Social Sciences & Humanities Open 13 (2026) 102737

Contents lists available at ScienceDirect

Social Sciences & Humanities Open

journal homepage: www.sciencedirect.com/journal/social-sciences-and-humanities-open

Review Article

Live streaming and consumer purchase behavior: Current and future opportunities in E-commerce

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ARTICLE INFO

Keywords:
Live streaming
e-commerce
Purchase behavior
Science mapping
Bibliometric analysis
Consumer behavior

ABSTRACT

This study provides a state-of-the-art review by evaluating the knowledge structure of live streaming and consumer purchasing behavior. The rise of digital marketing technology and social media influencers has increased the live-streaming phenomenon, where consumers purchase products advertised during live streams. This review uses a science-mapping technique based on bibliometric analysis to map live-streaming content and its influence on consumer purchase behavior, drawing on 604 journal articles published from 2019 to 2024. The current and future trends were analyzed using the prominent technique of bibliographic coupling and co-word analysis. The current and emerging trends discovered are 1) Customer engagement in live streaming, 2) Motivation of consumer live stream shopping, and 3) Product endorsement in live streaming. Future trends suggest 1) The impact of live streaming on online consumer commerce, 2) Trust and satisfaction in live streaming e-commerce, 3) Social media live streaming in e-commerce, and 4) Antecedents of purchase intention and adoption in live streaming commerce. These findings provide an evolving role for live streaming, from an engagement-driven tool to a strategic mechanism shaping digital commerce and consumer decision-making. The implications of live streaming for future e-commerce are immense for research and practice. From a psychological perspective, live streaming has highlighted mechanisms such as parasocial interaction, trust formation, and emotional engagement between sellers and buyers. Furthermore, the phenomenon of impulsive buying is a concern, as it significantly influences consumers' psychological states and decision-making processes. Business owners need to capitalize on the live streaming platforms, including engagement with influencers and opinion leaders for product endorsement. This review provides a novel, state-of-the-art understanding of live streaming and its way forward for e-commerce.

1. Introduction

Rapid advances digital technology have transformed online shopping with the emergence of live-streaming commerce. Compared to conventional electronic commerce (e-commerce), live streaming enriches consumers' experience by providing a platform for real-time interaction using video and live chat (Luo et al., 2023). These unique elements increase consumer engagement and provide immersive opportunities to evaluate products on the platform, leading to purchases (Paraman et al., 2022). Live streaming popularity has increased significantly as a platform for content creators and viewers (Pagáč et al., 2024). Most social media platforms today have embedded live streaming, signifying the need for social media platforms to provide such features to cater to users' demands (Mai et al., 2023; Wong et al., 2026). Social media giants such as Facebook, Instagram, and TikTok have all optimized their live-streaming features to meet the market demands in

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https://doi.org/10.1016/j.ssaho.2026.102737
Received 13 March 2026; Accepted 24 March 2026
Available online 31 March 2026

today's digital marketing landscape (Chen et al., 2024; Wang, 2024)

Streaming fundamentally refers to data transfer in a continuous stream, while live streaming refers to streaming real-time events over the internet (Merriam-Webster Inc, 2024). Live streaming lets consumers interact with sellers through online videos, comments, chat, and view live product advertisements (Hossain et al., 2023). Live streaming provides consumers an experience like offline shopping through detailed product presentations (Lin et al., 2023). Unlike conventional e-commerce, live streaming enables streamers to sell highly curated products at discounted prices, with real-time product demonstrations (Tan et al., 2023). Thus, this new form of commerce has transformed and disrupted the e-commerce business, forcing business owners and corporations to adapt to live streaming. There are persistent gaps in the literature regarding understanding the fundamental research streams on this subject, as many studies are expected to come. Thus, this study provides the network visualization and overview of live streaming and consumers' purchasing behavior based on well-established bibliometric analysis via science mapping.

The basis of this study's motivation relies on two fundamental reasons. The first is the imperative impact of live streaming on e-commerce and digital technology on consumer purchasing behavior. Live streaming has become the new frontier in the digital economy alongside sophisticated technology such as artificial intelligence, big data, the Internet of Things, and cloud computing. The development of these digital technologies has exacerbated live streaming as a norm in society, redefining the relationship between sellers and consumers (Lin et al., 2023). Live streaming shopping has become the new driving force and will increase due to the higher proportion of mobile internet (Ma et al., 2022; Tan et al., 2023). Live streaming has been shown to influence consumer psychology by enhancing social presence, perceived value, and emotional engagement, thereby shaping the cognitive and affective processes underlying consumer purchase decision-making in live-streaming e-commerce (Zhang et al., 2024). These behavioral and psychological mechanisms, including trust, real-time interaction, and interactive cues, are crucial in driving purchase intentions and actual purchases (Yang et al., 2025). Despite the widespread and increasing consumer purchasing behavior in live streaming, there are still plenty of emerging gaps and opportunities for scholars to explore consumer purchasing behavior in a live-streaming environment (Hossain et al., 2023).

Secondly, this study is motivated by the need to evaluate the knowledge structure of live-streaming published literature to reveal its topological and temporal framework and structure. There is a lack of findings from past reviews, particularly from the science mapping approach using bibliometric analysis. However, several studies have significantly provided a fundamental review of live streaming from various perspectives. Mai et al. (2023) reviewed live-streaming commerce by identifying three broad domains: streamer-focused research, platform-focused research, and consumer-focused research. In a systematic literature review, Cui et al. (2024) discovered that live streamer credibility and interaction are the most significant factors toward consumer trust, ultimately leading to purchase intention. Luo et al. (2023) systematically reviewed 201 studies through Scopus and Web of Science databases, discovering the basic questions of what we know, how we know, and where we should go regarding live streaming commerce. However, little is known about how live streaming impacts emerging and future marketing and business trends. Unlike prior reviews that provide thematic syntheses or classifications, this study adopts a science mapping bibliometric approach using bibliographic coupling and co-word analysis to uncover the knowledge structure and conceptual evolution of live streaming. This approach enables the identification of research clusters based on emerging and future directions that have not been systematically explored in past reviews. Thus, this study applies science mapping through bibliometric analysis to uncover the knowledge structure of live streaming and its relation to consumer purchase behavior. The following objectives are presented:

i) To investigate the current and emerging trends of live streaming and consumer purchase behavior using bibliographic coupling analysis.
ii) To predict future live streaming trends and consumer purchase behavior using co-word analysis.

This study is constructed based on a standard science mapping procedure as follows. This introduction section presents the background of live-streaming literature, its emergence, and its crucial impact on practitioners and researchers. Section 2 presents the methodology of science mapping and the bibliometric approach through two fundamental analyses of bibliographic coupling and co-word analysis. Next, section 3 discusses the findings based on the clusters produced, depicting the current and future research agendas in live streaming and consumer purchasing behavior. The theoretical and managerial implications are outlined in section 4, while the limitations and future research avenues are discussed in sections 5 and 6, respectively. Finally, the study is concluded in section 7.

2. Methodology

2.1. Bibliometric approach

A quantitative method analyzes bibliographic databases using a performance analysis or science mapping technique (Donthu et al., 2021). It explores the large volume of data by discovering specific knowledge through evolutionary nuance while shedding light on emerging areas (Zupic & Čater, 2015). This study supplements the established method of systematic review (qualitative) and meta-analysis (quantitative) by providing a combination of qualitative and quantitative analysis, reducing researcher bias (Linnenluecke et al., 2020). Two bibliometric approaches, known as performance analysis and science mapping, were introduced by Noyons et al. (1999). Performance analysis evaluates the publication trends of research constituents into joint and organized literature (Tiwari & Srivastava, 2025). Science mapping applies bibliometric applications based on statistical and mathematical indicators to measure and compare the evolution of science in a particular field (Pessin et al., 2022). Using these techniques has facilitated scientific writing and has been consolidated as practice at the beginning of research (Pallottino et al., 2018). Two bibliometric analyses are utilized to achieve the objectives as follows:

i) Bibliographic coupling: Evaluate the relationship between citing publications. It applies the reference similarity to connect publications (Budler et al., 2021). For instance, when two documents cite ten publications, these two papers are linked with a strength of ten. The stronger the bibliographic connection, the more it signifies their conceptual similarity. The analysis provides a research field's present themes (Donthu et al., 2021).
ii) Co-word analysis: This analysis examines the actual content of the publication by focusing on the words derived from the “author keywords,” “titles,” and “abstract” (Zupic & Čater, 2015). This analysis assumes words that highly appear form a thematic relationship with one another. This analysis is capable of predicting the future trends and forthcoming trajectories in a field (Donthu et al., 2021)

2.2. Research design and data collection procedure

The following search string (Table 1) was applied to retrieve publications according to relevant keywords. These keywords are associated with live streaming and purchase behavior, and their associated keywords and terminologies are derived from past studies, literature, and word searches via website and synonym identification. The dataset covers the period 2019–2024 to capture the most recent publications on the topic. Data were retrieved from the Web of Science Core Collection. Only a single database was used to reduce potential bias associated with

Table 1
Search string in WoS database.

No	Keywords	Justification
1	"live stream*" OR "real time stream*" OR "live broadcast*" OR "live video**" OR "webcast*"	To identify publications related to live streaming and related terminologies
2	"purchas*" OR "buy*" OR "shop*" OR "transac*" OR "commerc*"	To identify publications related to consumer purchasing and commerce behavior

merging datasets from multiple sources, as recommended by Nitesh Donthu et al. (2021). The Web of Science Core Collection was selected because it provides highly curated and selective indexing, particularly for high-impact journals across the social sciences, humanities, and life sciences (Zhu and Liu, 2020). The topic search (TS) was selected to retrieve articles with the keywords. It will ensure that the keywords will only appear in the title, abstract, or author keywords. After the search process, only journal articles are included for further analysis. The justification for including only journals is to ensure that the database is homogeneous and includes only peer-reviewed documents. Similar studies have adopted only journal publications in their bibliometric analysis (Bretas & Alon, 2021; Zulkepeli et al., 2024). The software tool used in this science mapping is VOSviewer version 1.6.20, a powerful tool to visualize the science behind a subject and capable of exporting and loading information from various sources (Moral-Muñoz et al., 2020).

3. Findings and discussion

The search in the WoS database was performed on 27th October 2024. Initial findings led to 628 articles, with 604 journal articles screened and finalized. The number of citations for these documents was recorded as 10,484 and 5814 (without self-citations). The average citation for each document was 17.36, with an h-index of 46. The number of publications and citations received is shown in Fig. 1. The graph shows the topic is still new, with the first publication emerging in 2019. Publications increased significantly from 2021 to 2022, with more than 100 publications produced, indicating the crucial impact of live streaming and consumer purchasing behavior. The number of publications and citations will continue to increase with more crucial issues and the transformation of e-commerce related to live streaming. This upward trend suggests that live streaming is becoming a prominent research topic today. It is driven by the rapid evolution of e-commerce platforms, which are expanding real-time digital interaction, shaping consumer engagement and purchase decisions.

3.1. Bibliographic coupling

Of the 604 documents, 42 met a threshold of 50, producing a robust network map. The map must be produced with an appropriate threshold to ensure robust and appropriate clusters representing appropriate research streams. The minimum citation should not be too high, causing overfiltering and missing crucial documents for thematic analysis. At the same time, it should not be too low, causing underfiltering and redundancy of themes (Ahmad et al., 2024). Since bibliographic coupling is connected based on the citing relationship, impactful publications are measured by their total link strength (TLS), indicating bibliographic strength. Documents with the highest bibliographic strength are Zhang et al. (2022) (334 TLS), Xue et al. (2020) (326 TLS), and Guo et al. (2021) (311 TLS) (see Table 2). These top-10 documents in bibliographic coupling show that publications revolved around live streaming and consumer engagement and associated factors such as trust, interaction, and streamers' characteristics, defining the formation of clusters.

Fig. 2 illustrates the network visualization of live streaming produced from bibliographic coupling analysis, producing three distinct clusters. The current trends and future development of live streaming and consumer purchase behavior are discussed. Cluster 1 (red) is related to customer engagement in live streaming, Cluster 2 (green) to the characteristics of live streamers and consumer shopping behavior, and Cluster 3 (blue) to product endorsement in live streaming. The clustering patterns indicate that current research primarily focuses on consumer interaction mechanisms and influencer-driven marketing. This phenomenon builds trust and engages the audience, ultimately influencing consumers' purchase decisions. To provide the clusters' overview, each is labeled based on inductive interpretation by connecting and synthesizing representative articles.

- Cluster 1 (red): **Customer engagement in live-streaming**

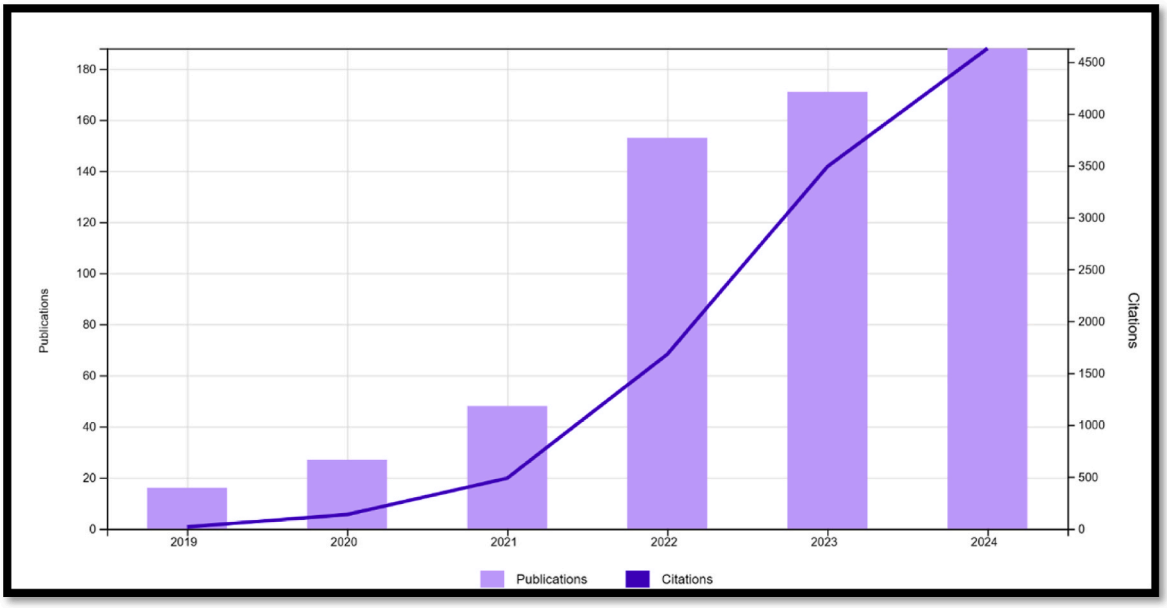

Fig. 1. Number of publications and citations on live streaming and consumer purchase behavior.
(source: Web of Science)

Table 2
Top 10 documents.

Rank	Publication	Scope	Citation	TLS
1.	Zhang et al. (2022)	Role of trust in live streaming commerce	160	334
2.	Xue et al. (2020)	Customer interaction in social commerce.	191	326
3.	Guo et al. (2021)	Live streaming commerce and impact on customer trust on engagement	137	311
4.	Gao et al. (2021)	Persuasive message in live streaming	124	287
5.	Lv et al. (2022)	Live streaming impact on continuous watching intention and immediate buying behavior	66	272
6.	Guo et al. (2022)	Top streamer's influence and popularity	138	251
7.	Xu et al. (2020)	Driver of consumer shopping behavior in live-streaming commerce	239	249
8.	Sun et al. (2019)	The influence of live streaming on consumer purchase intentions	450	249
9.	Chen et al. (2022)	Consumers' purchase intention based on dual-process model	81	248
10.	Wongkitrungrueng and Assarut (2020)	Consumer trust and engagement based on live streaming	544	236

The most crucial reason to adopt live streaming is its ability to engage customers. Symbolic value was found to directly influence customer engagement via trust, while hedonic and utilitarian values were shown to impact customer engagement indirectly through trust (Wongkitrungrueng & Assarut, 2020). Hu and Chaudhry (2020) discovered the link between structural and social bonds impacting consumer engagement via effective commitment, and financial bonds indirectly impact consumer engagement via affective commitment. Using text mining, Kang et al. (2021) discovered that interactivity influences customer engagement behavior, forming a curvilinear relationship based on 3.5 million online review comments.

- Cluster 2 (green): **Characteristics of live streamers and consumer shopping behavior**
  Streamers' characteristics are one of the important criteria for attaining and retaining customer engagement. Gao et al. (2023) studied virtual streamers' characteristics that influence consumers' purchase intention on live streaming. Findings suggest that animacy, likeability, and responsiveness elevate presence and telepresence, ultimately leading to purchase intention. Ma (2021) discovered that shoppers are motivated by gratification in terms of hedonic, utilitarian, and social. Virtual streamers' social presence and interaction increase consumers' purchases of live online streaming. Using flow theory, Zheng et al. (2023) evaluated consumers' behavior from the stream-streamer-viewer perspective. Antecedents of flow were identified as social presence and interactivity (stream dimension) and streamer expertise and attractiveness (streamer dimension) that influence flow, leading to consumer view and purchase behavior.
- Cluster 3 (blue): **Product endorsement in live streaming**
  Streaming media provides a platform for product endorsement. This endorsement could come from celebrities, social media influencers, and small streamers. Geng et al. (2020) discovered that celebrity endorsement significantly influences e-commerce sales, indicating crucial marketing outcomes. Based on live streaming views, Park and Lin (2020) suggest that product-source fit impacts trustworthiness and perceived source attractiveness. This endorsement of hedonic attitude, source trustworthiness, and self-product fit influences consumers' buying intention. Guo et al. (2022) studied product endorsement by small streamers who do not possess celebrity status but focus on interpersonal communication during live streaming. Findings show that product endorsement of these small streamers was highly influenced by expertise in reviewing products far superior to beauty. The following Table 3 summarizes each of the cluster labels.

The findings of these three clusters suggest the multi-dimensional nature of live streaming as a marketing tool. The evidence is consistent and mainly empirically grounded, with the majority of studies employing survey and experimental methods. These clusters are connected through dominant psychological mechanisms, particularly trust formation, social presence, engagement, and parasocial interaction. The specific role of customer engagement reveals trust as a key factor driving

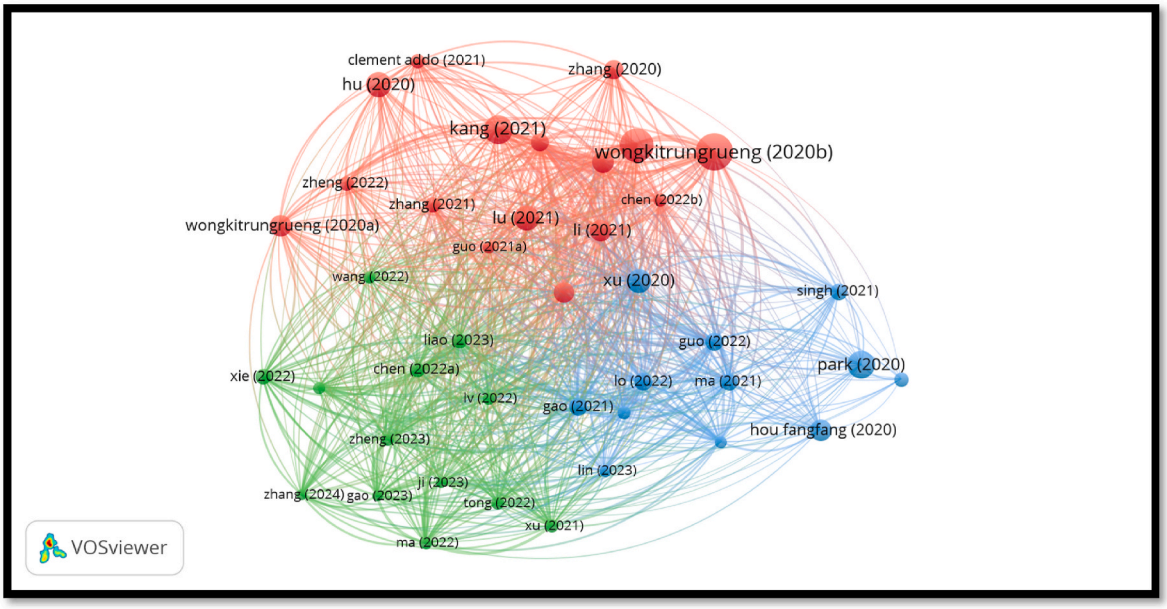

Fig. 2. Bibliographic coupling of live streaming consumer and consumer purchasing behavior.

Table 3
Summary of bibliographic coupling analysis on live streaming and consumer purchase behavior.

Cluster	Label	Number of publications	Selected publication
1 (red)	Customer engagement in live-streaming	16	Wongkitrungrueng and Assarut (2020), Hu and Chaudhry (2020), Kang et al. (2021)
2 (green)	Characteristics of live streamers and consumer shopping behavior	13	Gao et al. (2023) Ma (2021 Zheng et al. (2023)
3 (blue)	Product endorsement in live-streaming	12	Geng et al. (2020), Park and Lin (2020), Guo et al. (2022)

consumer involvement with live streaming platforms (cluster 1). Trust is closely associated with cluster 2, reflecting characteristics of live streamers and consumer shopping behavior. Specific attributes such as responsiveness, social presence, and likeability elevate the consumer experience and ultimately drive purchase intention. Lastly, cluster 3 highlights the significant impact of product endorsement during live streaming. Regardless of whether the streamer is a celebrity, an influencer, or a small streamer, the trust built and the streamer's characteristics will influence buyers' shopping intention and behavior. Notably, the findings indicated that trust, engagement, and streamers' influence on purchasing behavior in live streaming are powerful e-commerce marketing strategies.

3.2. Co-word analysis

This analysis suggests crucial future directions in live streaming and consumer purchase behavior. The co-word analysis presents four clusters from 42 out of 2719 keywords with 19 thresholds. The threshold was finalized after several trials to determine the most robust and meaningful network clusters, as in bibliographic coupling analysis. The highest co-occurred keywords are "Impact" (145 occurrences), "Behavior" (113 occurrences), and "Trust" (106 occurrences). Table 4 shows the highest co-occurred keywords.

The network structure of the co-word analysis is presented in Fig. 3. Cluster 1 (red) presents the impact of live streaming on online consumer commerce; cluster 2 (green) on trust and satisfaction in live-streaming e-commerce; cluster 3 (blue) on social media live streaming in e-commerce; and cluster 4 on the antecedents of purchase intention and adoption in live-streaming commerce. The clusters highlight that existing studies focus on consumer behavioural mechanisms, emphasizing the role of live-streaming commerce in forming trust, fostering interaction, and driving influencers' platform engagement. The map indicates four clusters representing four different themes. Following the author's inductive interpretation, the clusters are labeled accordingly.

- Cluster 1 (red): **The Impact of Live Streaming on Online Consumer Commerce**
  The first theme is a fundamental aspect of the impact of live streaming on consumer purchase behavior. One impact of live streaming on consumer commerce and purchasing behavior is the role of key opinion leaders or influencers. Lyu et al. (2024) found that opinion leaders' professionalism, popularity, and attractiveness influence live-streaming views and ultimately convert them into sales. Another impact of live streaming is consumer impulsive purchase behavior. Li, Huang, et al. (2024) depict that streamer characteristics (professionalism and personal charisma) and performance (entertainment and interactivity) impact consumers' impulsive purchase behavior in live streaming.

Table 4
Top 15 keywords in live streaming and consumer purchase behavior.

Rank	Keyword	Occurrences	Total link strength
1.	Impact	145	574
2.	Behavior	113	457
3.	Trust	106	472
4.	Purchase intention	101	429
5.	Live streaming	95	310
6.	Intention	81	323
7.	Social commerce	72	303
8.	Online	67	284
9.	Information	62	233
10.	Model	60	244
11.	e-commerce	59	226
12.	Commerce	53	191
13.	Engagement	51	201
14.	Social presence	50	224
15.	Live streaming commerce	50	204

Table 5
Summary of co-word analysis on live streaming and consumer purchase behavior.

Cluster	Label	Number of keywords	Selected Keywords
1 (red)	The impact of live streaming on online consumer commerce	13	Impact, commerce, online, information, quality, consumers, live streaming e-commerce
2 (green)	Trust and satisfaction in live streaming e-commerce	12	Behavior, model, purchase intention, commerce, trust, flow, satisfaction
3 (blue)	Social media live streaming in e-commerce	9	Live streaming, e-commerce, social media, engagement, interactivity, word of mouth
4 (yellow)	Antecedents of purchase intention and adoption in live-streaming commerce	8	Intention, live streaming commerce, social presence, purchase, antecedents, adoption

- Cluster 2 (green): **Trust and Satisfaction in Live Streaming E-Commerce**
  Consumers purchase products in live streaming due to the trust they place in live streamers and the product being sold. Chong et al. (2023) found that trust in broadcasters influences perceived value and moderates the relationship between continuance intention. Jiang et al. (2025) discovered that streamer and product characteristics significantly impact consumers' trust in the product. In another study, Guo et al. (2021) found that trust in broadcasters or streamers positively influences trust in community members and products, consequently impacting product trust. Wongkitrungrueng and Assarut (2020) discovered that symbolic value, utilitarian value, and hedonic value, directly and indirectly, influence trust in sellers and trust in products. This finding indicates that trust is the underlying component of consumer purchase and repurchase behavior in live streaming.
- Cluster 3 (blue): **Social Media Live Streaming in E-Commerce**
  Most social media platforms today have been equipped with live streaming features to accommodate the changes in marketing demand. Social media today are equipped with live streaming, enabling users to communicate with others in real-time (Jia et al., 2024). Social media has provided a platform for personal branding related to platform affordances, audience activity, and cross-platform promotion (Meisner and Ledbetter, 2022). Live streaming allows social media users to co-create and self-develop (Giertz et al., 2022). Chen et al. (2024) discovered slightly different findings from two social media platforms that drive engagement and interactions. The recommendation is relevant on Facebook, and aesthetics was found to be more relevant on Instagram.
- Cluster 4 (yellow): **Antecedents of Purchase Intention and Adoption in Live Streaming Commerce**
  Compared to conventional commerce, antecedents of consumer purchasing behavior in live streaming are different due to its live and real-time advertisement and platform. There are many antecedents of consumer purchasing behavior in live streaming. Ho et al. (2022) integrated the theory of reasoned action (TRA), the technology acceptance model (TAM), and the utilitarian gratification theory (UGT) to investigate user stimuli from live streaming. It was discovered that direct predictors of consumers' attitudes were entertainment gratification, information gratification, perceived usefulness, perceived value, and social interaction. Shang et al. (2023) discovered that anchor-background fit and product-background fit positively impact the consumer cognitive process, leading to live-stream purchase intention. Tian et al. (2023) discovered that informativeness, interactivity, and personal impulsiveness positively influence streamer trust. Subsequently, trust positively impacts consumers' intention to purchase on live streaming platforms. A summary of the co-word analysis is presented in Table 5.

The four clusters identified in this study are supported by robust empirical evidence on the psychological mechanisms that shape consumer behavior in live-streaming e-commerce. Conceptually, the clusters are interconnected through dominant mechanisms such as trust, social presence, parasocial interaction, and perceived value, which together explain how the themes translate into consumer purchase intention and repurchase behavior. Live-streaming platforms have reshaped the future of e-commerce. Cluster 1 highlights key opinion leaders and influencers, whose attractiveness and professionalism drive views and convert them into sales. Cluster 2 emphasizes the role of trust, indicating that consumer confidence in products and streamers strongly influences purchase and repurchase behavior. Trust is built not only through streamer characteristics but also through the value streamers exert, which reinforce consumer satisfaction (Chong et al., 2023; Guo et al., 2021). Furthermore, cluster 3 explores the role of social media such as Facebook and TikTok, which leverage real-time interaction and

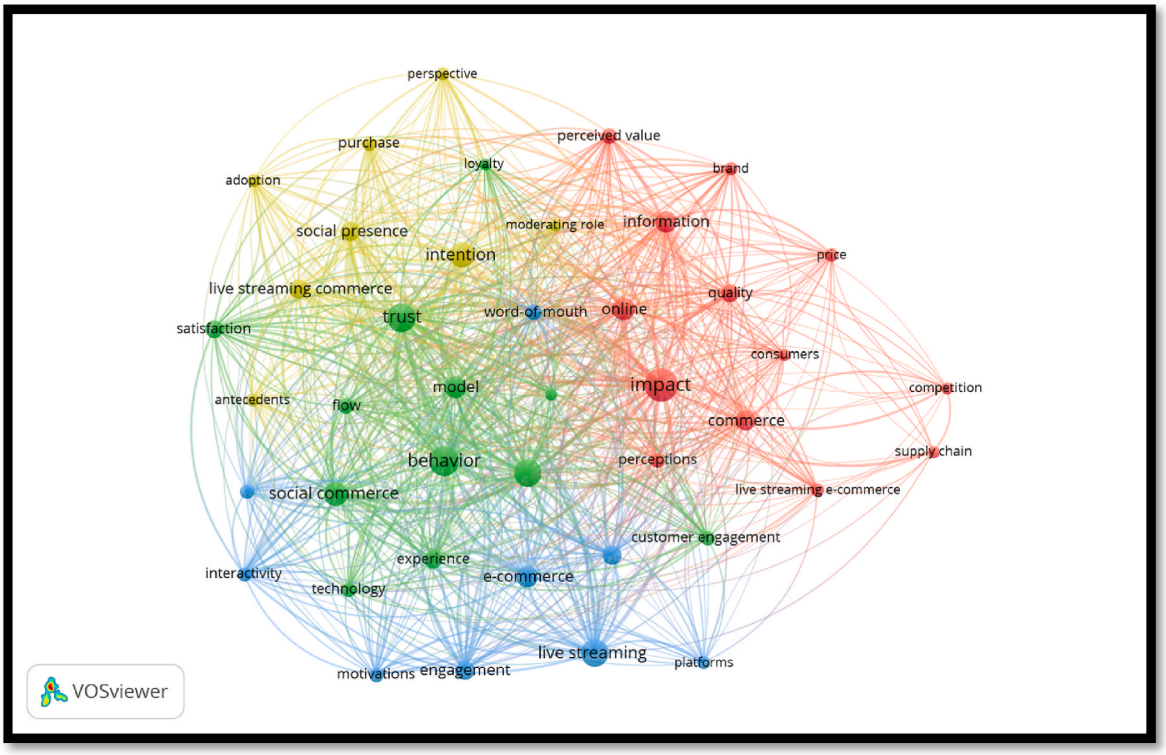

Figure 3. Co-word analysis on live streaming and consumer purchase behavior.

aesthetic appeal to enhance personal branding (Meisner and Ledbetter, 2022; Jia et al., 2024; Chen et al., 2024). Finally, cluster 4 focuses on the antecedents of purchase intention in live streaming, which differ from those in traditional commerce due to the real-time nature of live streaming. Factors such as social interaction, informativeness, entertainment, and interactivity drive purchase intentions. While trust in streamers increases the likelihood of making purchases. Together, these clusters suggest that live-streaming e-commerce is driven by a complex relationship among trust, influencer impact, the role of social media, and unique consumer behavioural factors shaped by the interactive medium.

4. Implications

4.1. Theoretical implications

This review has provided crucial theoretical implications in the field of live streaming, consumer commerce, and purchasing behavior. One of the fundamental aspects of live streaming is the role of influencers or opinion leaders utilizing social media for product endorsement, termed social media influencers (Fauzi et al., 2024). Almost all clusters in the two analyses are associated with live-stream influencers. The current trend shows customers engaged in live streaming due to social media influencers' attraction (cluster 1) and product endorsement by influencers (cluster 2). While future trends depict that trust and satisfaction towards influencers determine consumer purchasing behavior (cluster 2). These social media influencers can perform live streams for better engagement and a higher chance of selling their products than non-live webcasts. Thus, influencers are the fundamental theoretical basis for live-streaming success. A conceptual model of consumer psychological mechanisms in live streaming is shown in Fig. 4. The framework explains live streaming e-commerce as a process in which live streaming drivers, such as streamer characteristics (cluster 2 in the bibliographic coupling) and platform, media, and social media environments (cluster 3 in the co-word analysis), act as stimuli. These stimuli activate key psychological mechanisms, including social influence, cognitive

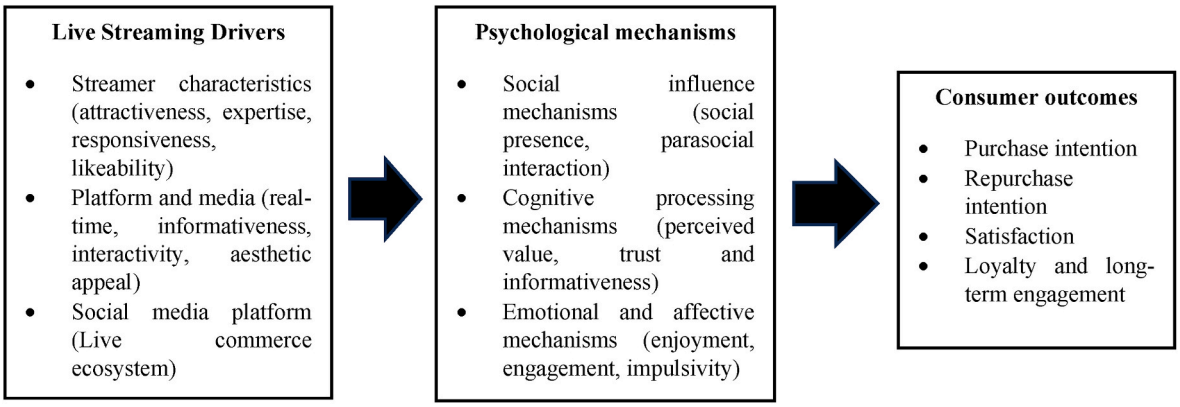

Fig. 4. Conceptual model of consumer psychological mechanisms in live streaming.

processing, and emotional and affective responses (Cluster 1 in the bibliographic coupling analysis and cluster 4 in the co-word analysis). These mechanisms collectively shape consumer decision-making and lead to behavioral outcomes such as purchase intention, satisfaction, and loyalty (cluster 1 in both the bibliographic coupling and co-word analyses).

The impact of social media influencers and live streaming can be studied from various theories. The cluster finding shows that consumers' motivation can be explained by the flow theory (Zheng et al., 2023), uses and gratification theory (Ma, 2021), and product endorsement theory (Geng et al., 2020; Park & Lin, 2020; Guo et al., 2022). These are the most commonly used theories in understanding consumer behavior in live streaming. Apart from that, other theories have been found to contribute to the theoretical basis. Long et al. (2024) examined the theory of planned behavior (TPB) and found that the TPB variables and social media influencer streamers significantly influence consumers' intention to purchase in live streaming. Shao (2024) studied attachment theory, and their findings revealed that consumers are attached based on the professionalism, empathy, credibility, and relevance of live content. Their attachment triggers their endorsement of social media influencers. Based on trust transfer theory, Hsu (2023) discovered that psychological contracts impact trust in live streamers and product trust in live streaming. Based on the uses and gratification theory, Bawack et al. (2023) discovered that consumers depend on social media influencers and live streamers to fulfill their social identification, need for value, and medium attributes for online shopping.

4.2. Managerial implications

This study provides crucial insights to managers and business owners with informed knowledge of the crucial predictors of live-streaming commerce. Among the aspects that business owners need to comprehend is the aspect of trust and engagement (Guo et al., 2021; Zhang et al., 2023; Jiang et al., 2025). Trust is highlighted in cluster 1 (Customer engagement in live-streaming) and cluster 3 (Product endorsement in live streaming) in bibliographic coupling analysis. It is also a crucial trend in future research, depicted in cluster 2 (Trust and satisfaction in live streaming e-commerce) in the co-word analysis. One proposed method is to engage consumers with personalization features during live streaming. The best approach is for the streamer to respond to all consumers' queries. However, the streamer's ability is limited when there are simultaneously too many viewers and queries. Hence, business owners need to equip live streaming with a team behind the scenes to help and facilitate the streamers, especially online with social media influencers. Furthermore, personalization can be accomplished with advanced live stream control options, which can be tailored based on specific features in social media. The control options include user control flexibility to zoom in and out of the page, block the speech box, and others to give consumers a sense of control in purchasing products during live streaming.

As trust is the key to consumer purchase and continuance purchase behavior in live streaming, managerial actions should be tailored to the stakeholders who can directly influence during broadcasts. For platform managers, the priority is to create an environment that signals reliability by strengthening governance through clear ethical guidelines for live selling and streamer support training, enabling consumers to interact with and purchase from streamers with confidence. Sellers and brands (especially big, established corporations) must provide professional and ethical support to streamers with live-broadcasting skills. Trust is reinforced when streamers are trained not only in live broadcasting techniques but also in professional and ethical conduct. Streamers must be able to deliver brand vision and knowledge of the product. They should be able to articulate product strengths and values and interact with customers. This enables consumers to perceive streamers as professionals and trustworthy, leading to trust, engagement, and, ultimately, purchase. Furthermore, marketing and digital media teams within organizations must equip their staff with robust skills to engage the public and increase engagement. Furthermore, the appropriate way to communicate is via various social media platforms (Giertz et al., 2022). These recommendations align with findings highlighted in cluster 3 on the role of social media live streaming in e-commerce. It was also discovered that among these social media, TikTok, Instagram, YouTube, Facebook (Meta), and Twitch are the most popular platforms for live streamers (Bawack et al., 2023). These platforms most likely offer features preferred by consumers, which drive their purchases.

5. Limitations

This study has its fair share of limitations that can be improved in the future. The articles considered in the dataset are derived from the live-streaming keywords and related terminologies in the title, abstract, and keywords only. Other distinct terminologies that may relate to live streaming are not inclusively included. This approach may not fully capture cultural and linguistic variation in how live-streaming commerce is described, particularly across Chinese and Western contexts. For instance, studies in China may use localized terms such as zhibo and daibo, which are referred to as live broadcast or live streaming in Western-focused studies. Nevertheless, the keywords used are similar to past live-streaming studies (Cui et al., 2024). Second, in our attempt to capture the main research streams from the clusters in the two analyses, a subjectivity analysis of narrowing the minimum citation might have hindered capturing the richness of the network themes. The minimum citation for bibliographic coupling was determined at 42 thresholds, while the co-word was finalized at 19. The determined threshold may risk subjectivity bias, meaning a slightly different threshold may be selected if other researchers conducted the same analysis. Third, this study relies solely on the WoS database, omitting other potential databases such as Scopus and Dimension. However, it is recommended to use only one database for bibliometric analysis, as database integration can lead to errors and duplication (Donthu et al., 2021). Nevertheless, future research could compare the findings to identify discrepancies and complementary insights that enhance the overall understanding of the subject.

6. Future research avenues

This subject is still in its infancy. There are many avenues for future research to explore various aspects, such as predictors of consumer purchasing behavior in live streaming, platform reliability, and others. One aspect needing further exploration is the relationship between impulsive purchasing behavior in live streaming. Li et al. (2024) suggest that streamer characteristics and performance impact consumer impulsive purchase behavior. Streamers' professionalism, charisma, entertainment, and interactivity impart trust and flow experience among consumers. In live-streaming, consumers who lack self-control and resistance to stimulation produce spontaneous purchase behavior. This out-of-control purchasing disorder is detrimental to individual and family financial health (Amos et al., 2014). Thus, studies on future intervention and mitigation strategies must be developed to ensure the public is educated on financial planning and awareness when going online. Future studies could also review impulsive purchasing behavior in live commerce using science mapping through bibliometric analysis to complement the meta-analysis (Amos et al., 2014). Impulsive behavior is reflected in cluster 1 of co-word analysis (the impact of live streaming on online consumer commerce). Building on this, future research could also examine the long-term impact of impulsive purchasing behavior in live streaming. Understanding this phenomenon would enlighten researchers and policymakers about the factors that influence consumer decision-making and their financial well-being. Furthermore, future studies could explore young consumers' purchasing behavior in-depth. Young consumers have different characteristics compared to senior citizens. The findings in clusters 3 (Social media live

streaming in e-commerce) and 4 (Antecedents of purchase intention and adoption in live-streaming commerce) highlight the need to explore the relevant associations of live streaming and its influence on young consumers. Understanding the psychological and social factors that drive young consumers' purchasing decisions could provide valuable insights into targeted marketing strategies and the effectiveness of influencer-driven promotions. For instance, young consumers are more price sensitive; thus, acknowledging their preferences would enable business owners to meet their needs and wants (Li et al., 2026). Moreover, examining the psychological drivers, such as social influence, peer pressure and emotional appeal, could further reveal how these factors shape young consumers' impulsive buying behavior in live streaming environments.

7. Conclusion

This study has presented a crucial fundamental overview of live streaming and its relation to consumer purchase behavior. There are still plenty of avenues for future research to embark on, including consumer and marketer perspectives. Business owners and practitioners must embrace this new norm to increase sales, improve marketing strategies, and capture the correct market segment. Three current and emerging streams were identified: 1) Customer engagement in live streaming, 2) Motivation of consumer live stream shopping, and 3) Product endorsement in live streaming. Together, these themes indicate that purchasing decisions are shaped by how streamer performance and platform features affect consumers' psychological responses, especially trust, perceived value, and social presence, driving engagement and eventually purchases. The study contributes by synthesizing current research into a framework that links live streaming factors to consumer outcomes. Future research should deepen the understanding of consumer psychology in live-stream shopping by examining how trust, parasocial interaction, engagement, and impulsive buying differ across platforms and product categories. Further work is also needed on how endorsement strategies and consumer behavioral factors influence repeat purchasing and loyalty.

CRediT authorship contribution statement

Muhammad Ashraf Fauzi: Conceptualization, Formal analysis, Funding acquisition, Writing – original draft. **Ahmad Samed Al-Adwan:** Data curation, Investigation, Supervision. **Christine Tan Nya-Ling:** Investigation, Methodology, Software. **Walton Wider:** Formal analysis, Writing – original draft. **Serikkhan Zhuzeyev:** Methodology, Validation, Visualization. **Chong Chin Wei:** Project administration, Resources, Writing – review & editing.

Data availability statement

No data was generated. This study is a bibliometric review based exclusively on secondary data from publicly available databases.

Declaration of AI use

During the preparation of this work, the author(s) used ChatGPT in order to refine ideas and enhance the clarity and coherence of the content. After using this tool, the author(s) reviewed and edited the content as needed and take full responsibility for the content of the published article.

Funding statement

No funding was received.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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