



Global Research Trends in Impulsive Buying Behavior within E-Commerce: A Bibliometric Analysis

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ABSTRACT

Impulsive purchasing behavior has become a significant focus in e-commerce research owing to the swift growth of digital marketplaces and technology-fueled consuming settings. This study seeks to systematically delineate and synthesize global research trends regarding impulsive buying behavior within the realm of e-commerce using extensive bibliometric analysis. The study examines 393 peer-reviewed papers and reviews from Scopus-indexed publications between 2000 and 2025, employing recognized bibliometric methodologies such as performance analysis, citation analysis, co-authorship analysis, co-citation analysis, and keyword co-occurrence mapping. Visualization technologies like VOS viewer are utilized to elucidate the intellectual framework, thematic progression, and collaborative dynamics within the discipline. The results demonstrate a distinct historical transition from initial technology-focused study to interdisciplinary studies that incorporate consumer psychology, digital marketing, social commerce, and advanced technologies like artificial intelligence and live-stream commerce. The findings delineate key authors, institutions, nations, and journals, emphasizing the preeminent influence of the United States and China, as well as the significance of high-impact journals in information systems and consumer behavior. The thematic analysis indicates an increasing academic focus on the emotional, experiential, and social aspects of impulsive purchasing, as well as rising issues pertaining to consumer welfare and ethical platform design. This study presents a systematic assessment of the knowledge domain, identifies research deficiencies, and gives significant insights to inform future academic research, managerial decisions, and policy formulation in digital consuming situations.

Keywords: Impulsive Buying, E-Commerce Sector, Bibliometric Analysis, Co-Citation Analysis, Bibliographic Coupling

JEL Classifications: M31, D91, L81

1. INTRODUCTION

Impulsive buying is defined as a sudden, compelling, and unplanned purchasing decision made spontaneously, characterized by strong emotions, immediate satisfaction, and limited cognitive deliberation. Preliminary research indicates that this conduct is a spontaneous reaction to situational stimuli frequently occurring without logical assessment motivated by the immediacy of decision-making and possibly resulting in later regret (Akram et al., 2017; Abdelsalam et al., 2020; Zhang & Shi, 2022; Al Mashikhi et al., 2025). Subsequent research clarified this perspective by emphasizing the experiential and emotional characteristics of impulses: impulsive purchasing

is propelled by intense urges and pleasurable emotions rather than meticulous cost benefit analysis and is often accompanied by emotional turmoil or remorse (Zhang and Shi, 2022; Wang et al., 2022). Modern definitions characterize impulsive buying as an unpremeditated acquisition prompted by a powerful impulse, without thorough deliberation or a logical decision-making process (Wang et al., 2022). Recent study underscores that cognitive assessments, including website credibility and visual attractiveness, together with affective components such as hedonic purchasing incentive, moderate and amplify online impulsive purchase behavior, highlighting the intricate interaction between cognition and emotion in this phenomenon (Chatterjee et al., 2025).

Impulsive buying is conceptually different from planned and logical purchase, which needs prior problem identification, information gathering, and alternative assessment (Abdelsalam et al., 2020). It is analytically distinct from obsessive buying: whereas compulsive buying is persistent, ritualistic, and frequently associated with psychopathology and a lack of control, impulsive buying is episodic, contextually stimulated, and not inherently pathological (Wang et al., 2022). Research has further differentiated the impulse to purchase impulsively from actual impulsive buying behavior, acknowledging that consumers may have intense desires that do not consistently result in action (Abdelsalam et al., 2020; Anoop and Rahman, 2024). The construct has progressively transitioned from a limited emphasis on in-store, product-specific triggers to a more expansive, multidimensional phenomenon influenced by personality traits, self-control, emotions, cultural values, and technological contexts (Zhao et al., 2021; Wang et al., 2022; Gong et al., 2024).

1.1. Impulsive Purchasing in E-commerce Settings

Digital platforms utilize situational stimuli that, when paired with elevated consumer arousal, markedly enhance the propensity for impulsive decision-making (Akram et al., 2018; Zhao et al., 2021). By removing offline constraints such as fixed operating hours, transit costs, and social judgment, these platforms create a fluid environment where consumers can satisfy their desires anytime, anywhere. (Akram et al., 2018; Abdelsalam et al., 2020; Jois et al., 2024).

In contrast to conventional physical environments, online settings present unique characteristics that enhance the likelihood of impulsive behavior. Website interactivity, dynamic product displays, media richness, and social presence cultivate immersive experiences that enhance arousal and hedonic engagement, hence increasing the propensity to purchase (Zhang & Shi, 2022; Ngo et al., 2024; chen et al., 2016; Xiang et al., 2016). The simplicity of navigation, efficient checkout procedures, and one-click purchasing diminish cognitive load and transaction barriers, hence promoting swift conversion from impulse to purchase (Zhao et al., 2021; Gulfranz et al., 2022). Personalization technologies and AI-driven recommendation systems present consumers with customized offers they may not have actively pursued, hence broadening the range of options for impulsive decisions (Zhao et al., 2021; Pal, 2025; Jois et al., 2024). Mobile commerce enhances immediacy and accessibility by facilitating continuous connectivity and purchasing opportunities during brief intervals in daily life (Jois et al., 2024; Zheng et al., 2019).

Simultaneously, digital impulsive purchasing is significantly influenced by platform design and algorithmic curation. Website stimuli (visual attractiveness, interaction, user-friendliness), marketing stimuli (scarcity, promotions), and affective stimuli (arousal, enjoyment) collectively create an integrated environment that consistently provokes impulses and unanticipated purchases (Zhao et al., 2021; Ngo et al., 2024). Akram et al. (2021) illustrate that both hedonic and utilitarian incentives favorably affect purchase intentions, especially when mediated by customer engagement and further enhanced by social values and electronic word-of-mouth (eWOM). These characteristics render online

impulsive purchasing more systematic and expandable than in offline environments, presenting both economic prospects and apprehensions about consumer wellbeing (Zhao et al., 2021; Wang et al., 2022).

1.2. Principal Factors and Ramifications across Psychological, Technical, and Social Dimensions

Empirical research reveals a complex array of factors that contribute to online impulsive purchasing. At the psychological level, personality traits (e.g., extraversion, neuroticism), impulsive buying propensity, and cultural orientations such as collectivism are positively correlated with impulsive purchasing, while self-control has an inhibitory effect (basha et al., 2023; Wang et al., 2022; Nyrhinen et al., 2023; Huang et al., 2024). Emotions are pivotal: arousal and pleasure influence the effect of environmental stimuli, including time constraints, quantity pressures, visual and auditory signals, and economic incentives on impulsive purchasing decisions (Ngo et al., 2024; Feng et al., 2024). Adverse emotions and mood states may facilitate impulsive purchases as a means of emotional regulation, albeit their effects are more varied (Ngo et al., 2024; Wang et al., 2022).

In terms of technology, website design and user experience serve as significant catalysts. The visual appeal, vividness, media richness, and interactivity augment perceived enjoyment and social presence, subsequently elevating the propensity for impulsive purchasing (Zhao et al., 2021; Zhang and Shi, 2022; Gulfranz et al., 2022). Website usability and user-friendliness diminish cognitive burden, facilitating more intuitive and emotion-driven decision-making processes (Zhao et al., 2021; Gulfranz et al., 2022; Wijaya et al., 2025). Personalization and recommendation systems, frequently driven by big data and artificial intelligence, enhance visibility of pertinent products and cultivate a sense of alignment and urgency that encourages impulsive purchases (Zhao et al., 2021; Pal, 2025; Jois et al., 2024). Live streaming commerce and short video formats provide real-time demonstrations and interactions, merging high media richness with situational cues like limited time offers to provoke impulsive behavior (Ngo et al., 2024; Feng et al., 2024).

Social features are gaining prominence in digital surroundings. Social presence, online assessments, and indications of social proof (ratings, notable reviews, user-generated content) augment perceived value and trust, hence promoting impulsive purchasing behavior (Zhang & Shi, 2022; Zafar et al., 2020; Abdelsalam et al., 2020; Tariq et al., 2019). In social commerce environments, packaged promotions and contextual engagements on social media platforms, along with perceived transactional and acquisition value, significantly predict impulsive purchasing behavior. (Zafar et al., 2020; Abdelsalam et al., 2020; Hu et al., 2023). The susceptibility to social influence and the propensity for impulsive purchasing amplify these effects (Zafar et al., 2020; Feng et al., 2024).

After a purchase, online impulsive buying is linked to mixed results. Conversely, it can produce hedonic advantages, exhilaration, and transient gratification (Cheah et al., 2018; Wang et al., 2022). Conversely, it is associated with regret, financial difficulties, and diminished perceived choice quality, affecting

consumer well-being and sustainable consumption (Wang et al., 2022; Nyrhinen et al., 2023; Lim et al., 2017). Impulsive purchases can affect happiness and loyalty to platforms; yet they may also lead to increased product returns and diminished long-term value if regret and dissonance prevail (Lim et al., 2017; Gulfranz et al., 2022). Comprehending this equilibrium is essential for accountable platform design.

1.3. Theoretical Underpinnings and Interdisciplinary Approaches

Studies on online impulsive purchasing utilize several theoretical frameworks from marketing, psychology, behavioral economics, and information systems. The stimulus-organism-response (S-O-R) framework serves as the primary model for analyzing website and marketing stimuli (S) that influence internal cognitive and emotional states (O), subsequently leading to urges and impulsive purchasing behaviors (R) (Zhao et al., 2021; Ngo et al., 2024; Zafar et al., 2020; Abdelsalam et al., 2020; Feng et al., 2024). Affective models emphasize the intermediary function of arousal and pleasure in converting environmental stimuli into behavior (Ngo et al., 2024; Zhao et al., 2021). Dual system and self-control theories frame impulsive purchase because of the conflict between rapid, affective systems and more deliberate, slower processes, with self-control acting as an inhibitory mechanism (Nyrhinen et al., 2023; Wang et al., 2022; Gong et al., 2024).

Personality and trait theories, such as the Big Five, elucidate individual variances in vulnerability to online impulses (Wang et al., 2022; Huang et al., 2024), whereas cultural and sustainability viewpoints emphasize the significance of collectivism, societal norms, and overarching issues related to overconsumption (Wang et al., 2022). Research in information systems provides models of technological acceptability, perceived ease of use, interactivity, and social presence to elucidate how digital interfaces influence psychological processes and behavior (Zhao et al., 2021; Gulfranz et al., 2022; Zhang and Shi, 2022; Wijaya et al., 2025). This plurality highlights that impulsive purchasing in e-commerce is fundamentally interdisciplinary, situated at the convergence of consumer psychology, digital marketing, and socio-technical systems design (Zhao et al., 2021; Abdelsalam et al., 2020; Gong et al., 2024).

1.4. Significance and Modern Pertinence

The economic and managerial importance of online impulsive purchasing is considerable. A significant proportion of online acquisitions in sectors like fashion, beauty, and digital products is impulsive, with platforms deliberately designing environments to enhance spontaneous purchases via flash sales, tailored promotions, live streaming events, and social commerce functionalities (Zhao et al., 2021; Ngo et al., 2024; Zafar et al., 2020; Singh and Gujar, 2025). For companies, comprehending and ethically utilizing impulsive purchasing can enhance conversion rates, typical order value, and short-term revenue (Zhao et al., 2021; Gulfranz et al., 2022; Jois et al., 2024). Policymakers and consumer advocates regard impulsive purchase as a critical issue in discussions surrounding digital consumer protection and sustainable consumption, driven by escalating worries over financial stress, overconsumption, and environmental consequences (Wang et al., 2022; Nyrhinen et al., 2023).

The significance of the construct has increased with the rise of mobile commerce, social commerce, and platform-based ecosystems. Social networking sites, live streaming platforms, and short video applications combine entertainment, social interaction, and integrated purchase, creating highly stimulating environments filled with impulsive impulses (Ngo et al., 2024; Abdelsalam et al., 2020; Feng et al., 2024; Gong et al., 2024; Yuxuan et al., 2025). Virtual reality and other immersive technologies are emerging as novel domains where presence, vividness, and interactivity might amplify impulsive behaviors (Gong et al., 2024). In this context, online impulsive purchasing has emerged as a pivotal focus in e-commerce, marketing, information systems, and consumer psychology, with increasing emphasis on cross-cultural disparities and macro-level developmental factors (Zhao et al., 2021; Gong et al., 2024).

1.5. Justification for a Bibliometric Investigation of Impulsive Purchasing in E-Commerce

The swift proliferation, fragmentation, and diversification of literature currently present obstacles to the accumulation of knowledge. Initial research focused on offline retail settings and in-store stimuli, while contemporary studies investigate online marketplaces, mobile applications, social commerce, live streaming, and immersive technologies (Zhao et al., 2021; Ngo et al., 2024; Abdelsalam et al., 2020; Gong et al., 2024). Antecedents encompass psychological characteristics, emotions, cultural values, website and interface attributes, marketing strategies, and social influence mechanisms, whereas outcomes include impulses and behaviors, as well as satisfaction, regret, loyalty, and sustainability-related issues (Nyrhinen et al., 2023; Zhao et al., 2021; Gulfranz et al., 2022; Wang et al., 2022; Abdelsalam et al., 2020; Gong et al., 2024; Lim et al., 2017). Concurrent lines of inquiry have emerged in marketing, information systems, and psychology, frequently with minimal interdisciplinary integration.

Recent data suggests that research output on impulsive purchase has surged significantly, surpassing three-digit annual publication counts and increasingly concentrating on e-commerce situations (Gong et al., 2024). Knowledge mapping indicates that e-commerce has evolved into a principal cluster, with developing terms like as technology, perceived value, consumer satisfaction, and virtual reality denoting new subfields (Gong et al., 2024). Simultaneously, previous quantitative syntheses have focused on either offline impulsive purchasing or limited online factors, resulting in deficiencies in comprehending the comprehensive intellectual framework of e-commerce-related impulsive buying research (Zhao et al., 2021; Abdelsalam et al., 2020).

In this setting, bibliometric analysis provides a systematic and replicable method to delineate the evolution and structure of the field. Bibliometrics can identify influential authors, journals, and countries, reveal collaboration patterns, and delineate thematic clusters including psychological antecedents, website and technological stimuli, social commerce dynamics, and sustainability implications by analyzing publication trends, co-authorship and institutional networks, as well as co-citation and keyword co-occurrence structures (Zhao et al., 2021;

Abdelsalam et al., 2020; Gong et al., 2024). Visual analytics tools (e.g., Cite Space, VOS viewer) facilitate the identification of intellectual turning points, nascent topics (e.g., live streaming, social platforms, dual system theory), and transitions from offline to online as well as from web-based to mobile and social commerce contexts (Zhao et al., 2021; Abdelsalam et al., 2020; Gong et al., 2024).

A concentrated bibliometric analysis of impulsive purchasing in e-commerce thus fulfills multiple scholarly objectives. It integrates a fragmented and interdisciplinary body of work, elucidates the primary and secondary theoretical views, and emphasizes neglected connections among psychological, technological, and social influences and post purchase results. It also establishes an evidence-based platform for future research priorities, emphasizing methodological variety, cross-cultural comparisons, consumer welfare, and the ethical and sustainable design of digital marketplaces. By methodically charting the intellectual terrain, this analysis can assist scholars, practitioners, and policymakers in navigating and critically assessing the swiftly changing field of impulsive purchasing in e-commerce.

2. BIBLIOMETRIC RESEARCH METHODS

2.1. Defining the Appropriate Search Terms

The study strategically combined terminology from two cross-disciplinary components: Impulsive buying and e-commerce. This entailed integrating keywords relevant to each domain to guarantee thorough coverage of both facets. Table 1 enumerates the two strings and their associated keyword sets utilized for the extraction of Scopus data and the selection of documents. This study defined these terms following a comprehensive examination of pertinent literature to encapsulate the essence of the subject domain. This study emphasized terms such as: “impulsive buying,” “impulse buying,” “impulse purchase,” “impulsive purchase,” “unplanned purchase,” “urge to buy.” The research included terms related to “e-commerce,” “ecommerce,” “electronic commerce,” “online shopping,” “online retail,” “online purchase,” “internet shopping,” “internet retail,” “mobile commerce,” “m-commerce,” “mcommerce,” “social commerce,” “s-commerce,” “scommerce,” “e-retail,” “online store,” “digital retail.” This methodology broadens the study’s reach and depth, enabling a thorough analysis of the relationship between impulsive purchasing and e-commerce. It guarantees the comprehensive collection of pertinent material

across several fields, establishing a solid basis for analysis and interpretation.

2.2. Data Collection

Bibliometric analysis is a quantitative approach that employs statistical and mathematical methods to assess scientific publications and their metadata, thereby delineating research productivity, scientific impact, and the intellectual and social framework of a discipline (Donthu et al., 2021; Ninkov et al., 2021; Gutiérrez-Salcedo et al., 2018; Salinas-Ríos and López, 2022). This study utilizes extensive bibliographic databases, including Web of Science, Scopus, and Google Scholar, employing indicators related to publications, citations, co-authorship, and co-occurrence to delineate performance and knowledge structures (Donthu et al., 2021; Ellegaard and Wallin, 2015; Gutiérrez-Salcedo et al., 2018). Scopus is favored due to its comprehensive multidisciplinary journal coverage, meticulously curated and high-quality citation data, and enhanced author and institutional profiles, facilitating thorough citation analysis and network mapping (Baas et al., 2020; Mongeon and Paul-Hus, 2015; Moral-Munoz et al., 2020; Magadán-Díaz and Rivas-García, 2022). As a result, Scopus has emerged as a fundamental data repository for extensive research evaluations, university rankings, science policy analyses, and interdisciplinary bibliometric investigations necessitating thorough and dependable coverage of global academic output (Baas et al., 2020; Ellegaard and Wallin, 2015; Mongeon and Paul-Hus, 2015).

The study employed a methodical method to meticulously discover and choose 692 papers, as illustrated in Table 1. The research adopted a strategic methodology by employing specific keywords, such as: “impulsive buying,” “impulse buying,” “impulse purchase,” “impulsive purchase,” “unplanned purchase,” “urge to buy.” The study also included terms related to e-commerce, such as: “e-commerce,” “ecommerce,” “electronic commerce,” “online shopping,” “online retail,” “online purchase,” “internet shopping,” “internet retail,” “mobile commerce,” “m-commerce,” “mcommerce,” “social commerce,” “s-commerce,” “scommerce,” “e-retail,” “online store,” “digital retail.” This study is limited to English-language publications, emphasizing data integrity and error minimization during extraction from Scopus and other databases, in accordance with the methodological standards set by Donthu et al. (2021a). Stringent data cleansing and validation protocols are executed, encompassing the methodical identification and elimination of duplicate entries, inconsistent metadata, and inaccurate

Table 1: Article inclusion and exclusion criteria

Selection criteria	Exclude	Include
Database: “Scopus”		
Date of search: “04 th February 2026”		
Period of publications: “2000 to 2025”		
(TITLE-ABS-KEY (“impulsive buying” OR “impulse buying” OR “impulse purchase” OR “impulsive purchase” OR “unplanned purchase” OR “urge to buy”) AND TITLE-ABS KEY (“e-commerce” OR ecommerce OR “electronic commerce” OR “online shopping” OR “online retail” OR “online purchase” OR “internet shopping” OR “internet retail” OR “mobile commerce” OR m-commerce OR mcommerce OR “social commerce” OR s-commerce OR “scommerce” OR “e-retail*” OR “online store*” OR “digital retail”))		692
Subject Area: business management and accounting, computer science, social science, economics, econometrics, and finance.	80	612
Publication type: “Articles and Review”	214	398
Language screening: “Include documents published in English only”	5	393

citation linkages. The natural language processing (NLP) capabilities of VOS viewer are utilized to optimize the keyword corpus by removing redundant terms and standardizing abbreviations (e.g., converting “KSFs” to “Key Success Factors”), thus improving the reliability and interpretability of subsequent bibliometric analyses.

As scholars in knowledge management, our research must focus on specific domains pertinent to our topic of inquiry. The study conducted an extensive examination, focusing on fields such: “Business, Management and Accounting,” “Computer Science,” “Social Sciences,” “Economics, Econometrics and Finance.” to guarantee that the collected resources directly facilitated our research. This tailored method enables a thorough examination of pertinent literature, the extraction of significant discoveries, and the enhancement of knowledge within our specific research domain. Moreover, in the academic domain, the credibility and trustworthiness of research findings are significantly contingent upon the quality of the published publications. By choosing the “Articles and Review” category, we emphasize scholarly articles that have completed stringent peer review processes. We see these publications as invaluable because of their rigorous methodology, theoretical progress, and empirical proof, making them crucial for developing a solid research foundation. Moreover, review papers present thorough summaries of current literature, delivering insightful viewpoints and directing future research endeavors. English functions as the universal language for scholarly discourse, enabling academics around to access and interact with intellectual material. By exclusively incorporating articles published in English, we guarantee access to a diverse array of high-quality research resources, thereby expanding the breadth of our literary analysis. This criterion enables comprehensive analysis and promotes international cooperation and knowledge sharing throughout the worldwide academic community.

2.3. Selecting the Techniques for Analysis

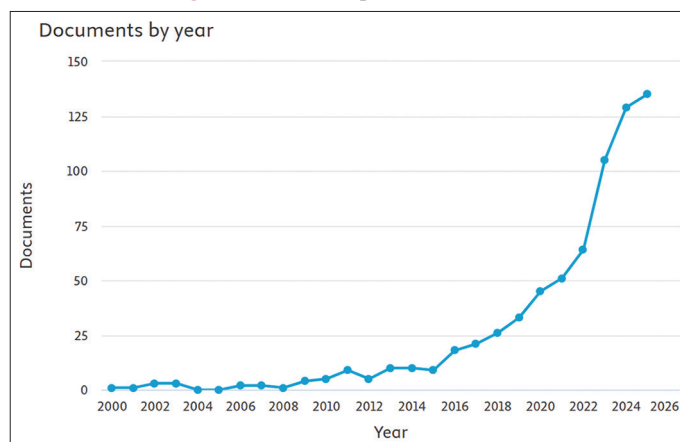
Bibliometric analysis is a quantitative approach for assessing textual and bibliographic data, facilitating a systematic investigation of publication trends and academic communication frameworks (Goyal and Kumar, 2020; Ahmuda and Yakhlf, 2024; Donthu et al., 2021). This method enables researchers to get significant insights from literature reviews, such as thematic development and research deficiencies, through the statistical analysis of extensive literary collections (Poje and Groff, 2021; Ahmuda and Yakhlf, 2024). It facilitates the discovery of research patterns, the mapping of discipline-specific knowledge structures, and the evaluation of significant studies to comprehend the contemporary research landscape (Mohammed and Li, 2023; Radeef and Velmurugan, 2025; Ahmuda and Yakhlf, 2024; Aghel et al., 2025). Fundamental bibliometric methodologies encompass authorship analysis, citation analysis, bibliographic coupling, co-citation analysis, and co-word analysis, collectively offering an extensive picture of a discipline (Donthu et al., 2021; Ahmuda and Yakhlf, 2024).

3. FINDINGS

3.1. Performance Analysis

Figure 1 illustrates the evolution of research articles on impulsive purchase behavior in the context of e-commerce throughout

Figure 1: Research publication trends



time. The investigation of impulsive buying (IB) in e-commerce commenced with Huang’s seminal work in 2000, which posed the critical question, “Information load: Its relationship to online exploration and shopping behavior.” The period from 2000 to 2014 exhibits limited scientific output, indicating that research interest in impulsive purchase was in its infancy and not significantly associated with e-commerce situations. Since 2015, there has been a marked increase in research volume, coinciding with the rapid expansion of E-commerce platforms and developments in consumer behavior.

The increase intensifies after 2020, reflecting a notable boost in research focused on impulsive purchasing in e-commerce, mobile commerce, and social commerce environments. The rapid advancement signifies that the field has reached maturity and multidisciplinary integration, highlighting the need for a comprehensive bibliometric study to monitor research trends, subject clusters, and the intellectual framework of this growing issue.

3.2. Prominent Authors, Organizations, and Countries for Research in Impulsive Buying and E-Commerce

Table 2 delineates the preeminent authors, institutions, and nations in the study of impulsive purchasing in the realm of e-commerce. Zheng Xiabing is the most prominent researcher among authors, with 1,051 total citations over three publications, demonstrating significant academic impact despite an exceedingly small number of papers. Subsequently, Akram, Umair, Zafar, and Abaid Ullah are noted, whose citation records further illustrate their acknowledged contributions to the discipline. The School of Economics and Management in China, at the institutional level, boasts 563 citations, indicating its significant research output and intellectual stature. Institutions from China, Malaysia, the United Kingdom, and Taiwan exhibit significant citation performance, highlighting the institutional variety influencing this research topic. The United States leads geographically with 7,365 citations from 45 journals, affirming its preeminent position in worldwide academic influence. China and Taiwan closely exemplify Asia’s burgeoning dominance in impulsive purchasing and e-commerce studies.

These findings collectively illustrate the crucial influence of prominent scholars, institutions, and nations in promoting high-

Table 2: Most inflation author, institutions, and countries

TC	Authors	TP	TC	Institutions	TP	TC	Countries	TP
1051	Zheng, X.	3	563	School of Economics and Management, China	5	7365	United States	45
590	Akram, U.	6	322	Institute of International Management, Taiwan	3	6066	China	104
508	Zafar, A.	4	272	School of Management and Economics, China	4	2656	Taiwan	32
499	Qiu, J.	3	215	Norwich business school, United Kingdom	4	1491	Hong Kong	8
499	Shahzad, M.	3	167	School of Economics and Management, China	2	1035	United Kingdom	20
367	Pan, Z.	3	167	School of Communication and Information, Singapore	2	881	Malaysia	42
322	Chen, J.	3	163	School of Management, United Kingdom	3	838	India	55
296	Xu, H.	4	116	Azman Hashim International Business School, Malaysia	2	562	Canada	5
282	Cheah, J.	4	116	Malaysia	2	540	Pakistan	15
272	Akram, Z.	4	101	Guanghua School of Management Peking Uni, China	2	489	Indonesia	49
246	Widjaja, A.	3	89	School of International Business and Marketing, UEH Uni, Vietnam	3	385	South Korea	13
218	Lim, X.	4	81	UCSI Uni, Malaysia	5	344	France	6
187	Khan, M.	3	69	Tashkent State Uni of Economics, Uzbekistan	3	310	Vietnam	30
187	Peng, H.	3	62	School of Management and Science Uni Malaysia	3	273	Sweden	5
136	Cham, T.	3	42	Business and Economics, Uni Putra Malaysia	5	258	Australia	5
111	Tanveer, Y.	3	33	The Uni of Jordan	3	183	Spain	9
72	Singh, S.	5	15	Uni of Finance -Vietnam	2	138	Saudi Arabia	6
42	Bashar, A.	4	12	Department of Marketing, The Uni of Jordan	2	47	Thailand	14
41	Pathak, V.	3	8	Symbiosis International (Deemed Uni), India	2	46	Jordan	6
12	Tan, G.	3	7	International College, Kirk Uni, Thailand	2	23	Philippines	5

TC: Total citations, TP: Total number of article(s) publications. The data is compiled from bibliometric sources

Table 3: Most inflation journal of impulsive buying and e-commerce

Journal	TC	TP	2000-2010	2011-2019	2020-2025
"International Journal of Information Management"	1844	8	2	3	3
"Information and Management"	1714	6	3	-	3
"Journal of Retailing and Consumer Services"	1605	21	-	13	8
"Asia Pacific Journal of Marketing and Logistics"	568	12	1	7	4
"Internet Research"	541	7	-	3	4
"Electronic Commerce Research and Applications"	506	6	1	3	2
"Journal of Business Research"	342	7	4	3	-
"Industrial Management and Data Systems"	290	5	3	1	1
"Journal of Internet Commerce"	258	5	-	2	3
"International Journal of Consumer Studies"	214	6	-	2	4
"Electronic Commerce Research"	209	9	1	6	2
"Young Consumers"	113	6	-	1	5
"International Journal of Human-Computer Interaction"	107	4	-	-	4
"Journal of Electronic Commerce in Organizations"	77	4	-	2	2

TC: Total citations, TP: Total number of article (s) publications

impact research and creating the worldwide academic framework of this discipline.

3.3. Most Influential Articles on Research in Impulsive Buying and E-commerce

Table 3 provides a comprehensive analysis of the preeminent journals disseminating research on impulsive buying within the realm of e-commerce, categorized by total citations (TC) and publication output (TP) throughout three distinct periods: 2000-2010, 2011-2019, and 2020-2025. The International Journal of Information Management is the most important journal among these venues, garnering 1,844 citations from eight publications, indicating its significant authority and interdisciplinary importance in information systems and digital consumer behavior research. Information and Management follow closely, with 1,714 citations from six papers, highlighting its substantial contribution to the comprehension of managerial and technological aspects of e-commerce-related impulsive purchasing.

The Journal of Retailing and Consumer Services is significant, documenting 1,605 citations over 21 articles, with a notable rise in output throughout the 2011-2019 and 2020-2025 eras, underscoring its ongoing commitment to consumer behavior and retail research. Other significant journals are the Asia Pacific Journal of Marketing and Logistics, Internet Research, and Electronic Commerce Research and Applications, all exhibiting moderate to high citation impact and sustained publication activity, especially in recent years. Moreover, publications like the Journal of Business Research, Industrial Management and Data Systems, and International Journal of Consumer Studies significantly enhance the discipline, illustrating its multidisciplinary scope encompassing marketing, management, and information systems. The distribution of citations and publications demonstrates a distinct concentration of significant research in high-impact journals, while also indicating an increasing diversification of academic outlets focused on impulsive buying and e-commerce since 2020.

Table 4: Most influential article of impulsive buying and e-commerce

Author (s)	Title	TC
Parboteeah et al. (2009)	“The influence of website characteristics on a consumer’s urge to buy impulsively”	722
Xiang et al. (2016)	“Exploring consumers’ impulse buying behavior on social commerce platform: The role of parasocial interaction”	497
Floh and Madlberger (2013)	“The role of atmospheric cues in online impulse-buying behavior, <i>Electronic Commerce Research and Applications</i> ”	349
Chen et al. (2019)	“How do product recommendations affect impulse buying? An empirical study on WeChat social commerce”	313
Ozen and Engizek (2014)	“Shopping online without thinking: Being emotional or rational?”	95
Zafar et al. (2021)	“The impact of social media celebrities’ posts and contextual interactions on impulse buying in social commerce”	90
Zhao et al. (2022)	“A Meta-Analysis of Online Impulsive Buying and the Moderating Effect of Economic Development Level”	87
Chih et al. (2012)	“The Antecedents of Consumer Online Buying Impulsiveness on a Travel Website: Individual Internal Factor Perspectives”	86
Ek Styvén et al. (2017)	“Impulse buying tendencies among online shoppers in Sweden”	37
Chen et al. (2020)	“Understanding “window” shopping and browsing experience on social shopping website: An empirical investigation”	35
Kwek et al. (2010)	“Investigating the shopping orientations on online purchase intention in the e-commerce environment: A Malaysian study”	29

3.4. Most Influential Articles on Research in Impulsive Buying

Table 4 delineates the most impactful articles that have profoundly influenced research on impulsive purchasing within the e-commerce domain. The influential study by Parboteeah et al. (2009), entitled “The influence of website characteristics on a consumer’s urge to buy impulsively,” is particularly notable, having garnered 722 citations, highlighting its pivotal contribution to understanding how website design and attributes incite online impulsive purchasing behavior.

Xiang et al. (2016) significantly contributes with “Exploring consumers’ impulse buying behavior on social commerce platforms: The role of parasocial interaction,” which has garnered 497 citations, indicating the increasing significance of social interaction and engagement in digital consumption contexts. Likewise, Floh and Madlberger (2013) offers significant insights on the influence of ambient cues on online impulse purchasing, garnering 349 citations and underscoring the experience aspect of e-commerce platforms.

Recent notable research, like Chen et al. (2019) and Zafar et al. (2021), concentrate on social commerce, product recommendations, and the impact of social media, demonstrating the field’s progression towards socially driven and technology-enhanced purchasing behaviors. Furthermore, meta-analytical and context-specific investigations, such as those by Zhao et al. (2022) and Chih et al. (2012), expand the theoretical and empirical dimensions of literature. These publications collectively signify crucial contributions that have enhanced the comprehension of impulsive buying by amalgamating technological, social, and psychological viewpoints inside e-commerce research.

3.5. Thematic Trends of Impulsive Buying and E-commerce

Figure 2 displays an overlay visualization of keywords related to impulsive purchase research in the e-commerce domain, created with VOS viewer, where node colors represent the chronological progression of research themes from 2002 to 2010. Purple and dark blue nodes, primarily associated with the initial period (2002-

2004), signify core technology concepts such as the “World Wide Web” and “cognitive systems,” illustrating the initial emphasis on web-based infrastructures. As the timeline advances toward 2005-2007, indicated by blue-green and green hues, research focus transitions to subjects such as “websites,” “online systems,” and “consumer behavior,” reflecting an increasing interest in user interaction and behavioral dimensions of online buying. During the later period (2008-2010), shown by yellow hues, themes including “visual aesthetics,” “consumer behavior,” and “impulsive purchasing gained prominence,” reflecting a heightened focus on “psychological,” “experiential,” and “marketing-oriented viewpoints.” The prominent central nodes, encompassing electronic commerce and e-commerce, highlight their enduring significance across time, serving as pivotal hubs that link technological and behavioral research domains and demonstrate the progressive development of this research area.

Figure 3 presents an overlay visualization of significant research themes in impulsive buying studies within the e-commerce domain from 2011 to 2019, created using VOS viewer. Purple and blue hues signify older subjects from the initial phase of this period (2011-2013), including “consumer behavior” and “online consumer behavior,” indicating a sustained emphasis on foundational consumer behavior research. During the period from 2014 to 2016, the transition to green is accompanied by heightened focus on “online shopping,” “e-commerce,” and “website quality,” signifying the amalgamation of technology elements with consumer purchasing patterns. The light-yellow tints (2017-2019) signify contemporary topics such as “impulse purchasing,” “hedonic value,” “mobile commerce,” and the compulsion to buy impulsively, indicating a distinct transition towards psychological, experiential, and marketing-focused viewpoints on impulsive buying. Significant nodes like “electronic commerce” and “impulse buying” affirm their pivotal role in linking research streams and influencing the progression of academic trends during this timeframe.

Figure 4 presents an overlay visualization of significant research issues concerning impulsive purchase in the e-commerce domain for the years 2022-2024, created with VOS viewer. The map

Figure 2: Influential topics in the “period of 2000-2010”

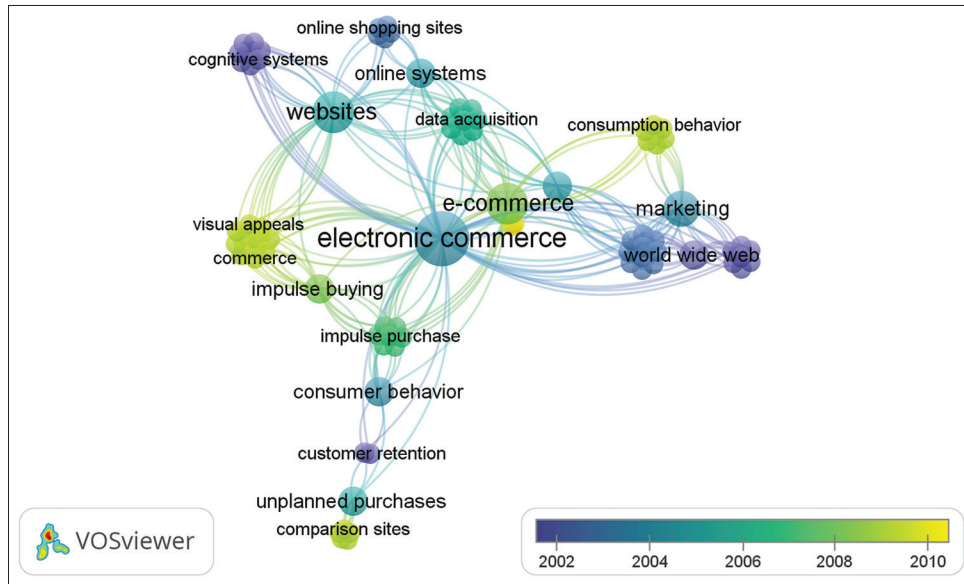
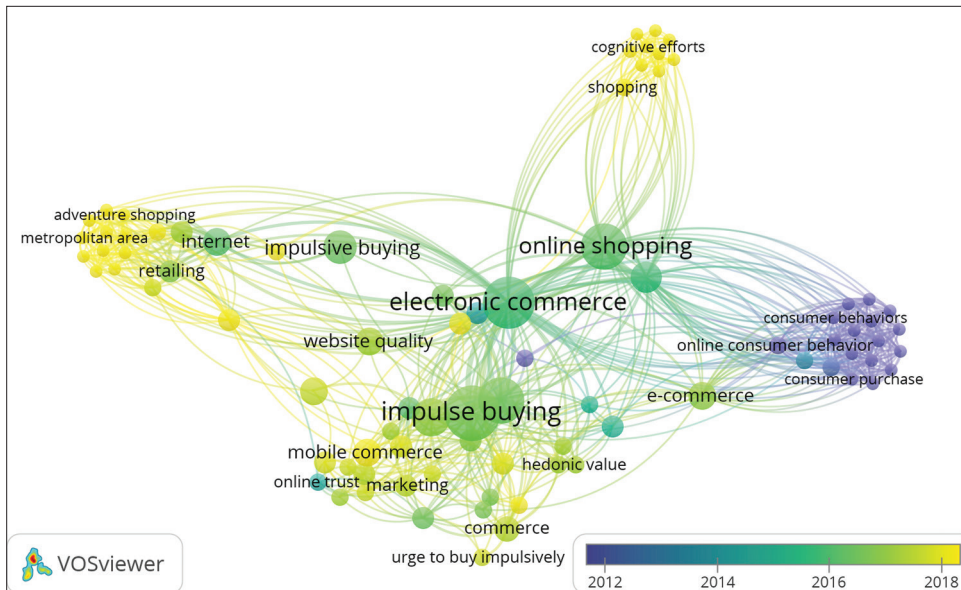


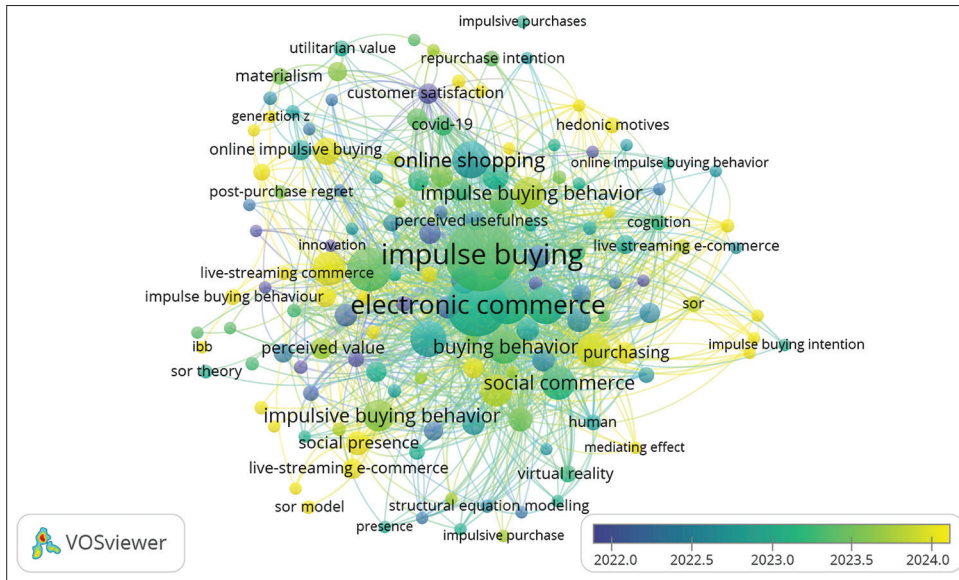
Figure 3: Influential topics in the “period of 2011-2019”



illustrates a cohesive network of keywords that signifies the progression of research interests and current trends in this domain. The colors blue and purple signify topics from the early part of the period (2002), including “purchasing behavior,” “perceived utility,” and “internet commerce”. As the image transitions to green hues (2002.5-2003), there is a heightened emphasis on themes such as “social commerce,” “impulse purchasing behavior,” and “customer happiness,” reflecting an intensified focus on social and behavioral elements. The light-yellow tones (2003-2004) signify the latest topics, encompassing “live-streaming” “e-commerce,” “hedonic reasons,” “impulse buying intention,” and “post-purchase remorse,” indicating a distinct transition towards psychological, experiential, and advanced technology viewpoints. Central themes like “impulse buying” and “electronic commerce” emerge as the most prevalent and impactful subjects, highlighting their crucial role in linking research streams and influencing current trends in this field.

4. FUTURE RESEARCH DIRECTIONS

Future study on impulsive purchasing in e-commerce should concentrate on the interplay between modern digital technologies and consumer psychology, including examining how artificial intelligence, algorithmic personalization, and real-time data analytics influence impulsive decision-making. Recent studies underscore the increasing significance of social commerce, live-streaming e-commerce, and mobile platforms; future research should investigate how immersive technologies, including virtual and augmented reality, amplify emotional arousal and impulsive reactions. Increased focus is required on consumer well-being, examining the long-term effects of impulsive purchasing, such as post-purchase regret, financial strain, and issues related to sustainable consumption. Comparative studies across cultures and regions are currently insufficient and require expansion

Figure 4: Influential topics in the “period of 2020-2025”

to adequately reflect variations in cultural values, economic development, and regulatory frameworks. Future study would benefit from longitudinal designs, experimental methodologies, and multidisciplinary frameworks that integrate marketing, psychology, and information systems. Ethical questions about compelling design and appropriate platform governance necessitate further examination to reconcile commercial goals with consumer safety in digital marketplaces.

5. CONCLUSION AND IMPLICATIONS

This bibliometric study offers a thorough and systematic analysis of global research trends on impulsive purchase behavior in e-commerce, delineating the intellectual framework, theme progression, and academic impact within this swiftly growing domain. The analysis of articles from 2000 to 2025 demonstrates a distinct evolution from initial technology-focused research to advanced, interdisciplinary studies that incorporate consumer psychology, digital marketing, information systems, and social commerce. The temporal analysis reveals that earlier studies prioritized web-based infrastructures and online systems, whereas recent research increasingly emphasizes the emotional, experiential, and social aspects of impulsive buying, especially in mobile, social, and live-streaming commerce contexts. The performance study underscores the preeminence of prominent authors, institutions, and nations, with the United States and China emerging as key contributors regarding research output and citation impact. High-impact journals like the *International Journal of Information Management*, *Information and Management*, and the *Journal of Retailing and Consumer Services* are crucial in influencing scholarly discourse, reflecting the field's robust foundation in both information systems and consumer behavior literature. The examination of the most impactful publications highlights the essential role of website attributes, social engagement, environmental signals, and recommendation mechanisms in elucidating online impulsive purchasing behavior.

The thematic evolution shown using keyword co-occurrence and overlay visualizations demonstrates a dynamic transition towards sophisticated digital technologies, social influence mechanisms, and post-purchase outcomes, encompassing satisfaction, regret, and customer well-being. Notwithstanding this expansion, the study reveals many deficiencies, including the underrepresentation of specific locations, a lack of longitudinal and cross-cultural evaluations, and inadequate examination of ethical considerations, sustainability, and long-term consumer welfare. This bibliometric study enhances literature by integrating disparate studies, pinpointing prevailing and nascent themes, and providing a systematic basis for future academic exploration. The findings offer significant insights for researchers wanting to match their work with high impact themes, for practitioners striving to develop responsible and effective e-commerce strategies, and for legislators focused on consumer protection in digital marketplaces. This work carefully maps the evolution and status of impulsive buying research in e-commerce, thereby deepening the comprehension of a complex phenomenon and facilitating the advancement of theory, practice, and policy in a progressive digital consumption environment.

This bibliometric analysis presents significant theoretical, managerial, and policy implications for research on impulsive purchasing in e-commerce. The findings unify disparate literature by elucidating the conceptual framework and thematic progression of impulsive purchase research, emphasizing the increasing convergence of consumer psychology, information systems, and digital marketing ideas. The recognition of prevailing frameworks like the S-O-R model and developing concerns concerning social commerce, live streaming, and post-purchase consequences offers researchers a more defined basis for theoretical advancement and multidisciplinary inquiry. The findings provide practical insights for e-commerce professionals and platform developers from a managerial perspective. Comprehending how website attributes, personalization technologies, social influence mechanisms, and immersive features drive impulsive purchasing can assist firms in optimizing user experience, augmenting conversion rates,

and improving short-term sales performance. The established connections among impulsive purchasing, regret, and consumer welfare highlight the necessity for responsible platform design, urging companies to reconcile persuasive tactics with transparency and consumer safeguarding. The study underscores the necessity for politicians and consumer advocacy organizations to confront the ethical and legal concerns linked to algorithmic persuasion, social commerce, and mobile buying contexts. This research highlights deficiencies in sustainability, long-term consumer welfare, and regional differences, thereby facilitating evidence-based policies to foster equitable, transparent, and sustainable digital marketplaces. The study offers a strategic framework for synchronizing academic research, management practices, and public policy within the developing e-commerce landscape.

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