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Impulsive Buying Behavior in Live Streaming Commerce: Research Trends and Intellectual Structure through a Bibliometric Analysis

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Abstract

The rapid growth of live streaming commerce has transformed online consumer decision-making, creating an increasingly dynamic environment in which impulsive buying behavior can emerge. The present study employs a bibliometric analysis to explore the research trends of impulsive buying behavior in the context of live streaming commerce. Impulsive buying and live streaming keywords were used to collect data from Scopus, and 74 publications relevant to the topic were found. The data were analysed using VOSviewer by co-authors using co-authorship, co-occurrence, co-citation and bibliographic coupling. The results show that the research has grown rapidly since 2023 and peaked in 2025. The most common type of publication is journal articles, and the greatest number of publications are concentrated in several Asian countries, especially China, Malaysia and Indonesia. It is an interdisciplinary field that includes business, marketing, psychology, social sciences and information technology. Key themes include live streaming commerce, consumer behavior, emotional and psychological factors, theoretical models and research methods. This study presents an overview of the intellectual structure and development trend of impulsive buying research in the context of live streaming commerce.

Keywords

Bibliometric Analysis, Consumer Behavior, E-Commerce, Impulsive Buying Behavior, Live Streaming Commerce.

1. Introduction

Impulsive buying behavior is an important topic in consumer behavior research because it reflects spontaneous purchasing decisions that occur without prior planning and are often accompanied by strong emotional responses. It was initially characterised as unplanned buying behavior (Stern, 1962). Rook (1987) described it as a sudden and powerful urge that is difficult to control. Subsequent studies show that impulsive buying is influenced by psychological factors, situational conditions, emotional responses, and self-control (Beatty & Ferrell, 1998; Dholakia, 2000). The rise of digital technology has further expanded its context, as online consumers encounter price promotions, product recommendations, attractive interfaces, and transaction convenience that can stimulate immediate purchases. Previous research confirms that online store characteristics and digital platform features can encourage impulse buying through emotional responses and perceived value (Parboteeah et al., 2009; Verhagen & van Dolen, 2011).

Live streaming commerce represents a more interactive form of e-commerce by integrating product promotion, entertainment, social interaction, and real-time transactions within a single digital environment (Cai & Wohn, 2019; Xu et al., 2020). Through live demonstrations and direct communication, consumers can observe products, ask questions, and interact with sellers in real time. Such features can strengthen consumer engagement, trust, and social presence, thereby influencing purchase decisions (Wongkitrungrueng & Assarut, 2020). The interactive and time-sensitive nature of live streaming commerce also creates conditions conducive to impulsive purchasing. Flash sales, discount coupons, limited-time offers, host persuasion, and social pressure from other viewers can encourage consumers to make rapid purchase decisions. Real-time interaction may further intensify emotional involvement and purchase intention (Chen & Lin, 2018b; Sun et al., 2019). Consequently, the Stimulus–Organism–Response (S-O-R) framework proposed by Mehrabian and Russell (1974) has become an important theoretical perspective for explaining how environmental stimuli generate internal psychological responses and subsequent purchasing behavior.

Within this framework, external stimuli such as promotions, social interaction, and platform design influence consumers' cognitive and emotional states, which subsequently shape behavioral responses. Previous studies have examined social presence, perceived value, hedonic motivation, and parasocial interaction as determinants of impulsive buying behavior in live streaming commerce (Eroglu et al., 2001; Ming et al., 2021). Recent research has also highlighted emotional arousal, flow experience, discounts, and online coupons, showing that social interaction and emotional engagement can stimulate impulsive purchases, while discounts and coupons enhance perceived value and purchase urgency (Balakrishnan et al., 2020; Imbayani & Gama, 2024). However, existing research remains fragmented across variables, theoretical perspectives, and contexts, with most studies focusing on individual determinants rather than the broader development of the field. Therefore, a research gap remains in understanding the evolution, intellectual structure, thematic development, and collaboration patterns of impulsive buying research in live streaming commerce, particularly regarding dominant themes, influential contributors, emerging topics, and underexplored areas.

To address this gap, this study employs bibliometric analysis to systematically examine publication trends, intellectual structures, emerging research areas, and relationships among studies (Donthu et al., 2021). It enables the mapping of co-authorship, co-occurrence, co-citation, and bibliographic coupling to provide an objective overview of research development (Zupic & Čater, 2015). Using “impulsive buying” and “live streaming” as core search terms, relevant Scopus publications are analysed using VOSviewer. Although existing studies show that digital

environments can facilitate impulsive buying, research in live-streaming commerce remains fragmented and largely focused on specific variables and limited contexts. Consequently, the major contributors, collaboration patterns, intellectual structures, and thematic evolution of the field remain insufficiently mapped. The novelty of this study lies in integrating performance analysis and science mapping to provide a comprehensive overview of impulsive buying research in live-streaming commerce, identify knowledge gaps, and clarify future research directions.

Accordingly, this study aims to provide a comprehensive bibliometric mapping of impulsive buying behavior in live streaming commerce by examining the evolution of publication trends and the contributions and collaboration patterns of authors, countries, and institutions; identifying the intellectual structures, citation relationships, and major thematic clusters that characterise the field; and analysing the evolution of research themes to identify emerging topics, research gaps, and potential directions for future research.

2. Literature Review

2.1. Live Streaming Commerce in the Digital Context

Live-streaming commerce is an emerging form of e-commerce that integrates social interaction, entertainment, product presentation, and real-time transactions within a single digital platform (Cai & Wohn, 2019; Sun et al., 2019; Li et al., 2021). Its rapid development is reflected in the adoption of live-streaming features by major e-commerce platforms such as Lazada Live, Shopee Live, and Taobao Live. Unlike conventional online shopping, live-streaming commerce enables direct and simultaneous communication between sellers and consumers, allowing consumers to observe product demonstrations, ask questions, receive immediate responses, and obtain personalized product information. This interactive process creates a more engaging and immersive shopping experience while reducing uncertainty about products. Based on Wongkitrungrueng and Assarut (2020) and Retnosari and Nadlifatin (2024), the presence of social interaction and real-time communication can strengthen consumers' product interest, trust, engagement, and perceived social presence, which subsequently influence their purchase decisions.

The interactive characteristics of live-streaming commerce also create a dynamic environment in which consumers may experience stronger psychological and situational pressure to purchase. According to Chen and Lin (2018b), real-time product demonstrations, persuasive communication by hosts, audience interactions, flash sales, and limited-time offers can generate urgency and encourage consumers to accelerate their purchase decisions. Furthermore, consumers can observe the reactions and purchasing behavior of other viewers, creating social cues that may reinforce their willingness to buy. Meirida and Nuvriasari (2024) argue that the combination of entertainment, social presence, immediacy, and promotional stimuli therefore distinguishes live-streaming commerce from conventional e-commerce and provides favourable conditions for spontaneous purchasing. In this context, live-streaming commerce can be understood as a stimulus-rich digital environment in which technological, social, emotional, and promotional factors interact to shape consumer behavior, particularly impulsive buying behavior.

2.2. The Concept of Impulsive Buying Behavior

Impulsive buying behavior refers to unplanned purchasing actions that occur spontaneously and without prior consideration (Stern, 1962). Rook (1987) further describes impulse buying as a sudden and powerful urge to purchase that is often accompanied by reduced self-control. From a consumer perspective, this behavior is not merely functional but also involves hedonic motivations, as consumers may experience pleasure, excitement, or emotional gratification during spontaneous purchases (Parboteeah et al., 2009). Beatty and Ferrell (1998) emphasise that both

consumers' emotional states and situational factors can influence their tendency to engage in impulse buying, indicating that the behavior emerges from an interaction between individual conditions and environmental stimuli. Similarly, Dholakia (2000) explains that impulsive behavior occurs through the interaction between internal consumption impulses and consumers' ability to regulate or control those impulses.

The development of digital commerce has further expanded opportunities for impulsive buying by making purchasing processes faster, easier, and more stimulus-rich. Unlike conventional shopping environments, online platforms continuously expose consumers to promotional messages, product recommendations, attractive visual displays, personalized content, and convenient transaction mechanisms. These characteristics can reduce the time and effort required to complete a purchase while simultaneously increasing consumers' exposure to persuasive stimuli. Verhagen and van Dolen (2011) demonstrate that characteristics of online shopping environments can influence consumers' impulse buying tendencies, particularly through emotional responses and perceived value. Therefore, impulsive buying has become increasingly relevant in digital consumption contexts, where technological convenience and marketing stimuli can interact with consumers' emotions, situational conditions, and self-control to encourage spontaneous purchasing decisions.

2.3. Theoretical Perspectives on Impulsive Buying Behavior

The Stimulus–Organism–Response (S-O-R) model, introduced by Mehrabian and Russell (1974), provides a widely used theoretical framework for explaining how environmental stimuli can shape consumers' impulsive buying behavior. The model proposes that external stimuli influence an individual's internal psychological state, including cognitive and emotional responses, which subsequently generate behavioral outcomes. Eroglu et al. (2001) extended this perspective to online shopping environments by demonstrating that environmental cues within digital platforms can influence consumers' internal states and, consequently, their purchasing behavior. This framework is particularly relevant to digital commerce because online environments expose consumers to multiple stimuli simultaneously, including platform characteristics, promotional activities, product information, and social cues.

In the context of impulsive buying, digital stimuli can trigger psychological and emotional reactions that reduce deliberate decision-making and encourage spontaneous purchases. Chen and Yao (2018a) and Chen et al. (2019) found that platform design, marketing strategies, and social interaction, for example, can increase consumers' affective responses and purchasing tendencies. These mechanisms become particularly relevant in live-streaming commerce, where consumers encounter real-time interaction, persuasive hosts, promotional offers, and responses from other viewers within an immersive environment. Such stimuli may influence consumers' perceptions and emotions before translating into immediate purchasing responses. Therefore, the S-O-R framework provides a useful theoretical foundation for understanding impulsive buying behavior as a response to external environmental stimuli, particularly when those stimuli strongly influence consumers' cognitive and emotional states.

2.4. Impulsive Buying Behavior in Digital and Live Streaming Environments

In digital environments, the convenience, speed, and intensity of consumer exposure to marketing stimuli can increase susceptibility to impulsive purchasing. The ease of accessing products through mobile devices allows consumers to search, evaluate, and complete transactions with minimal effort, potentially reducing the time available for deliberate decision-making. Aiolfi et al. (2022) suggest that mobile-device use in shopping environments can increase impulsive buying behavior by strengthening consumer engagement with digital content. Similarly, Chen et al. (2019) found that online advertising and product recommendations can significantly

influence consumers who tend to engage in impulsive purchasing. These findings indicate that digital platforms do not merely facilitate transactions but also create environments in which technological convenience and marketing stimuli can interact with consumers' psychological responses.

These effects may become more pronounced in live-streaming commerce because multiple stimuli operate simultaneously in a highly interactive and time-sensitive environment. Consumers can communicate with sellers and other viewers in real time while being exposed to product demonstrations, persuasive messages, promotions, and limited-time offers. Such conditions can intensify emotional involvement and create pressure to make rapid purchasing decisions (Gong & Jiang, 2023). Feng et al. (2024) demonstrate that live-streaming environments can encourage impulsive behavior through the convergence of emotional and contextual factors. Therefore, compared with traditional e-commerce, live-streaming commerce provides a more dynamic and stimulus-rich environment that may be particularly conducive to impulsive purchase behavior (Miranda et al., 2024).

3. Methods

The present study adopts a bibliometric analysis approach to describe the development of literature and to explore intellectual structures, research trends and linkages between key concepts. This method was chosen because it allows for a systematic, objective and data-driven analysis of a large number of scientific papers (Donthu et al., 2021). The Scopus database was searched for the words “experience and impulsive buying” in the title, abstract and keywords of the data using Boolean operators. The literature selection process in the first phase of the study was carried out transparently and systematized via the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) method (Page et al., 2021).

This process consisted of four stages: identification, screening, eligibility and inclusion. In the identification stage, the keywords “Impulsive Buying Behavior” OR “Impulsive Buying” AND “Live Stream” OR “Live Streaming” were used to retrieve articles from the Scopus database. This led to an initial pool of 80 documents. In the next steps of screening and eligibility, the documents were classified according to some criteria, e.g. in English and being a journal article or conference paper. Publications not satisfying these requirements were eliminated. The final dataset contained 74 relevant publications that were further studied.

The next step was to collect and analyse the data. Selected data were downloaded in Comma Separated Value (CSV) or Research Information Systems (RIS) formats, including titles, authors, publication years, keywords, abstracts and number of citations. We employed VOSviewer to explore the relationships between publications and identify the structure of the research field. The analytical process consisted of data cleansing, the selection of bibliometric techniques (co-authorship, co-occurrence, co-citation and bibliographic coupling) and the setting of threshold values to ensure that only significant elements were analysed. These methods were used to identify patterns of collaboration, conceptual links, and the intellectual structure of the literature (Donthu et al., 2021; Zupic & Čater, 2015). Subsequently, VOSviewer was utilised to present the findings in network, overlay, and density visualisations. This allowed us to identify thematic clusters, see how concepts relate to each other, and get a general idea of research trends (Van Eck & Waltman, 2010; Donthu et al., 2021).

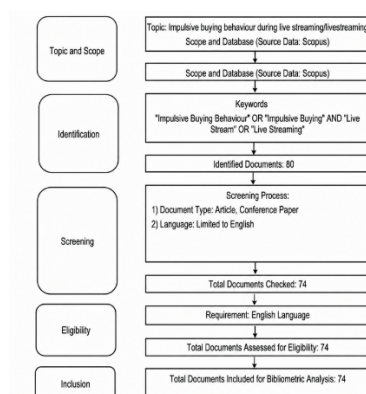


Figure 1. The Process of Collecting Data

Figure 1 illustrates the literature selection process used in this study, with particular emphasis on the inclusion and exclusion criteria. The initial search identified 80 documents from Scopus using the defined keywords. During screening, 6 documents were excluded because they did not meet the required document type and language criteria, leaving 74 documents for eligibility assessment. All 74 documents met the English-language requirement and were subsequently included in the bibliometric analysis. Thus, the inclusion criteria consisted of English-language publications relevant to impulsive buying and live-streaming commerce, while documents that did not meet the specified document type or language requirements were excluded.

4. Results

4.1. Publication Trends and Research Contributions

Figure 2(a) shows a clear and rapid increase in research on impulsive buying behavior in live streaming commerce over the observed period. Publications remained relatively limited and stable in 2021–2022, with around three documents per year, indicating that the topic was still at an early stage of development. Research activity then increased substantially, from 8 publications in 2023 to 16 in 2024, reflecting growing academic attention to impulsive buying within live streaming commerce. The most notable growth occurred in 2025, when publications reached approximately 34 documents, demonstrating that the topic had become an increasingly important research area in e-commerce and consumer behavior.

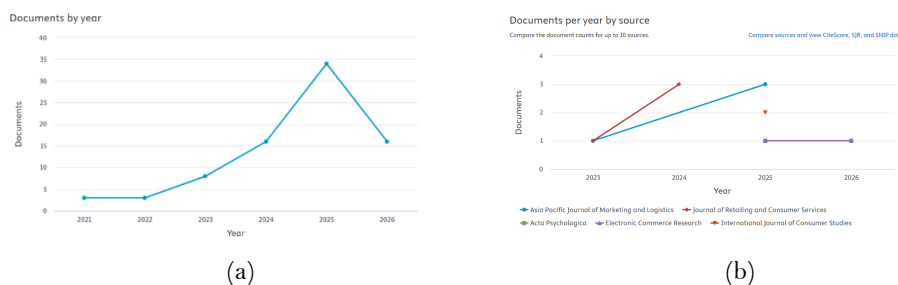


Figure 2. (a) Publication Trend, (b) Journal's Resource Trend

The decline to around 16 publications in 2026 should be interpreted cautiously, as the year may contain incomplete publication data and therefore does not necessarily indicate declining research interest. Overall, the publication trend confirms the rapid emergence and development of this research field, further supporting the importance of bibliometric analysis to identify its intellectual

structure, research trends, thematic development, and potential directions for future research.

The trend of the bibliometric study on impulsive buying behavior in the context of live streaming commerce, as shown in the graph “Documents per year by source”, is still very new but beginning to develop. The number of publications was very low in 2023, but started to increase in 2024 and 2025. This was largely due to journals like the Asia Pacific Journal of Marketing and Logistics and the Journal of Retailing and Consumer Services. The involvement of other journals such as International Journal of Consumer Studies, Acta Psychologica and Electronic Commerce Research shows that this issue is being studied by different fields, not only marketing but also psychology and e-commerce. The pattern suggests that the research of impulsive buying behavior in live streaming commerce is still in the initial stage of growth, and there is a lot of space for future development.

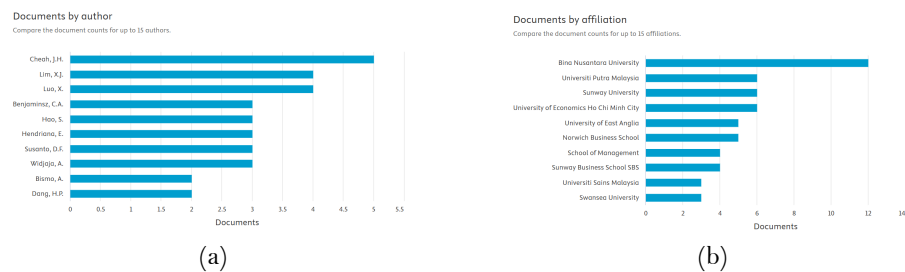


Figure 3. (a) Distribution of Documents, (b) Top Public Publication Institutions

Figure 3(a) shows that research on impulsive buying behavior in live streaming commerce is concentrated among a relatively small group of core authors. Cheah, J. H. is the most prolific contributor, followed by Lim, X. J. and Luo, X., indicating that these scholars have played a significant role in shaping the early intellectual development of the field, particularly in consumer behavior and impulsive purchasing within interactive digital environments. Meanwhile, Benjaminsz, C. A., Hao, S., Hendriana, E., Susanto, D. F., and Widjaja, A. represent moderate contributors, while Bismo, A. and Dang, H. P. have comparatively fewer publications. The uneven distribution of authors suggests that the field remains relatively concentrated and provides opportunities to broaden academic collaboration and explore psychological, technological, and social perspectives on impulsive buying in live streaming commerce.

Figure 3(b) illustrates that research on impulsive buying behavior in live streaming commerce is concentrated in a relatively small number of institutions. Bina Nusantara University records the highest contribution, followed by Universiti Putra Malaysia, Sunway University, and the University of Economics Ho Chi Minh City, highlighting Southeast Asia as a major research hub. European institutions, including the University of East Anglia, Norwich Business School, and Swansea University, contribute less substantially. Overall, the institutional distribution indicates that the field remains relatively young and Asia-focused, creating opportunities for broader international collaboration and more diverse research perspectives.

Table 4 (a) presents the distribution of publications by country or territory and shows that research on impulsive buying behavior in live streaming commerce is predominantly concentrated in Asia. China records the highest publication output, reflecting its strong live streaming commerce ecosystem and substantial academic interest in impulsive consumer behavior. Malaysia and Indonesia also make notable contributions, highlighting Southeast Asia as an important research hub alongside the rapid expansion of e-commerce and digital technologies. In contrast, the UK and Vietnam show moderate contributions, while India, Taiwan, Jordan, the Philippines,

and the Czech Republic have relatively limited outputs. Overall, this geographical distribution indicates that research remains heavily concentrated in Asian countries, while greater participation from other regions could broaden the geographical and contextual understanding of impulsive buying behavior in live streaming commerce.

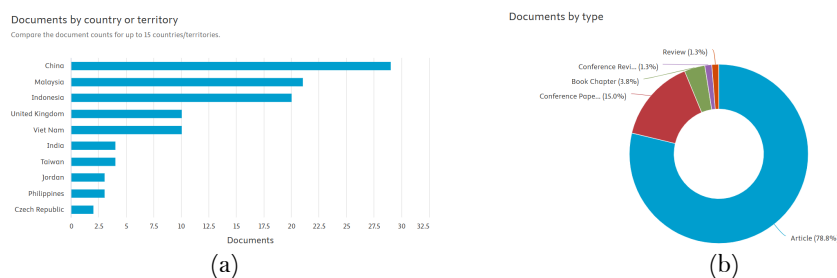


Figure 4. (a) Publication by Countries, (b) Types of Documents in Publications

Figure 4(b) shows that publications on impulsive buying behavior in live streaming commerce are overwhelmingly dominated by journal articles, accounting for approximately 78.8% of the total documents. Conference papers contribute around 15%, indicating that the topic is also actively discussed through academic forums where emerging findings are presented. In contrast, book chapters (3.8%), review papers (1.3%), and conference reviews (1.3%) represent only a small share of the literature. The dominance of empirical journal articles, together with the limited number of review studies, suggests that the field remains relatively young and provides substantial opportunities for future systematic literature reviews and bibliometric studies to consolidate existing knowledge and develop stronger conceptual perspectives.

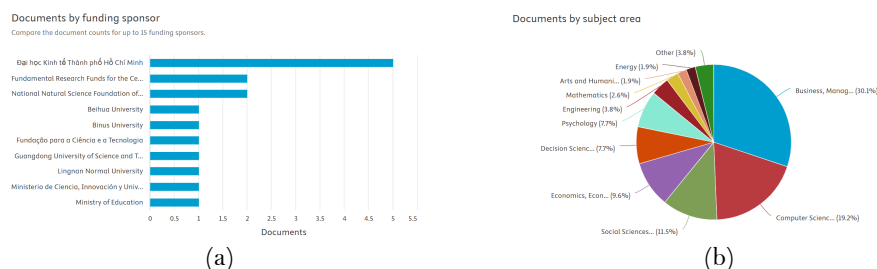


Figure 5. (a) Top Funding Agencies in Research (b) Publications by Field of Study

Figure 5(a) shows that research contributions are concentrated in a limited number of institutions, with Đại học Kinh tế Thành phố Hồ Chí Minh recording the highest output at approximately five publications. Funding sources such as the Fundamental Research Funds and the National Natural Science Foundation account for around two publications each, reflecting strong research support, particularly in China. In contrast, Beihua University, Binus University, and Fundação para a Ciência e a Tecnologia contribute only one publication each, indicating that research remains geographically and institutionally dispersed. Overall, the pattern highlights Asia's strong contribution while leaving considerable opportunities for institutions from other regions to expand research in this field.

Figure 5(b) indicates that research is primarily concentrated in Business, Management and Accounting (30.1%), followed by Computer Science (19.2%), Social Sciences (11.5%), and Economics (9.6%). Decision Sciences and Psychology each contribute approximately 7.7%, demonstrating the relevance of technological, behavioral, social, and economic perspectives. Meanwhile, Engineering, Mathematics, Arts and Humanities, and Energy account for relatively small shares.

The distribution confirms the multidisciplinary nature of impulsive buying research in live streaming commerce, while business and technology remain the dominant disciplinary perspectives.

4.2. Intellectual Structure and Thematic Evolution

Figure 6 shows the keyword co-occurrence network and highlights the interconnected structure of research on impulsive buying behavior in live streaming commerce. Core keywords such as live broadcast, impulsive buying, impulse purchase, and electronic commerce indicate the central themes of the field, while consumer behavior, buying behavior, and sales emphasize consumer responses in real-time online shopping. Several interconnected clusters are also evident, including psychological factors such as emotion, arousal, and impulsiveness; theoretical perspectives such as S-O-R theory, perceived value, perceived enjoyment, and telepresence; and methodological approaches including PLS-SEM, online surveys, and questionnaires. Figure 6 demonstrates that the field is multidimensional and increasingly integrates technological, marketing, and psychological perspectives to explain impulsive buying in live streaming commerce.

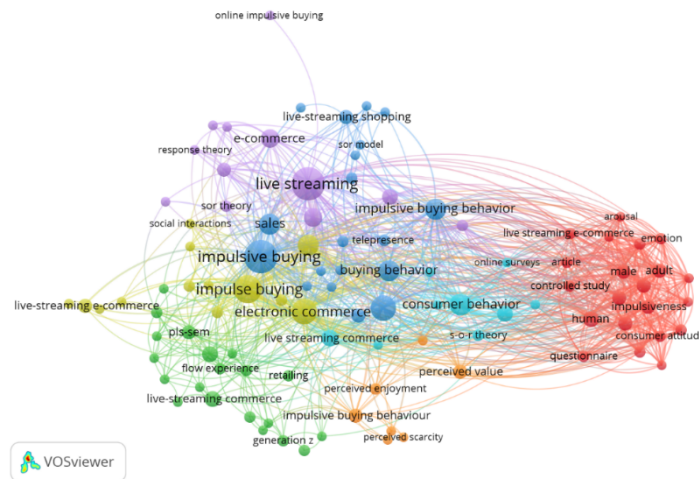


Figure 6. Network Visualization

The keyword analysis reveals several interconnected clusters that describe the intellectual structure of research on impulsive buying behavior in live streaming commerce. The main cluster of live streaming and e-commerce is characterised by keywords such as live streaming, e-commerce, live streaming shopping, and sales, reflecting the fundamental focus on integrating live streaming technology into e-commerce activities and its potential to stimulate consumer purchases and increase sales. Closely related to this is the consumer behavior cluster, which focuses on how consumers respond to live shopping environments, particularly their purchasing decisions and impulsive buying tendencies.

The emotional and psychological cluster includes keywords such as emotion, arousal, impulsiveness, and consumer attitude, highlighting the psychological and emotional mechanisms underlying impulsive buying behavior. These relationships are further explained through the theory and conceptual models cluster, which includes SOR theory, response theory, perceived value, perceived enjoyment, and telepresence. This cluster demonstrates how live streaming acts as a stimulus that influences consumers' psychological states and ultimately generates behavioral responses, including impulsive purchases. From a methodological perspective, the research methodology cluster is dominated by PLS-SEM, online questionnaires, surveys, and controlled studies, indicating the common empirical approaches used to examine these relationships.

The keyword structure also identifies a context and market segmentation cluster, represented by terms such as Generation Z, male, adult, and human, which reflects the demographic characteristics and consumer segments examined in previous studies. In addition, the additional influencing factors cluster includes perceived scarcity, flow experience, social interaction, and retail, highlighting external stimuli and user experiences that can further increase consumers' likelihood of making impulse purchases. These clusters demonstrate that research on impulsive buying behavior in live streaming commerce is inherently multidisciplinary, integrating technology, consumer behavior, psychological mechanisms, theoretical perspectives, research methodologies, and market characteristics to explain how live shopping environments shape impulsive purchasing decisions.

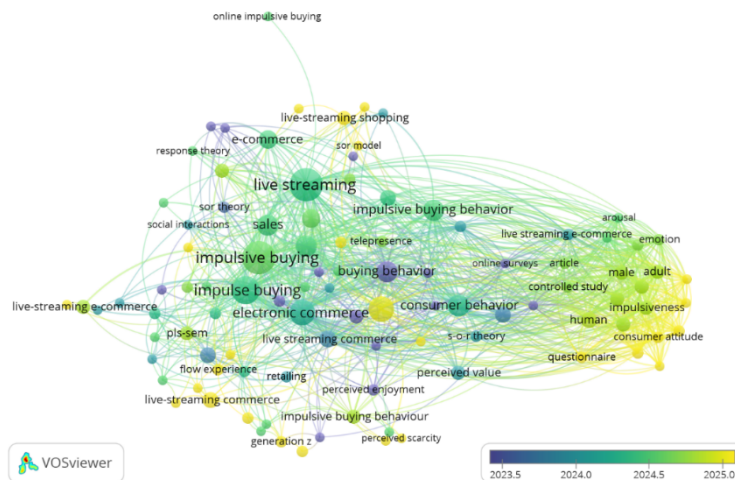


Figure 7. Overlay Visualization

Figure 7 illustrates the keyword co-occurrence and temporal evolution of research on impulsive buying behavior in live streaming commerce. Live streaming emerges as the central node, closely connected with impulsive buying, consumer behavior, and electronic commerce, confirming the strong integration of live streaming with established e-commerce research. Psychological and experiential factors, including emotion, arousal, perceived value, flow experience, and telepresence, further highlight how real-time interaction shapes consumer engagement and impulsive purchasing, with the S-O-R framework representing a prominent theoretical approach. The temporal colours indicate an evolution toward more recent topics such as consumer attitude, impulsiveness, and online surveys, suggesting increasing attention to measurable consumer responses and data-driven analysis. Research on impulsive buying in live streaming commerce is increasingly multidimensional, integrating technological, psychological, social, and behavioral perspectives while moving toward more specific empirical investigations.

Based on Figure 8, the density visualization highlights the intensity and interconnectedness of research on impulsive buying behavior in live streaming commerce. The bright yellow regions represent the most frequently studied and strongly connected topics, particularly live streaming, impulse buying, sales, and e-commerce. This indicates that existing research primarily examines how live-streaming activities within e-commerce influence impulsive buying behavior. Related themes, including consumer behavior and buying behavior, further reinforce this focus. Meanwhile, psychological and experiential factors such as telepresence, flow experience, and perceived enjoyment, together with the S-O-R model, highlight the importance of understanding how live-streaming stimuli influence consumers' emotional and cognitive responses.

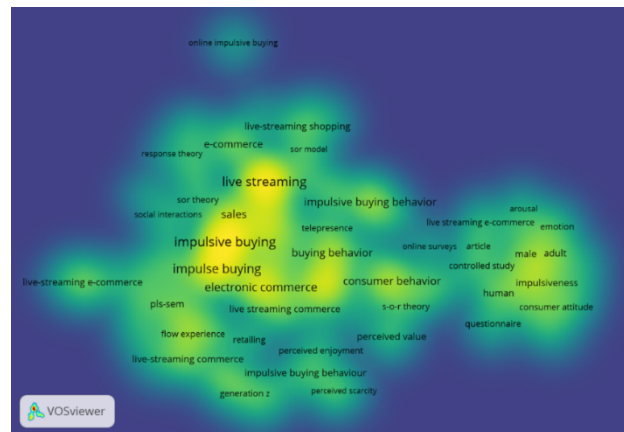


Figure 8. Density Visualization

Conversely, the less dense regions (green to blue) contain topics such as emotion, arousal, consumer attitude and research methods such as online survey and questionnaires, demonstrating more niche and emerging research pathways. As shown in this map, most of the studies on impulsive buying in live streaming commerce focus on the interaction of digital technology, marketing strategies and consumer psychology. In addition, research is increasingly tending to measure user experience and consumer behavior with greater depth.

5. Discussion

The bibliometric findings indicate that research on impulsive buying behavior in live streaming commerce has expanded rapidly, particularly after 2023, and reached its peak in 2025. This growth reflects increasing academic interest in how digital environments shape consumer decision-making through visual stimuli, transactional convenience, and interactive experiences. These findings are consistent with Verhagen and van Dolen (2011), who demonstrated that online environmental stimuli can influence consumers' impulse buying tendencies, and Parboteeah et al. (2009), who found that website characteristics and situational cues can stimulate impulse purchasing. However, the present findings extend this perspective by showing that live streaming commerce introduces a more interactive and socially embedded environment in which purchasing occurs simultaneously with entertainment and real-time communication.

The multidisciplinary structure identified in the mapping further confirms that impulsive buying in live streaming commerce cannot be explained from a purely marketing perspective. The strong presence of marketing, information technology, social science, and psychological themes reflects the distinctive characteristics of live streaming, where entertainment, social interaction, and transactions are integrated into a single environment. This finding supports Cai and Wohn (2019) and Sun et al. (2019), who emphasised the importance of social interaction and engagement in live-streaming environments. Similarly, Wongkitrungrueng and Assarut (2020) found that live-streaming characteristics can strengthen consumer trust and engagement, while Ming et al. (2021) demonstrated that social and interactive features can influence consumers' purchasing responses. Thus, the present results suggest that live streaming commerce represents an evolution from conventional e-commerce by adding social presence and real-time interaction to the purchasing process.

The prominence of the Stimulus–Organism–Response (S–O–R) framework provides an important theoretical explanation for this development. Based on Mehrabian and Russell (1974), environmental stimuli influence individuals' internal psychological states before generating behavioral responses, while Eroglu et al.

(2001) demonstrated the applicability of this logic to online shopping environments. The bibliometric results reinforce this theoretical pathway by identifying emotion, arousal, and impulsiveness as prominent psychological themes. This is consistent with Rook (1987), who conceptualised impulse buying as a sudden and emotionally driven purchasing experience, and Beatty and Ferrell (1998), who highlighted affective states and situational factors as important antecedents of impulse buying. Recent studies further support the relevance of psychological, social, and contextual factors in live commerce, including the roles of emotional responses, social interaction, and consumer experience (Balakrishnan et al., 2020; Xia et al., 2024; Imbayani & Gama, 2024).

Nevertheless, the bibliometric mapping reveals that these factors remain relatively fragmented across research streams. Although prior studies have established the importance of psychological, social, and promotional stimuli, they are often examined through separate models rather than integrated into a holistic framework (Chen et al., 2019; Meirida & Nuvriasari, 2024). The present findings therefore indicate an important theoretical opportunity to connect technological stimuli, social interaction, psychological states, and promotional mechanisms within a unified model of impulsive buying. Such integration could provide a more comprehensive explanation of how live-streaming environments simultaneously shape consumers' cognitive, emotional, and behavioural responses. Such integration may provide a more comprehensive explanation of how these dimensions interact to shape impulsive buying behavior in live-streaming commerce.

6. Conclusion

This study demonstrates that research on impulsive buying behavior in live-streaming commerce has grown rapidly, particularly since 2023, with publication activity peaking in 2025. The findings indicate that impulsive buying is shaped by the interaction of technological, psychological, social, and promotional factors, with live-streaming features such as real-time interaction, social presence, platform design, promotions, and host influence affecting consumers' internal states and purchase responses. The dominance of the Stimulus–Organism–Response (S-O-R) perspective further confirms the importance of psychological mechanisms in explaining these relationships. The bibliometric mapping also shows that the field is multidisciplinary, primarily involving business, marketing, psychology, social sciences, and information technology. These findings provide an integrated overview of the field's development, intellectual structure, and major research themes, while suggesting that future studies should move beyond isolated variables toward more comprehensive explanations of impulsive buying in live commerce.

From a practical perspective, the findings highlight the importance for live-streaming platforms, sellers, and streamers to understand how technological features and promotional strategies interact with consumers' psychological and social responses. However, several limitations should be acknowledged. The analysis relied solely on Scopus, potentially excluding relevant publications indexed in Web of Science, Google Scholar, and Dimensions. The use of specific keywords may also have excluded studies using terms such as live commerce, social commerce, impulse purchase, or livestream shopping. In addition, the dataset consisted of only 74 publications, reflecting the relatively early stage of this research domain. Future research should therefore expand database coverage and keyword combinations, periodically update the dataset, and complement bibliometric analysis with systematic reviews or content analysis. Greater attention should also be given to underexplored geographical and cultural contexts, while emerging variables such as trust, fear of missing out, perceived scarcity, streamer credibility, and digital ethics, alongside qualitative, longitudinal, experimental, and mixed-method approaches, can

help develop more integrated and generalisable models of impulsive buying behavior in live streaming commerce.

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