



## Revealing Impulsive Purchase Behavior Global Research: Visualization Mapping using Bibliometric Analysis

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### Abstract

This study aims to analyze global research trends on impulse purchasing through a bibliometric approach, focusing on its evolution, key contributors, and emerging themes. It examines publication density, citation networks, and conceptual structures while identifying critical areas like consumer behavior, digital marketplaces, and sustainability. The study explores research gaps in cross-cultural contexts, emerging markets, and advanced technologies, offering insights for future research. It proposes interdisciplinary approaches in e-commerce, live-stream shopping, sustainability, and ethical considerations to advance the field. Using VOSviewer, bibliographic maps are constructed. The next step is to evaluate 344 articles by utilizing Scopus database and high-quality metadata. The results provide light on academic inclinations, citation networks, group dynamics, and potential avenues for future study regarding impulsive purchases. We search for the most frequent studies in the year 2021-24 by using publication density and duration analysis to filter for new finds. Based on the results of the disciplinary analysis, the following journals published research on impulse buys: retail, consumer service, and psychology. With 90 articles at the top of the list, the United States clearly has a lot of



scholarly interest in the subject, according to the territorial analysis. The fact that China has published more articles in this area than any other country shows how actively involved the country is. The United States ranks second in this regard. An important node in the green cluster, which focuses on "impulse buying," highlights author cooperation through co-citation analysis. Finally, this study uses component-based, keyword, and publication analysis to suggest future research directions.

**Keywords:** impulsive purchases; Bibliometric analysis; disciplinary analysis; co-citation analysis.

## 1. Introduction

Impulse purchasing is unplanned buying decisions made spontaneously and without prior intention, driven by immediate emotional responses or situational factors. Customers often engage in impulsive and spontaneous buying behavior, primarily driven by intuition when confronted with various stimuli. This behavior is often associated with a strong desire and a sense of gratification (Chan et al., 2017; Gowhar, 2023). Impulse buying, characterized by unplanned, compelling, and hedonically complex behavior (Dinesha, 2021), has been extensively studied in both business and academic contexts. Researchers have explored this phenomenon for nearly eighty years, with initial studies dating back to the 1940s in the United States under the DuPont Consumer Buying Habit Studies, which laid the groundwork for subsequent research into impulsive purchasing (Piron, 1991; Gowhar, 2023). The definition of impulse buying has been a common focus of research, though there remains some debate about what precisely constitutes it. Impulse buying is more complex and multifaceted than often assumed, with consumers frequently confusing impulsive shopping with unplanned purchases. Unplanned purchases are a subset of impulse buying, with the latter encompassing a broader range of behaviors (Morozova & Vlaev, 2024). Emotional drivers play a crucial role, as feelings of excitement or pleasure can prompt spontaneous purchases (Wang et al., 2022). Cognitive biases, such as the scarcity effect and social proof, also contribute significantly to impulse buying, creating a sense of urgency or social validation that encourages unplanned purchases (Abbott et al., 2023). Environmental and situational factors are key in facilitating impulse buying. In physical retail environments, store layout, visual merchandising, and promotional displays can enhance the likelihood of impulsive purchases (Abbott et al., 2023; Thant, 2023). Online shopping features, such as personalized recommendations and one-click purchasing, further facilitate spontaneous buying decisions (Redine et al., 2023).

Consumer profiles, including demographics and psychographics, influence impulse buying behavior. Younger consumers and those with higher levels of novelty-seeking traits are often more prone to impulse buying (Lin et al., 2023). While impulse buying can provide immediate gratification, it may lead to financial strain and buyer's remorse. Understanding these dynamics is essential for both consumers aiming to manage their spending and marketers looking to



optimize promotional strategies (Baumeister et al., 2001). According to the research that has been conducted over the past two decades on impulsive buying, particularly online impulse buying, there are major gaps and potential for additional research. There is a paucity of study in emerging markets and low-income nations, particularly with cross-cultural features of impulsive buying in online environments. The majority of studies have been conducted in China and the United States, but there is a lack of exploration in these regions.

The research acumen of answering questions; Q1: What are the global trends of impulse purchase in marketing realm? Q2: What study areas are connected to impulsive purchase in marketing? Q3: What topics and avenues could be explored in the study of impulse purchases? Q4: Through the analysis of co-occurring keywords, what intricate correlations about impulsive buying can be uncovered? and Q5. What are the working authors in area of impulsive purchase?. This study aims to provide a comprehensive explanation of impulse purchasing and its most relevant antecedents, including a historical review of the concept, an analysis of current terminology, and an evaluation of key authors, source journals, nations, publications, and themes that have significantly impacted the field of impulse buying. The press forward, the paper is presented in this order: to demonstrate the paucity of bibliometric studies in the field, section 2 presents a brief overview of existing works outside the marketing domain. Section 3 describes the bibliometric method from the initial design of the study leading up to data visualisation and interpretation. Section 4 conveys the findings of the analysis, while section 5 discusses the main themes in marketing obesity research aided by a tree map and a topic dendrogram. Section 6 concludes the paper with a reflection on the implications for future research.

## **2. Literature Review**

Researchers shown an interest in the impulse buying patterns of individuals over the course of the past sixty years include Clover (1950), Stern (1962), Verplanken et al. (2005), and Chang et al. (2011). These are just a few of the researchers that have pursued this particular field of inquiry by themselves. In an earlier study (Kollat & Willett, 1967), the ideas of impulsive buying and unexpected purchase were regarded to be comparable to one another. This was the conclusion reached by the researchers. Stimulation is something that people are exposed to when they are shopping, and this stimulation leads to their making purchases on the spur of the moment. It was Applebaum (1951) who was the first person to assert that this is the reason why individuals make these kinds of financial commitments. In his research that was carried out in 1962, Stern distinguished between four distinct types of individuals that engage in impulsive purchasing behavior. Pure, reminder, suggestion, and planned impulse purchases were the categories that were used to determine these individuals. Recent research trends comprehend patterns of individuals' impulse purchases connectivity with perceived interactivity and risk, subjective norms and visual appeal (Lee et al., 2023), trust (Li et al., 2024), hedonic shopping



(Liang & Yu, 2024), upward social comparison (Kanthawon & Jabutay, 2024), obesity (Marinello et al., 2023).

The literature on impulse purchasing encompasses various components that elucidate the factors influencing this behavior. Consumer psychology investigates the cognitive, emotional, and social triggers behind impulse purchasing decisions (Muhammad, 2024). Marketing strategies analyze how companies employ promotions, advertisements, and in-store tactics to stimulate impulse sales (Ul Ain Q et al., 2024). The influence of digital and e-commerce is examined through research on how online platforms, social media, and mobile shopping apps have transformed impulse buying behaviors (Deng et al., 2023). Additionally, cultural and demographic factors are explored, revealing how aspects such as culture, age, gender, and income levels impact impulse purchasing tendencies across different consumer groups (Huang & Cai, 2021). Ethical and sustainable considerations address the environmental and social implications of impulse buying, particularly in relation to fast fashion, consumerism, and waste generation (Ullah et al., 2024; Moes et al., 2022). Furthermore, technological innovations are studied to understand how AI, algorithms, and personalized marketing enhance the likelihood of impulse purchases through tailored recommendations (Jain & Gandhi, 2021). The retail environment is also a significant focus, investigating how store layout, product displays, and sensory stimuli, such as lighting, music, and scents, affect impulse buying behavior (Yolcu & Meyer, 2023). Finally, impulse control and self-regulation are examined to explore the psychological mechanisms that influence consumers' ability to resist or succumb to impulse purchases (Aiolfi et al., 2022).

A few of the researchers who have shown an interest in the impulse buying patterns of individuals over the course of the past sixty years include Clover (1950), Stern (1962), Verplanken et al. (2005), and Chang et al. (2011). These researchers have examined the patterns of individuals' impulse purchases. These are just a few of the researchers that have pursued this particular field of inquiry by themselves. In an earlier study (Kollat & Willett, 1967), the ideas of impulsive buying and unexpected purchase were regarded to be comparable to one another. This was the conclusion reached by the researchers. Stimulation is something that people are exposed to when they are shopping, and this stimulation leads to their making purchases on the spur of the moment. It was Applebaum (1951) who was the first person to assert that this is the reason why individuals make these kinds of financial commitments. In his research that was carried out in 1962, Stern distinguished between four distinct types of individuals that engage in impulsive purchasing behavior. Pure, reminder, suggestion, and planned impulse purchases were the categories that were used to determine these individuals. The behavioral features of impulse buying have been the subject of inquiry in recent studies that have focused on personal qualities and impulsiveness. These studies have been conducted in recent generations. The aforementioned investigations have been carried out. An example of



impulse buying is when a buyer experiences a sudden, frequently overwhelming, and persistent need to get something rapidly, as stated by Rook (1995). According to Rook, this is an example of impulse buying. Here is an illustration of a buyer who made a purchase on the spur of the moment. Additionally, the hedonistic nature of the drive to make a purchase is complicated, and it has the ability to produce emotional upheaval at the same time. In addition, it is common for people to make purchases on the heat of the moment without giving any thought to the potential outcomes that may be brought about by the choices they make.

There was a consideration given to both of these issues in the scale. During the process of developing the scale, both of these concerns were taken into mind. An emotional state, which can be defined as a combination of pleasure, excitement, and power, is said to be the source of the intrinsic activation of impulse buy behavior, as stated by Rook et al. (1993). This is the conclusion that can be drawn from the findings of the aforementioned researchers. It is believed that this form of intrinsic activation is the cause of the behavior of making impulsive purchases. The activation of themes and connections that are linked with the act of making impulsive purchases is the cause of this occurrence, which takes place as a consequence of the connection between the two. People who are traveling and make impulsive purchases are driven by the urge to change or keep a mood that they are now experiencing. In addition to the other factors that contribute to their behavior, this desire is also at play. In accordance with the findings of Coley and Burgess (2003), the state of mind that passengers are in at the moment of the transaction is the most significant psychological component that contributes to passengers making impulsive purchases. Those individuals who make frequent purchases at duty-free shops that are located within airports are the ones who are most likely to find this to be particularly appealing and useful.

According to the findings of the research that Abbas and Bashir (2015), they explored the relationship between cognitive and emotional decision making in relation to the unexpected purchase of casual clothing. A previous study came to the conclusion that cognitive impulsive purchase can take place unintentionally or without prior deliberation for a number of different reasons according to the findings of the study. According to Li et al. (2015), mood may be the hidden enticement of impulse buying, and this behavior is linked to emotional responses. They also suggest that mood may be the cause of impulse buying. Furthermore, mood may be the primary factor that leads to impulsive purchases. Travelers, for instance, are regularly seen engaging in such fleeting gratification as a manner of lessening the emotional responses they experience. According to Ünsalan (2016), the phenomenon of making a buy on impulse is one that is astonishing, exciting, hedonistically complicated, and engaging altogether. Therefore, it is feasible for impulsive purchasing to be a component of consumer behavior that is not readily apparent. In addition to this, it accounts for a considerable amount of the purchases that are done on a daily basis, and it allows for the acquisition of a wide variety of products



(Bahrainizadeh & Rajabi, 2016). The behavior of making decisions on purchases on the spur of the moment accounts for two-thirds of all decisions. The researchers Amos et al. (2014) did a meta-analysis of the literature on impulsive buying, and their findings revealed that the key component that drove impulse buying was the interaction between situational variables and dispositional traits. According to the findings of Atulkar and Kesari (2018), the situational construct of an individual, which includes the amount of time and money that is accessible to them, will increase the likelihood that they will make impulsive purchases. As a result of this, consumers and travellers frequently engage in the practice of buying purchases on the spur of the moment.

### **3. Material & Methods**

This study employs a quantitative bibliometric analysis to examine journals on impulse purchasing over multiple decades (Zhou et al., 2022; Devi et al., 2023). It utilizes objective methods to map the field's structure and applies descriptive analyses to investigate study characteristics, the evolution of articles, emerging trends, research networks, prominent contributors, themes, and the distribution of publications across countries and journals. Additionally, a systematic literature review (SMA method) is conducted to identify key developments and research frontiers, providing an overview of the field and uncovering potential research gaps.

#### **3.1 Data processing**

To ensure data validity and high-quality outcomes, this study emphasizes the importance of rigorous standards in measuring and data collection processes, research procedures, and paper selection. In this context SMA method involves using bibliometric techniques to visualize the structural and evolutionary aspects of a research field (Ahmed & Aziz, 2023). It highlights the importance of using reliable data to strengthen the validity of bibliometric analyses. This research followed the five-step approach outlined in (Figure 1). The first step involves applying a broad search strategy using a search string without limitations to identify underexplored research areas. This process utilizes specific but comprehensive terminology related to the topic of interest, such as "Impulse," "Impulsive," and "Purchase," as well as variations like "purchasing." The second step focuses on retrieving social science and business research from the Scopus database, emphasizing high-quality metadata and citation information. In the third step, bibliometric analysis is conducted using Scopus data and VOSviewer software. The initial keyword search, centered on "impulse" and "purchase," identified 515 records. This search was refined using the Scopus advanced search function with the filter TITLE-ABS-KEY (title, abstract, keywords), specifically applying the search string "impuls\* purchase\*" to capture variations such as "impulse purchasing" and "impulsive purchases." To ensure the quality and focus of the analysis, the search was restricted to peer-reviewed journal articles, reducing the dataset to 367 records. Further refinement was done by limiting the language to English, which



excluded non-English publications and resulted in 357 articles. Only those at the final publication stage were included, yielding a final dataset of 344 articles (see Figure.1). Additionally, the Structured Mapping Approach (SMA) was employed to create visual representations such as tables, matrices, and concept maps to illustrate relationships, gaps, and research concentrations. Baas et al., (2020) highlight the importance of verifying data integrity—identifying errors, inconsistencies, and missing data—before proceeding with analysis. The use of VOSviewer is strongly advocated for data extraction and visualization, particularly in the creation of bibliometric maps, as it enhances the interpretability of research through graphical representation. VOSviewer is freely available to the bibliometric research community, with the goal of fostering collaboration and furthering research in the field.

The fourth step involves analyzing citations to identify the most influential papers and authors, mapping collaboration patterns across countries, and uncovering relationships between topics by examining the co-occurrence of keywords in the literature. Finally, the fifth step synthesizes the findings using the SMA, drawing on patterns revealed by the bibliometric mapping to summarize the state of the field and offer directions for future research. This method is particularly useful in organizing and synthesizing knowledge from a vast and diverse body of literature, especially in areas of fragmented research. Verification of dataset integrity is crucial at this stage to detect and address any errors or inconsistencies. The promotion of VOSviewer for free access serves to enhance collaboration and advancement within the bibliometric research community.

### 3.2 Data analysis

The final list of publications was compiled, and data were downloaded in CSV Excel format from the Scopus dataset for bibliometric analysis. This research identifies distinct concerns and priorities within subareas of the field, highlighting current scenarios constrained by key hotspots, trends, emerging topics, and deficiencies. A notable research gap exists between the literature and consumer concerns, indicating that addressing this gap could help bridge the divide between consumer awareness and behavior. For visual representation and analysis of bibliometric relationships, the study employs VOSviewer, a widely recognized mapping tool known for its accessibility and reliability in bibliometric studies. VOSviewer extracts keywords, titles, and abstracts for content analysis, using distance-based visualizations to reveal co-occurrence relationships between terms. The software's smart local moving algorithm, developed by Van Eck and Waltman, effectively identifies publication network relations, thereby enhancing scholarly understanding of research landscapes. The analysis interprets bibliometric indicators within the scholarly context, taking into account factors such as publication patterns, citation behaviors, and research collaborations. The study includes descriptive and performance analyses, covering publication patterns, primary sources, citations, journal analysis, author analysis, and relevant keyword analysis. The VOSviewer



results are then mapped based on network analyses, including co-occurrence, co-citation, authorship, and connection analyses.

Additionally, sub-theme analysis plays a crucial role by breaking down broader themes into more focused areas (Alsharif et al., 2020), offering valuable insights for identifying new trends and future research directions. This approach facilitates a deeper understanding of understudied topics, highlights gaps in the literature, and improves clarity in communication. By identifying distinct patterns within sub-themes, scholars can prioritize future research projects based on significance and societal demands.

Figure 1. Data Processing

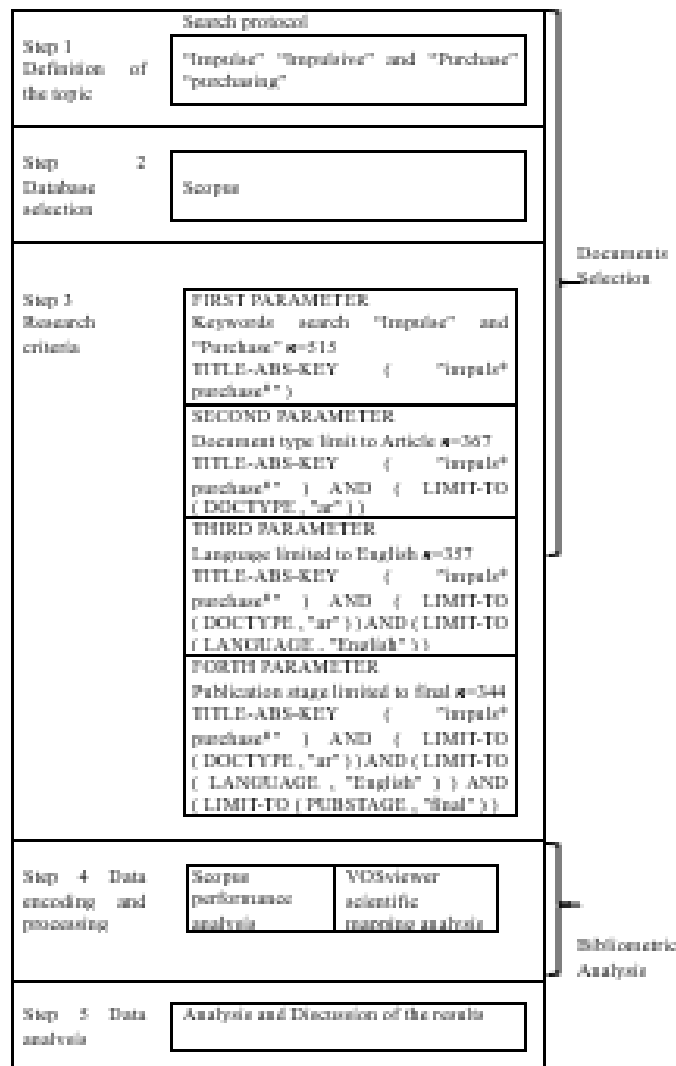


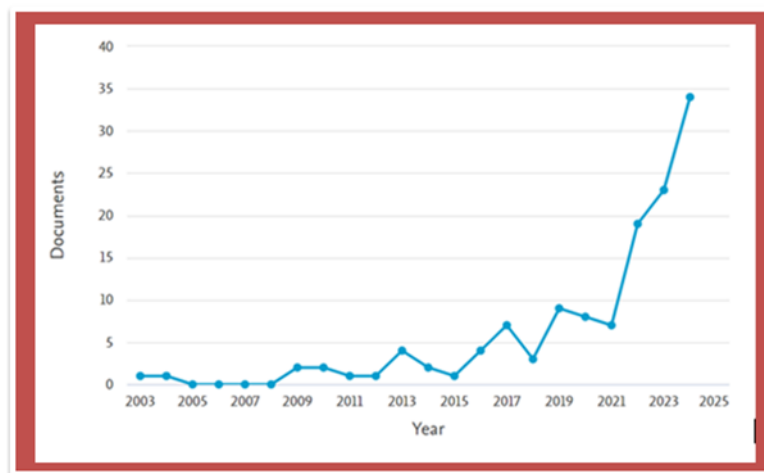
Figure 1. The search protocol and flow diagram adapted from Aiolfi, S., & Luceri, B. (2024).



## 4. Findings

### 4.1 Duration analysis

The study at hand investigated the trends and publications in specified duration enacting impulsive purchase. The article search begun from 515 documents and restricting to 344 for comprehensive bibliometric analysis. Aiming at the most comprehensive research articles authors and the co-authorship in the domain of impulsive purchase studies. To answer the\_Q1: What are the global trends of impulse purchase in marketing realm? Starting from the data limitation year-2003, this area of research (impulsive purchase) obtain rise with balance and elevated from the year-2009. Moreover, right from that year rise in the publication and exposed deem interest by the research fraternity to emphasize on IP. A comprehensive rise in publication is recorded from the documents in the year-2017 and up-to 2024 reached to the high point of publications (Figure. 2).

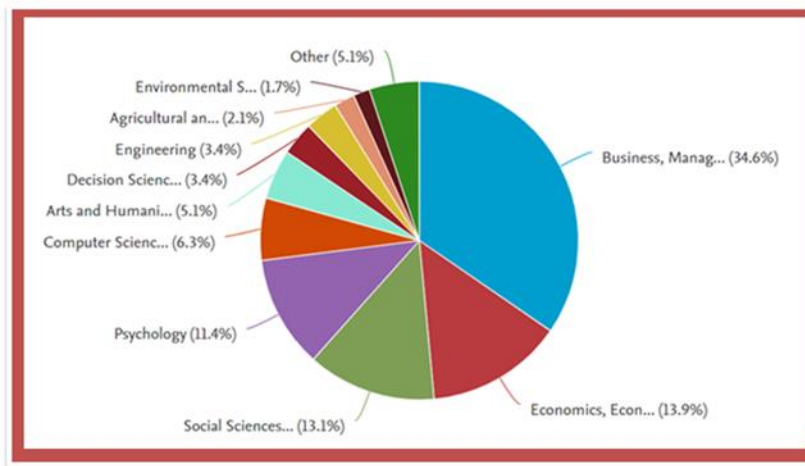


**Figure.2 Author’s work: trends in impulsive purchase research.**

When categorizing impulsive buying and impulse purchasing by subject area (Figure 3), the distribution of documents is illustrated in the accompanying pie chart. The largest share, 34.1% (equivalent to 224 papers), falls under business, management, and related fields. Social sciences account for 71 papers (10.8%), followed by economics with 69 papers (10.5%), computer science with 60 papers (9.1%), and psychology with 58 papers (8.8%). Other notable subject areas include engineering, which has 42 papers (6.4%), decision sciences with 28 papers (4.3%), arts and humanities with 21 papers (3.2%), medicine with 17 papers (2.6%), and agricultural and biological sciences with 14 papers (2.1%). An additional 8.1% of the documents fall under the "other" category, encompassing a variety of disciplines outside the main areas listed. The chart clearly demonstrates that research on impulsive buying and impulse purchasing is most prevalent in the business and management fields, which dominate



the publication output. Additionally, there is a significant presence in other academic areas, particularly the social sciences, economics, computer science, and engineering. This suggests that the study of impulsive buying behaviors extends across a wide range of disciplines, with business and management leading the way.



**Figure.3 Author's work, subject area trends.**

The Bibliometric documents search unfolded dominating publications in multi-academic fields mostly in business, management and accounting (34.6%), economics, econometrics & finance (13.9%) and social sciences (13.1%) as the major areas of publication on impulsive purchase (see fig.3). These findings are very much in support of the impulsive purchase research by the social science publications globally.

## 4.2 Disciplinary analysis

### 4.2.1 Top Distribution by Journal and Subject Area

The publication trends of the 344 sampled articles demonstrates significant progress. These articles were drawn from 214 journals, with 10 journals accounting for the highest number of published articles. The Journal of Retailing and Consumer Services leads with 18 articles, followed by Frontiers in Psychology with 10, the International Journal of Retail and Distribution Management with 9, Young Consumers with 7, and the Journal of Consumer Behavior with 6 articles. All of these journals are classified in Quartile 1. Ranked sixth, the Journal of Consumer Marketing, which falls under Quartile 2, has published 6 articles. Similarly, the Journal of Fashion Marketing and Management also published 6 articles but recorded the highest Total Citations (TC) with 660 citations and a TC/TR (Total Citations to Total Publications Ratio) of 110.00 scores. The remaining three journals are the Journal of Business Research with 5 articles, the Asia Pacific Journal of Marketing and Logistics with 4, and the Journal of Distribution Science, which also has 4 articles. Notably, the Journal of



Retailing, despite having only 3 articles and being excluded from Table 1, achieved 965 citations, which exceeds the total citations of the Journal of Fashion Marketing and Management (660 citations), the highest-ranked journal in Table 1 in terms of citations.

**Table 1. Top publications distribution by journal**

No.	Source Title	TP(R)	TP (%)	TC(R)	TC/TP	Q
1	Journal of Retailing and Consumer Service	18(1)	5.23	90 (9)	5.00	1 (97th)
2	Frontiers in Psychology	10(2)	2.90	190 (5)	19.00	1 (78th)
3	International Journal of Retail and Distribution Management	9(3)	2.61	269 (3)	29.89	1 (78th)
4	Young Consumers	7(4)	2.03	108 (8)	15.43	1 (87th)
5	Journal of Consumer Behavior	6(5)	1.74	151 (6)	25.17	1 (88th)
6	Journal of Consumer Marketing	6(6)	1.74	131 (7)	21.84	2 (67th)
7	Journal of Fashion Marketing and Management	6(6)	1.74	660 (1)	110.00	1 (81st)
8	Journal of Business Research	5(8)	1.45	492 (2)	98.40	1 (97th)
9	Asia Pacific Journal of Marketing and Logistics	4(9)	1.16	208 (4)	52.00	1 (83rd)
10	Journal of Distribution Science	4(10)	1.16	11 (10)	2.75	3 (32nd)

TR(R)= Total papers (Rank), TP percentage= percentage of total papers, TC(R)= Total citations (ranking in this list), TC/TR=Total citations divided by total papers, and Q=Scopus quartiles in 2022 (percentile). The quartiles are quartile 1 (Q1): serial titles in the 99th-75th percentiles; quartile 2 (Q2): serial titles in the 74th-50th percentiles; quartile 3 (Q3): serial trials



in the 49th-25th percentiles; and quartile 4 (Q4): serial titles in the 24th-0th percentiles [50]. Source: authors' own work.

#### 4.2.3 Cited Works in Impulsive Buying Literature

The top 11 authors in the subject are identified by a study of author contributions. With four works, Liew T.W. is the most prolific author. Bellini S. and Dwivedi Y.K., who each have about three published works, are next in line. Notable authors who published almost three documents apiece are Gan C.L., Jaafar N.I., and Kim M. Outstanding authors. Furthermore, with slightly under three publications apiece, Lee Y.Y., Leong L.Y., and Omar A.C. exhibit comparable production. Ahn J., who has authored two articles, rounds off the list. This evaluation emphasizes the important contribution each of these writers has made to the field, with Liew T.W. coming in first in terms of total contributions. Table 2 presents the most cited publications related to impulsive buying behaviors, showcasing significant contributions to the field. The most cited work is by Beatty and Ferrell (1998), titled "Impulse buying: Modeling its precursors," with 925 citations, underscoring its foundational role in understanding impulsive purchases. Other notable publications include Bruce et al. (2004), which examines supply chain management in textiles and clothing with 481 citations, and Liu et al. (2013), who investigate website attributes influencing online impulse purchases, receiving 363 citations. Verplanken and Herabadi's (2001) study on individual differences in impulse buying tendencies achieved 353 citations, highlighting the psychological dimensions of the behavior. Additionally, research by Peck and Childers (2006) and Cohen and Babey (2012) addresses environmental influences and contextual factors affecting impulse purchases. Collectively, these works illustrate the multifaceted nature of impulsive buying, encompassing psychological, environmental, and contextual influences, and their high citation counts reflect their significance and impact on marketing and consumer behavior research.

**Table 2. Most cited publications**

Authors	Title	Year	Source title	Cited
Beatty S.E.; Ferrell M.E.	Impulse buying: Modeling its precursors [1]	1998	Journal of Retailing	925
Bruce M.; Daly L.; Towers N.	Lean or agile: A solution for supply chain management in the textiles and clothing industry? [2]	2004	International Journal of Operations and Production Management	481
Liu Y.; Li H.; Hu F.	Website attributes in urging online impulse purchase: An	2013	Decision Support Systems	363



	empirical investigation on consumer perceptions [3]			
Verplanken B.; Herabadi A.	Individual differences in impulse buying tendency: Feeling and no thinking [4]	2001	European Journal of Personality	353
Peck J.; Childers T.L.	If I touch it I have to have it: Individual and environmental influences on impulse purchasing [5]	2006	Journal of Business Research	253
Cohen D.A.; Babey S.H.	Contextual influences on eating behaviours: Heuristic processing and dietary choices [6]	2012	Obesity Reviews	231
Djafarova E.; Bowes T.	'Instagram made Me buy it': Generation Z impulse purchases in fashion industry [7]	2021	Journal of Retailing and Consumer Services	227
Chen C.-C.; Yao J.-Y.	What drives impulse buying behaviors in a mobile auction? The perspective of the Stimulus-Organism-Response model [8]	2018	Telematics and Informatics	225
Dittmar H.; Beattie J.; Friese S.	Gender identity and material symbols: Objects and decision considerations in impulse purchases [9]	1995	Journal of Economic Psychology	223
Mattila A.S.; Wirtz J.	The role of store environmental stimulation and social factors on impulse purchasing [10]	2008	Journal of Services Marketing	198

Source: authors' own work.

### 4.3 Territorial analysis

#### 4.3.1 Global Research Contributions



There is a definite hierarchy in the research contributions to the topic of impulsive buying, as shown by the examination of document counts by nation figure 3. With almost 90 publications, the United States takes the lead, demonstrating a strong level of scholarly interest in the subject. China comes in second place with a significant number of publications, indicating that it is an active participant in this field of study. Notable data are also presented by Malaysia and India, which reflects their increasing interest in research on impulsive purchases. The United Kingdom and Taiwan contribute to the discourse, albeit at lesser levels, while countries such as Australia, Indonesia, South Korea, and Canada show smaller but nonetheless meaningful participation. This distribution highlights the important regions that propel scholarly inquiry in this topic and highlights the global reach of research on impulsive purchasing behaviors. And undefined Country or Territory in 8 publications.

**Table 3. Documents by Country or Territory**

Country or Territories	T or P	%	Country or Territories	T or P	%	Country or Territories	T or P	%
U.S.A	85	17.89	TURKEY	6	1.26	HUNGARY	2	0.42
CHINA	61	12.84	MACAO	5	1.05	IRELAND	2	0.42
INDIA	44	9.26	NEW ZEALAND	4	0.84	JAPAN	2	0.42
MALAYSIA	31	6.53	PORTUGAL	4	0.84	PHILIPPINE	2	0.42
U.K.	28	5.89	SINGAPORE	4	0.84	QATAR	2	0.42
TAIWAN	22	4.63	SWEDEN	4	0.84	SWITZERLAND	2	0.42
AUSTRALIA	21	4.42	AUSTRIA	3	0.63	UZBEKISTAN	2	0.42
INDONESIA	14	2.95	BANGLADESH	3	0.63	COATIOA	1	0.21
SOUTH KOREA	13	2.74	BRAZIL	3	0.63	CHANA	1	0.21



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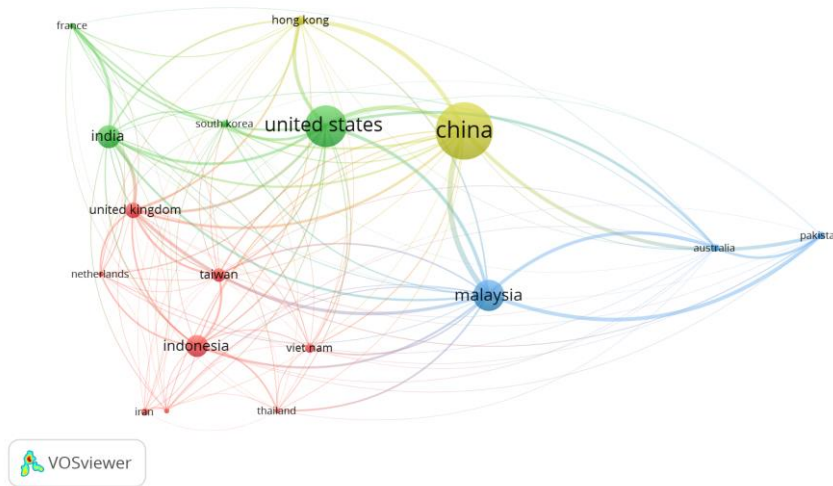
CANADA	10	2.11	COLOMBIA	3	0.6	NORWAY	1	0.2
								1
VIET NAM	10	2.11	FINLAND	3	0.6	OMAN	1	0.2
								1
FRANCE	9	1.89	GREECE	3	0.6	PERU	1	0.2
								1
NETHERLAND	8	1.68	SOUTH AFRICA	3	0.6	RUSSIAN FEDERATION	1	0.2
								1
PAKISTAN	8	1.68	SPAIN	3	0.6	SEBIA	1	0.2
								1
HONGKONG	7	1.47	THAILAND	3	0.6	SLOVAKIA	1	0.2
								1
IRAN	7	1.47	BELGIUM	2	0.4	SRI LANKA	1	0.2
								1
GERMANY	6	1.26	CZECH REPUBLIC	2	0.4	SUDAN	1	0.2
								1
ITALY	6	1.26	DENMARK	2	0.4	U.A.E	1	0.2
								1

TP=total papers, Source: authors' own work

Global research exploration is foundational as the countries are contributing largely to impulsive purchase. Top-10 of the countries like China at maximum 30-documents on the study area, United State at the second position of 21-documents, Malaysia with third rank country in terms of impulsive purchase 17, India 13, Indonesia 11, United kingdom 09, Tiwan 07, Hong Kong 05, Veit Nam and Australia 05 documents respectively. So fig.4 represents the three of the major countries contributing to the area of impulsive purchase and the least documents of a country is 4 by Australia in connection to Q3.

#### 4.3.2 Territorial analysis

Cluster-I showcase China as the dominating force in impulsive purchase studies the insight, followed by green cluster, where United State is al so major part of the study area contributions. Malaysia, India, the United Kingdom, and Indonesia are the followers in connection to impulsive purchase studies (see Figure. 4).



**Figure.4 Author’s work: visual map, impulsive purchase countries.**

#### 4.3.3 Coupling network visualization

The cluster analysis of countries contributing to impulsive buying research provides a detailed look into the global distribution of academic output in this field. Four distinct groups have emerged, each characterized by the number of documents produced and their citation strength figure 5a. Cluster 1 includes six countries: Indonesia, Italy, South Korea, Taiwan, the United States, and Vietnam. The United States stands out as the most prolific contributor, with 85 documents and an impressive citation count of 5,401, indicating its central role in shaping the discourse on impulsive buying behavior table 5. Taiwan, with 21 documents and 757 citations, also demonstrates a strong presence, while South Korea and Indonesia contribute at slightly lower levels, each with 13 and 14 documents, respectively. Cluster 2 comprises Australia, China, Hong Kong, Malaysia, and Pakistan, with China leading this group with 56 documents and 1,528 citations, showcasing its significant engagement in this research area. Australia and Malaysia also contribute meaningfully, with 19 and 28 documents, respectively, while Hong Kong and Pakistan, with 6 and 7 documents, indicate moderate but impactful participation. China is currently the leading country in research on impulse purchasing figure 5b. Cluster 3 features five countries: France, Germany, India, the Netherlands, and the United Kingdom. India contributes a substantial number of documents (41) but is surpassed in terms of citation strength by the United Kingdom, which has 27 documents and 1,771 citations, reflecting the depth and influence of UK-based research in this field. France and Germany, with 9 and 6 documents, respectively, exhibit moderate engagement, while the Netherlands rounds off this group with 6 documents. Cluster 4 is the smallest, consisting of Canada, Iran, and Turkey. Canada leads this cluster with 10 documents and 728 citations, marking it as an important player despite its smaller output. Iran and Turkey, with 7 and 6 documents respectively, also

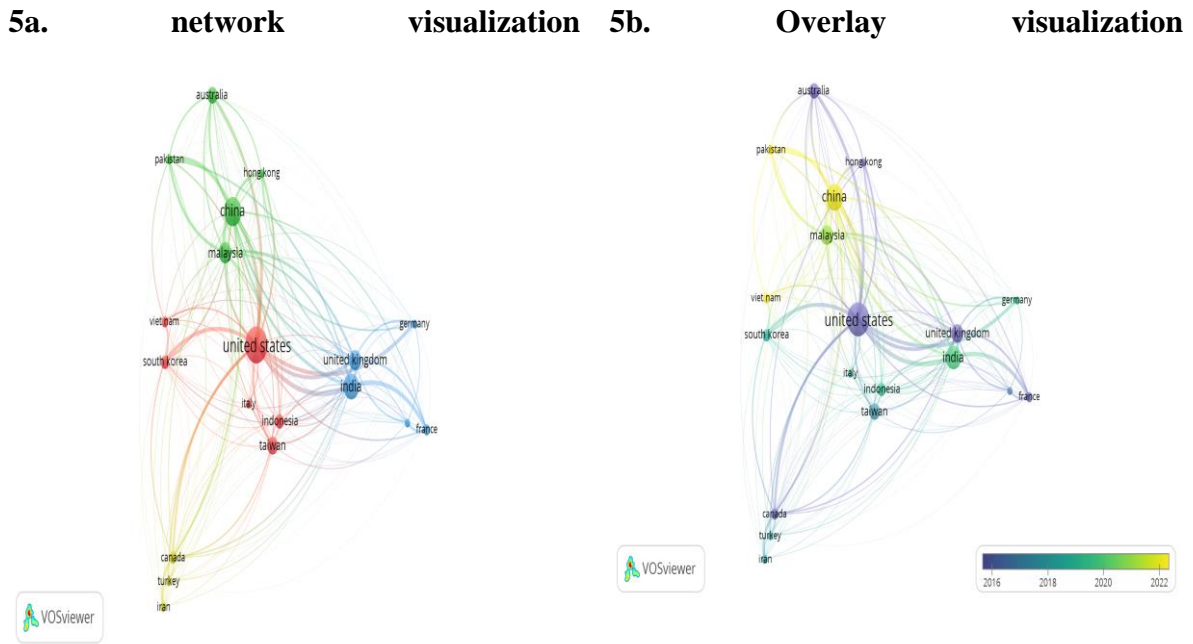


contribute to the field, though their citation counts indicate less influence compared to the other nations. This cluster analysis highlights the global reach of impulsive buying research, with key players like the United States and China driving the conversation, while other countries provide valuable contributions to the expanding body of knowledge.

**Table 5. Bibliographic Coupling by Country**

Cluster	Country	Documents	Citations	Total Strength	Link
1	United States	85	5401	2390.99	
	South Korea	13	315	475.55	
	Taiwan	21	757	367.5	
	Indonesia	14	444	250.21	
	Vietnam	8	122	185.76	
	Italy	6	207	76.3	
2	China	56	1528	1892.65	
	Malaysia	28	522	1049.54	
	Pakistan	7	218	610.49	
	Australia	19	680	590.24	
	Hong Kong	6	437	413.04	
3	India	41	556	1209.12	
	United Kingdom	27	1771	991.83	
	France	9	231	537.84	
	Germany	6	156	382.69	
	Netherlands	6	110	218.69	
4	Canada	10	728	659.46	
	Iran	7	154	246.68	
	Turkey	6	135	203.83	

Source: authors' own work



**Figure 5a-5b. Country Coupling Network and Overlay Visualization**

Source: VOSviewer

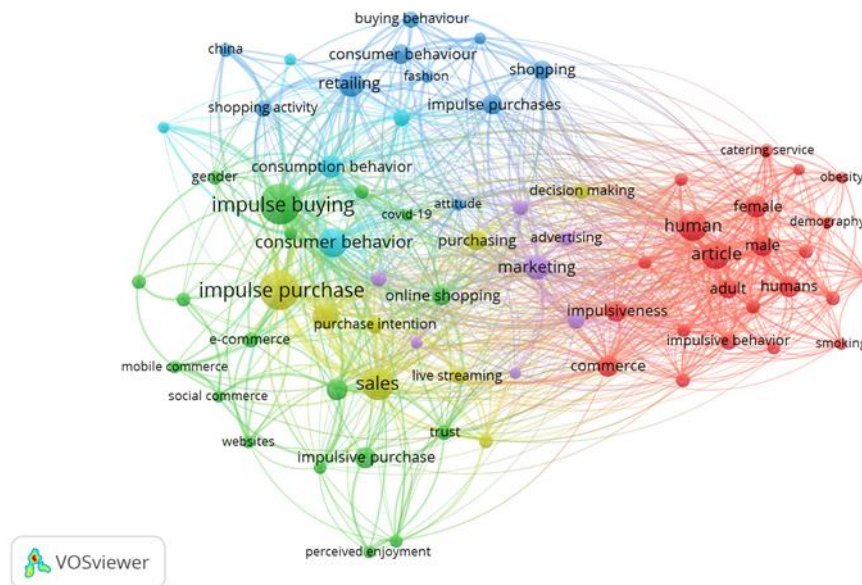
#### 4.4 Co-occurrence Analysis

##### 4.4.1 All keywords Co-Occurrence Analysis

Impulse Buying in E-Commerce theme for green color cluster figure 6. The main emphasis of the cluster, "impulse buying," is represented by a prominent node that is characteristic of the green cluster. A number of minor nodes that are pertinent but not as prominent as the primary subject in terms of frequency or usage accompany it. "E-commerce," "impulsive purchase," "gender," "online shopping," "mobile commerce," "social commerce," "websites," and "trust" are some examples of these tiny keywords. This suggests that although there is a lot of interest in impulse buying, it is frequently discussed in the context of online retail settings and factors influencing customer behavior, like "gender" influences and "trust" in digital platforms. It was found that "perceived enjoyment" and "trust" are emerging keywords currently being studied in recent research (Figure 6). Impulse Purchase and Consumer Behavior, the green olive cluster is primarily centered around the keyword "impulse purchase", which is the most prominent term in this study. It appears in 344 articles, being used 55 times, and is linked to other keywords with a Total Link Strength (TLS) of 33 (as shown in Table 4). Following impulse purchase, notable keywords include "sales" and "purchase intention" (a newly emerging keyword currently gaining attention, as seen in Figure 6), along with "purchasing", "decision making", and others.



Consumer Behavior and Impulse Buying Tendencies, the blue cluster is dominated by the large nodes “consumer behavior” and “consumption behavior”, with smaller nodes such as “impulse buying tendency” and “store entertaining”. As this is the smallest cluster, it reflects a more focused area of study within the broader field of consumer behavior. Retailing and Consumer Behavior, the blue cluster is characterized by large nodes such as “retailing”, “consumer behavior”, and “buying behavior”, while smaller nodes include “shopping activity”, “China”, and “attitude”. This group of keywords reflects topics that have been extensively studied in the past, and it does not contain any keywords that are currently considered emerging areas of interest in recent research.



**Figure 6. Co-Occurrence Keywords Network Visualization**

Network visualization (threshold 71). Source: VOSviewer

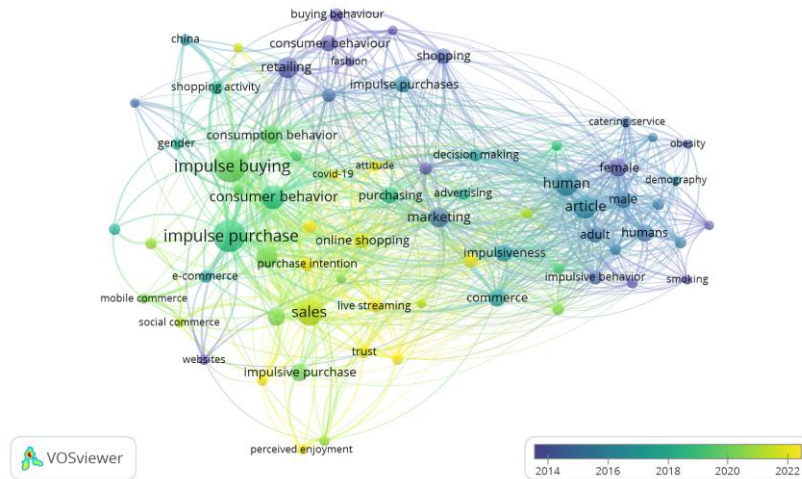
Marketing and Consumer Behavior theme in the purple cluster comprises a limited number of keywords, with the most significant node being “marketing”. Smaller, secondary nodes include “advertising” and “human experience”, among others. Impulsiveness and Consumer Demographics theme for final group of red node keywords holds considerable importance, featuring key terms such as “human”, “article”, “male”, and “female”, which are large nodes significant for their co-occurrence relationships. Secondary nodes in this category include “catering service”, “obesity”, “demography”, “adult”, “humans”, “impulsive behavior”, “smoking”, “commerce”, and “impulsiveness”. Notably, both groups of keywords represent areas that have been previously studied, rather than emerging topics (see Figure.7).



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**Figure 7. Co-Occurrence Keywords Overlay Visualization**

Overlay visualization (threshold 71). Source: VOSviewer

**Table 4. Keywords List with Keyword Occurrences and TLS**

Keywords list	occurrences	TLS	Keywords list	Occurrences	TLS
Impulse purchase	55	39.00	Consumption behavior	17	16.00
Impulse buying	58	38.00	Impulsiveness	16	16.00
Sales	37	36.00	Humans	16	16.00
Human	30	30.00	Male	16	16.00
Article	28	28.00	Commerce	15	15.00
Consumer behavior	29	25.00	Purchasing	14	14.00
Electronic commerce	23	23.00	Adult	14	14.00
Retailing	23	21.00	Shopping	13	13.00
Marketing	21	19.00	Cognition	10	10.00
Female	17	17.00	Consumer behavior	14	10.00

TLS=total link strength. Source: authors' own work



#### 4.4 Co-citation Analysis

Visual in Figure.8 showcase co-citation clusters of the authors' collaboration on impulsive purchase studies. Red cluster in the visual showcase that Rook D.W, Betty S.E, Sharma P. and Verplanken b. holds maximum citations with other field scholars' research work. Coming to the "green" cluster noted the Asian authors contribution in the field as Ringle C.M, Liu Y, Li Y, Cheah J.H have done studies in the field of impulsive purchase. The compressive connectivity among the authors showcase the co-citation being acknowledge by the field expert publications. The blue cluster and lemon colour cluster with minimum co-citation in the work of thee scholars to answer Q5.

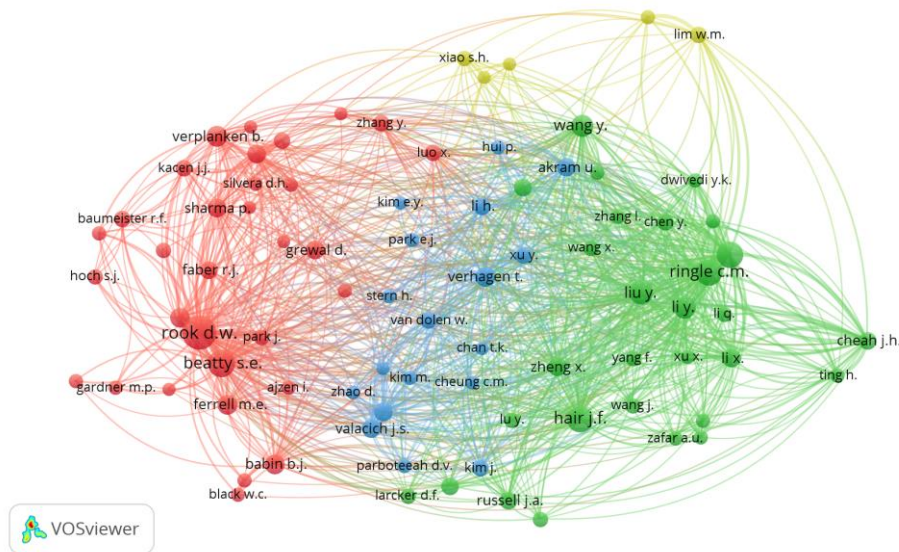


Figure.8 co-citation on impulsive purchase

## 5. Discussion

### 5.1 Trends in impulsive purchase research

Research on impulsive purchasing has significantly increased, particularly during the period from 2021 to 2024. This rise is reflected in the growing number of studies focusing on diverse areas such as e-wallets (Lee et al., 2023), consumer behavior (Li et al., 2024), airport shopping (Liang & Yu, 2024), and the impact of social networks (Kanthawon & Jabutay, 2024). These trends demonstrate an expanding interest in understanding the evolving patterns of consumer behavior, especially in contexts involving time sensitivity and social interactions.

### 5.2 Disciplinary research areas

Research conducted by the disciplinary body yielded results that paved the way for the creation of numerous new fields of study as a direct result of the academic effort. This resulted from the



efforts made in the academic realm. Research in the fields of psychology, retailing, and consumer-based journals extensively covers impulsive purchase. This is backed by studies in the fields of cognitive science (Khetarpal & Singh, 2024; Divakar & Venkatesh, 2024; Chetioui & Bouzidi, 2023), retailing connectivity (Nyrhinen et al., 2024; Deng et al., 2023; Jhon et al., 2024), and retailing studies (Nyrhinen et al., 2024; Deng et al., 2023; Jhon et al., 2024).

### **5.3 Territorial analysis**

Territorial analysis reveals that the majority of impulsive purchasing research is concentrated in countries like the United States also supported by th work (Tee et al., 2023; Liu et al., 2024; Isa et al., 2020), China, and Malaysia (Robinson et al., 2018; Lee & Johnson, 2010). The United States leads with extensive contributions, reflecting its established academic infrastructure and focus on consumer behavior studies. China follows closely, showing a strong interest in understanding impulsive buying within its rapidly growing retail and e-commerce sectors. Malaysia also plays a significant role, particularly in the context of airport and tourism retail environments (Nguyen et al., 2023; Bozaci, 2020; Chiou & Hsiao, 2017, Omer et al., 2015).

### **5.4 Co-Occurrence and Co-citation analysis**

The findings provide substantial evidence in favour of impulsive purchasing and buying at the top of the bibliometric mapping. This is in addition to sales, online shopping, and marketing, which are all included in the Scopus database. In the graphic depiction shown in figure, the co-citation clusters that were created as a result of the authors' collaboration on studies concerning impulsive purchases are included. When it comes to studies on impulsive purchases, Rook D.W., Betty S.E., Sharma P., and Verplanken are at the top of the list. These studies are supported by the work of (Lee et al., 2023; Li et al., 2024; and Liang & Yu, 2024).

## **6. Conclusions**

This research unfolded publication trends, citations, collaborations in the area of impulsive purchase at global seen. Impulsive buying trends and publications were examined in this study. For bibliometric analysis, 515 articles were searched and reduced to 344. Impulsive purchase study writers and co-authors strive for comprehensive research. Study revealed that since 2003, impulsive purchases have increased with balance and since 2009. Increased publication and exposure have shown research community interest in IP since that year with enlarged publication from 2017 to 2024.

Coming to the second part, the study revealed publication areas on impulsive purchases was most common in business, management, and accounting, economics, econometrics, and finance and social sciences according to Bibliometric records. Territorial contributions, Global research is crucial since countries drive impulsive purchases. China has the most impulsive purchases, US, Malaysia, India, Indonesia, UK and Tiwan. These results reflects major working countries that holds how important impulsive purchase for the global scholars. Above



100 citations, the study contributions are extensive. Journal of Fashion Marketing and Management. Highly cited journals include International by Journal of Electronic Commerce, Marketing Science, Journal of the Academy of Marketing Science at the top securing high citations.

Cluster-I keyword co-occurrence analysis signified impulsive buying, consumer behavior retains the major area under gender, territory, and generations of concern. Cluster-II revealed impulsive buying and adults, COVID-19, and live streaming. Cluster III considered human cognition in sales, consumer behavior, and buy intention studies. Cluster-IV featured theoretical studies, interest, and perceptual base on marketing and impulsive buy intention.

The findings displayed authors' impulsive purchase study co-citation clusters. The cluster shows that Rohk D.W., Betty S.E., Sharma P., and Verplanken b. have the most field scholar citations. Asian authors Ringle C.M., Liu Y, Li Y, and Cheah J.H. have studied impulsive purchasing in the "green" cluster. The field expert publications acknowledge co-citation through compressive connectedness among authors. The blue and lemon hue clusters have minimal co-citations in the works of these experts. This research analyzed global scholarly work on impulsive purchase that is the major source of retail marketing and customer buying behavior all goods.

## **7. Limitation**

This study has the potential to be expanded by incorporating new topics, such as shopping at airports, the pressure of time, the reduction of stress curves, trust and information, and the atmosphere of airports. The research domain is the only area that this paper covered in its entirety. In order to analyze studies on impulsive purchasing, the researcher utilized the span of years that was shown in the timeline. This allowed the researcher to conduct the investigation. These studies have the potential to be elevated, which would enable for more in-depth biblical contributions to be made in the topic of impulsive purchase. This would be possible if the time frame was extended. Databases are the subject of bibliometric studies, which are concerned with databases and form a key issue of attention within the profession. The researcher made use of the Scopus database in order to achieve the goal of doing the analysis. The "web of science" or "dimension" database might be utilized to expand upon this database in order to discover major contributions to the field of literature. This would be a potential extension of the database.

## **8. Future Direction**

Investigating economic influences, such as during crises, and the psychological drivers of impulse buying can offer deeper insights holds potentials. Moreover, studies on environmental sustainability and digital marketplaces, including the metaverse, are essential to understanding



evolving consumer behaviors. Longitudinal studies are recommended to track changes in impulse buying trends over time for a comprehensive view.

Future research in impulsive purchasing should focus on specific contexts such as airport shopping, live-stream shopping platforms, and high-pressure environments to understand the influence of situational factors like time constraints and stress. Additionally, studies on digital and AI-enhanced marketplaces are needed to examine how personalized recommendations and real-time shopping features shape impulsive behaviors, including their ethical implications. Research should also expand to underexplored regions like Africa, Latin America, and Southeast Asia to capture diverse cultural and socioeconomic influences. Longitudinal studies, especially those analyzing the impact of crises like the COVID-19 pandemic on consumer habits, are crucial for understanding long-term behavioral shifts. Finally, there is a growing need for research on the relationship between impulse buying and sustainability, exploring how green marketing can influence or mitigate impulsive behavior, promoting responsible consumption.

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