasing sales conversion rates (Venkatesh et al., 2016; Wongkitrungrueng et al., 2020). Chen et al. (2018) claim that entertainment exerts a positive and significant influence on the flow experience in live streaming contexts. Additionally, entertainment shapes viewers' attitudes, which subsequently impact their intention to continue watching. Furthermore, the flow state experienced by consumers during livestream shopping further encourages purchase decisions, as the activity becomes so intrinsically enjoyable that individuals are motivated to continue engaging in it, even at a

considerable cost (Yin et al., 2023). Research on the full path “entertainment-flow-purchase intention” has been scarce, despite its increasing popularity.

Based on Li et al. (2024), entertainment has a weak relationship with the flow experience of consumers. Zheng et al. (2023) suggest that future research could explore additional characteristics of live streaming, particularly those that may moderate the quality of the live streaming experience and its influence on consumers’ buying behavior. Therefore, it is necessary to investigate the moderating factor of how to enhance the entertainment quality in e-commerce live streaming.

LITERATURE REVIEW

Stimulus-Organism-Response Theory (S-O-R)

Originating from environmental psychology, the Stimulus-Organism-Response (SOR) model developed by Mehrabian and Russell (1974) has been increasingly applied in recent years to examine the dynamics of live streaming e-commerce. Researchers have utilized this framework to investigate how various stimuli in live streaming environments influence consumers’ internal states and, subsequently, their purchase intentions and behaviors (Guo et al., 2021). Thus, the study used entertainment as the environmental stimuli (S) that affect consumers’ flow (O), and in turn, purchase intention is influenced.

Flow Theory

Flow theory, which was introduced by Csikszentmihalyi (1975), refers to a mental state of deep concentration and immersion in an activity, where individuals become so engaged that external distractions fade away. In digital contexts, flow theory has been widely adopted to explain sustained media use and its link to behavioral intentions, including purchase decisions (Li et al., 2018). Pelet et al. (2017) expanded this framework by identifying five dimensions of flow in social media settings—enjoyment, focus, challenge, control, and curiosity—demonstrating that these elements collectively contribute to the overall flow experience.

Entertainment and Flow

Entertainment is defined by Bosshart and Macconi (1998) as encompassing pleasure, excitement, relaxation, and diversion, and it plays an important role in shaping users’ attitudes and behavioral intentions. Research has shown that entertainment not only enhances users’ attitudes toward platforms but also increases their willingness to recommend and continue using them (Curras-Perez et al., 2014). In the context of live streaming, entertainment serves as a key driver of immersion, contributing to hedonic value and facilitating the emergence of flow experiences (Leung, 2020). During shopping livestreams, enthusiastic product presentations, humorous interactions, and real-time engagement with viewers create a pleasurable and satisfying environment that encourages full immersion, ultimately leading users into a state of flow (Lu et al., 2022).

Flow and Purchase Intention

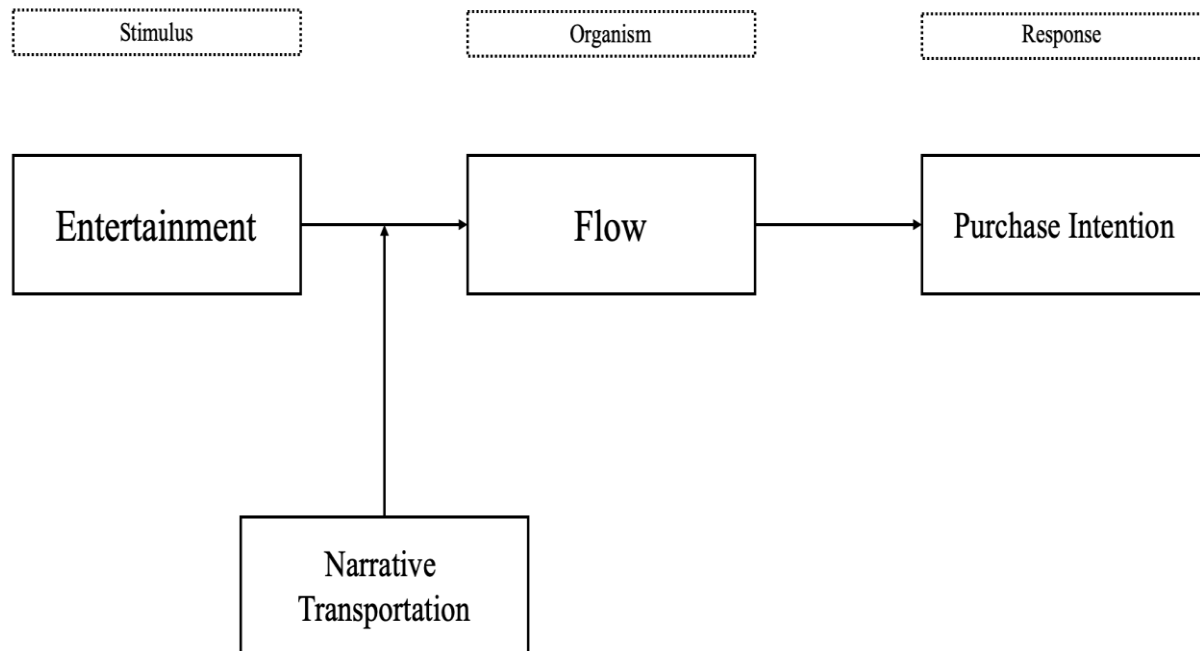
Flow is characterized by intense focus and absorption in the present moment, during which consumers tend to ignore external distractions and rational deliberation, increasing their susceptibility to impulsive decisions (Cui et al., 2022). Empirical evidence shows that flow experience is positively associated with online shopping behaviors (Hsu et al., 2012). In virtual shopping contexts, the sense of pleasure derived from immersion significantly enhances consumers’ purchase intentions (Yim et al., 2017). Thus, flow not only deepens engagement but also serves as a critical driver of impulsive and intentional purchasing behavior.

The Moderating Role of Narrative Transportation

Narrative transportation refers to the psychological process in which individuals become deeply immersed in a story, driven by empathy for characters and vivid imagination of the plot (Van Laer et al., 2014). Rooted in narrative transportation theory, this experience enables individuals to mentally enter the narrative world, forming emotional connections with characters while becoming detached from their immediate surroundings

(Green & Brock, 2000). This deep engagement enables narratives to effectively shape and influence audience beliefs (Thomas & Grigsby, 2024). Thus, it is important to explore the effect of narrative transportation in moderating the relationship between entertainment and flow in e-commerce live streaming.

Conceptual Framework



METHODOLOGY

Drawing on recent literature and empirical findings, this study seeks to contribute to theoretical advancement and offer practical implications for enterprises involved in live streaming e-commerce. It aims to provide valuable guidance for marketing professionals, the e-commerce sector, and academic researchers in navigating the challenges of an increasingly competitive marketplace.

FINDINGS AND DISCUSSIONS

Entertainment and Flow

The findings confirm that entertainment significantly influences the flow experience, aligning with Jiang et al. (2024), who reported that entertainment provided by streamers positively affects viewers' flow state. Similarly, Lu et al. (2022) identified a strong link between entertainment and flow, particularly in the context of impulse purchase intentions. This study extends flow theory by demonstrating that entertainment plays a vital role in facilitating immersive flow states within e-commerce live streaming, emphasizing the importance of emotional engagement alongside cognitive involvement. It also reinforces the relevance of the S-O-R model in understanding consumer behavior in dynamic digital environments. From a practical perspective, brands are encouraged to collaborate with streamers who possess strong interpersonal qualities, such as charisma, humor, and effective communication skills. Training should prioritize performance and improvisation, in addition to product expertise. In increasingly saturated e-commerce markets, entertainment serves as a strategic differentiator. Live streaming platforms and sellers can enhance viewer engagement through interactive entertainment features such as polls, lucky draws, virtual gifts, and mini-games. Moreover, tailoring entertainment to the preferences of specific demographic groups—such as fast-paced, humorous content for younger audiences and more relaxed, informative content for older viewers—can further optimize the flow experience and enhance consumer engagement.

Flow and Purchase Intention

This study confirms the positive influence of flow on purchase intention in the context of e-commerce live streaming. The findings are consistent with those of Li et al. (2024), who found that immersive flow experiences during sporting goods live streams significantly enhance consumers' willingness to purchase. Similarly, the results support Wang et al. (2021), who highlighted that flow offers distinct advantages by placing consumers in a relaxed and comfortable state, which facilitates greater engagement during live streaming sessions. It enhances the understanding of experience-driven consumption by emphasizing the role of immersion and psychological engagement in shaping online purchasing behavior, thereby extending traditional rational choice models in marketing. It also underscores the importance of technical quality, such as seamless streaming, synchronized audio-visuals, and user-friendly interfaces, in facilitating the flow state that positively influences purchase intention. Furthermore, streamers should be equipped not only with product knowledge but also with skills in storytelling, emotional expression, and interactive communication to maintain viewer engagement through compelling narrative structures. Given the measurable impact of flow on consumer behavior, platforms are encouraged to develop analytical tools that track indicators such as viewing duration and engagement rates, using these metrics to predict and enhance sales performance.

Narrative Transportation between Entertainment and Flow

It demonstrates that narrative transportation moderates the relationship between entertainment and flow in e-commerce live streaming. This is consistent with the results of Ophir et al. (2021) and Hursting et al. (2021), who also emphasized the influential role of narrative engagement in enhancing users' immersive experiences. This study offers new viewpoints on how narrative-based entertainment improves customer absorption by incorporating narrative transportation theory, which has its roots in media psychology and persuasion research, into the realm of e-commerce live streaming. From the results, adding storytelling components like product demonstrations in authentic settings, firsthand accounts, or emotionally stirring tales can improve viewers' flow experiences. The development of analytical tools that track markers of narrative transit, such as viewer retention, emotionally charged remarks, and reactions at storytelling moments, is encouraged for live streaming platforms to support this. In order to improve customer engagement and encourage purchase intentions, these indicators can be used to guide and improve content strategy.

CONCLUSION

In summary, this study deepens the understanding of consumer behavior within China's rapidly evolving e-commerce live streaming sector by exploring the dynamic interaction between entertainment, flow experience, and narrative transportation. The results reveal that entertainment plays a key role in fostering flow, which in turn significantly boosts consumers' purchase intentions. Importantly, narrative transportation serves as a key moderating factor, intensifying the influence of entertainment on flow, particularly when the content resonates emotionally or culturally, such as through regional traditions or user-generated narratives. Theoretically, this research bridges the Stimulus-Organism-Response (S-O-R) framework with flow theory, presenting an innovative lens for examining immersive digital shopping experiences. From a practical standpoint, it suggests that merchants should emphasize humor, interactive engagement, and context-rich product presentations to cultivate flow, while platforms can enhance effectiveness by tailoring narrative pacing through data-driven personalization. Additionally, policymakers are encouraged to introduce regulatory measures that promote transparency and prevent excessive commercialisation, ensuring a more balanced and ethical development of the live streaming economy.

LIMITATIONS AND FUTURE RESEARCH

This study acknowledges certain limitations, particularly its exclusive focus on the Chinese market and reliance on self-reported data, which may be subject to response biases. Future research is encouraged to broaden the analytical scope by investigating cross-cultural differences in the effectiveness of narrative strategies and examining the ethical considerations associated with hyper-personalized algorithmic recommendations (Chekima et al., 2023; Chekima et al., 2019). Despite these limitations, the study makes

meaningful contributions by addressing theoretical gaps and presenting actionable insights, thereby advancing academic discourse and promoting the sustainable and ethical evolution of live streaming commerce.

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