

Antecedents of Online Impulsive Buying Among Social Media Users: A Bibliometric Analysis

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Abstract

This research paper aims to conduct a bibliometric analysis of the antecedents of online impulsive buying among social media users. The study investigates the occurrence of keywords related to impulsive buying behavior in academic databases and identifies the most frequently occurring keywords to gain insights into the research trends in this area. The results indicate that the most common keywords related to impulsive buying behavior are "impulsive buying," "consumer behavior," "electronic commerce," and "compulsive buying." The study also finds that researchers are interested in understanding the psychological mechanisms that drive impulsive buying behavior, as evidenced by the frequency of keywords such as "behavioral research" and "psychology." The analysis includes a co-occurrence analysis of keywords and a cluster analysis of authors, institutions, and countries. The study also identifies several emerging trends in the literature, including the impact of social media influencers, the role of mobile devices, and the influence of cultural factors. The findings of this study provide valuable insights into the antecedents of online impulsive buying behavior and can inform future research in this area. Overall, the study provides a valuable overview of the research trends and antecedents related to online impulsive buying behavior among social media users. The findings can help researchers and practitioners to better understand this phenomenon and develop strategies to mitigate its negative consequences.

Keywords:[Impulsive Buying, Impulses, Social Media, Sustainability, Bibliometric Analysis]

Introduction

The rise of communication technology has significantly altered daily life, bringing with it several contemporary innovations including social networking websites (Khokhar et al., 2019). People are increasingly inclined to migrate their social engagements to online spaces like Facebook, Instagram, LinkedIn, and Twitter, considering social media apps to be an essential part of their daily lives (Alalwan et al., 2017). In addition to being places for socializing, they provide a forum for people to share and express their opinions and experiences concerning a certain commodity or service. This trend has been correctly identified by smart entrepreneurs and businessmen who have incorporated social media as their efficient marketing tool. There is no wonder in the fact that there exist several vibrant businesses only through social media platforms and running them successfully.

Entrepreneurs are putting a wide range of products and services in front of people via social media. Customers are drawn to advertisements, messages, reviews, or photographs regarding a certain product as they scroll through the pages, triggering desires in their minds that prompt and encourage them to make purchases. Many purchases made by consumers are spontaneous, unplanned, made on the spur of the moment, and motivated by strong desires, pleasant sentiments, and enthu-

siasm.(Khokhar et al., 2019). These types of purchases without thoughtful consideration of the need and necessity of the product are termed Impulsive Buying. Thus impulsive buying is the result of unplanned stimuli (H. Stern,1962), Unintended(S. Mittal et., al 2016), On spot hedonic, thoughtless, and unreflective.

The influence of social media marketing on impulsive buying is significant. Social media marketing has led to a rise in unplanned purchases, resulting in an increase of up to 40 percent in extra expenses attributed to social media factors (Bansal & Kumar, 2018). Several factors have contributed to social media becoming a haven for impulsive purchasing. The constant barrage of advertisements, promotions, and time-limited deals on social media can incite a sense of urgency and scarcity, which can result in impulsive purchases. Second, the existence of influencers on social media who promote goods and services may lead some consumers to make hasty purchases in response to their suggestions. Thirdly, impulsive purchasing might result from the social impact that comes from other people's favorable experiences with a good or service, known as social proof. Furthermore, social media platforms have increased accessibility, convenience, and speed of buying like never before. E-commerce has been seamlessly incorporated into social media platforms, allowing users to make purchases without leaving the platform and without visiting other

websites. This user-friendliness and practicality may encourage impulsive purchasing even more.

The rate of internet users and social media users has shown a tremendous increase in the last decade. As per the statistics of 2023 January, out of the 5.16 billion internet users 4.76 billion are social media users (Nagabhushanam & Dumasia, 2023). Social media has become a daily affair of the population. It has grown in such a way that it can affect our lifestyle, behavior, and even our personality. Even while internet shopping and impulsive purchases are hot topics right now, they will never lose their freshness because new social media sites, businesses, and ideas are constantly emerging. For business owners and consumers, this research is necessary. Therefore, the purpose of this study is to perform a bibliometric analysis to gain insight into the number of papers published, significant contributors, significant contributing countries, most frequently used phrases, and most referenced articles. The following research questions were developed to determine the primary objective of the study:

1. What is the current trend in the publishing of research about impulse buying among social media users?
2. What are the most reputable sources for studying impulse buying in this field?
3. Who are the most important, influential, and significant authors, organizations, and countries in the body of research on impulse buying in this field?
4. What are the most influential co-authors and co-citation networks in the field of impulse buying among social media users?
5. What are the current popular research topics in the area of impulse buying on social media platforms?

Theoretical Background

This session provides an overview of Social Media Marketing and Impulsive Buying

Social Media Marketing

An online platform or program that enables users to create, share, and exchange text, images, and videos with other users in their network or with the general public is referred to as social media. Usually, social media networks provide user interactions through a variety of tools like comments, likes, shares, and direct messaging. These platforms, which have billions of users worldwide and enable connections and communication with others from anywhere in the world, have permeated every aspect of contemporary life. Facebook, Twit-

ter, Instagram, TikTok, LinkedIn, and YouTube are just a few of the well-known social networking sites. Communication, marketing, politics, and social contact have all been significantly impacted by social media, which is still swiftly evolving thanks to the ongoing development of new features and applications.

Social media marketing is a type of digital marketing that makes use of social media websites to advertise a company, brand, item, or service. The basic goal of social media marketing is to connect with and interact with potential customers by producing and disseminating content that speaks to their interests and needs.

Social media marketing entails developing and putting into action a social media strategy that is in line with a company's overarching marketing objectives. This entails deciding which social media channels to employ, figuring out who the target audience is, and creating a content strategy that takes into account their interests and behaviors. The capacity to gauge and monitor a campaign's efficacy in real-time is one of the main advantages of social media marketing. To achieve better results, this enables marketers to make data-driven decisions and optimize their plans.

The subject of social media marketing is always changing, with new platforms, fads, and best practices appearing all the time. As a result, it necessitates a commitment to lifelong learning and a readiness to change. However, social media marketing can be a potent tool for increasing brand exposure, engagement, and sales when done well.

Impulsive Buying

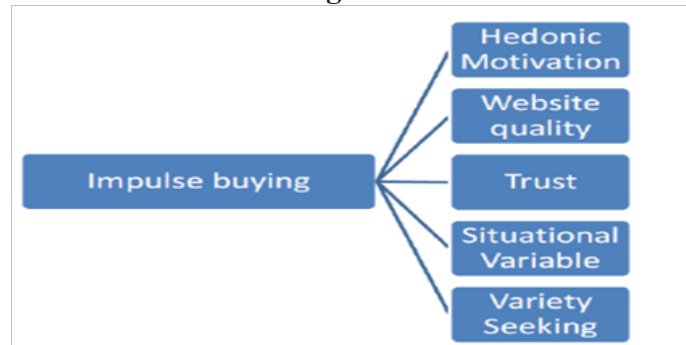
The act of buying something on a whim without giving it much thought or thinking about the possible implications is known as impulsive buying. It frequently involves a quick urge or desire to purchase something, motivated by feelings like excitement, pleasure, or fulfillment rather than by a process of deliberation. Impulsive purchasing can happen both offline and online, and it can be impacted by a variety of things, including individual preferences, environmental cues, peer pressure, and marketing strategies. It is frequently linked to impulsive spending, unanticipated purchases, and a propensity to buy more than one had intended. Depending on the situation and the individual, impulsive buying can result in both positive and negative effects. While it might result in joy and satisfaction right away, in the long run, it might also bring about regret, financial pressure, and buyer's remorse.

Impulsive purchase behavior is affected by several

things. Researchers have categorized it as situational, psychological, social, and situational elements, as well as internal and external factors. A model for analyzing online impulsive purchases has been developed

by Bansal and Kumar (2018). It takes into account five variables: Hedonic motivation, website quality, trust and ethical ideals, situational variables, and diversity seeking.

Figure 1



Source: Bansal and Kumar (2018)

Hedonic motivation is the study of how a person's response to pleasure and pain influences their willingness to pursue an objective. The quality of a website includes factors including design, functionality, usability, and search engine optimization. The ethical and secure procedures that businesses employ when dealing with clients are referred to as "trust and ethical values." Situational factors have to do with the circumstances in which a customer makes a purchase. Variety seeking is the practice of comparing several possibilities for a certain commodity on social media.

Data and Methods

Bibliometric analysis is a powerful and widely used method for studying patterns and trends in scholarly literature. It involves the quantitative analysis of bibliographic records, such as publications, citations, co-authorships, and keywords, to gain insights into the structure, impact, and evolution of a research field. In this study, we are conducting a bibliometric analysis with the available secondary data in the Scopus database using VOSviewer and BiblioShiny to solve the research question.

Table 1: Selection Criteria of Data from the Scopus Database

Selection Criteria	Scopus	
	Exclude	Include
Search Date: 11/05/2023 Database: Scopus Search Terms: Impulsive buying, impulsive purchase, unintentional purchase, window shopping	-	711
Subject Area: Business Management and Accounting, Social Sciences, Economics, Econometrics, Finance, Arts, and Humanities	352	359
Document type: Articles, Review, conference proceedings	14	338
Language: English	15	323
Erroneous Record Refinement	2	321

Source: Scopus Database

This table represents the results of a search conducted on the Scopus database on May 12, 2023, using the search terms "impulsive buying," "impulsive purchase," "unintentional purchase," and "window shopping." The search yielded 711 results in total. To refine the search

results, certain criteria were set to exclude or include certain records. In this case, 359 records were included that fell under the subject area of Business Management and Accounting, Social Sciences, Economics, Econometrics, Finance, Arts, and Humanities and, excluded

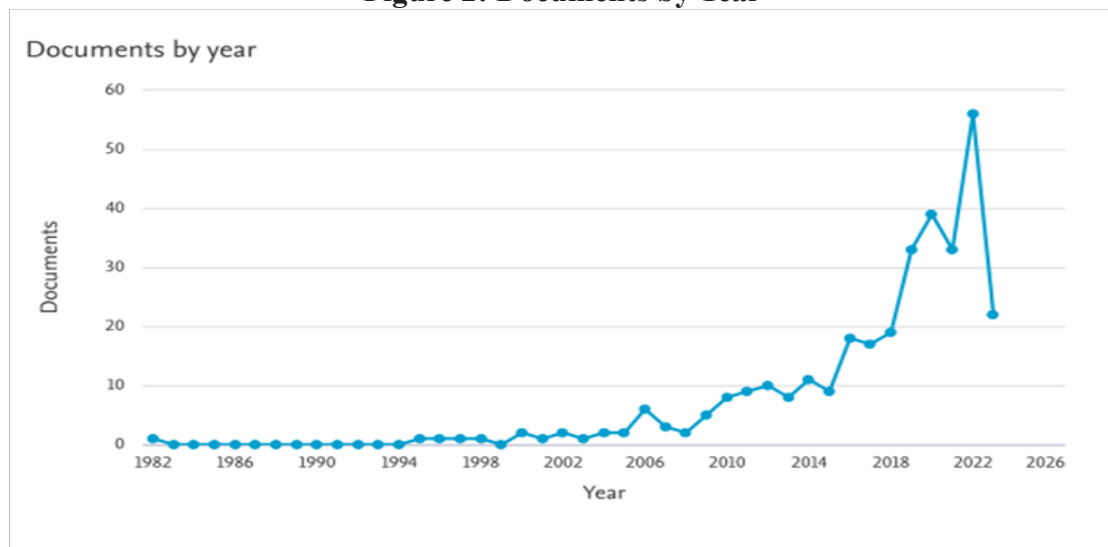
352 results. Additionally, only articles, reviews, and conference proceedings were included, resulting in the inclusion of 338 records and further removed 14 items. Finally, the language of the records had to be English, which resulted in a further refinement to 323 records after removing 15 articles. After these refinements, only two erroneous records were identified and excluded,

leaving a final total of 321 records that met all the selection criteria and were included in the study.

Results and Discussions

1. What is the current trend in the publishing of research about impulse buying among social media users?

Figure 2: Documents by Year



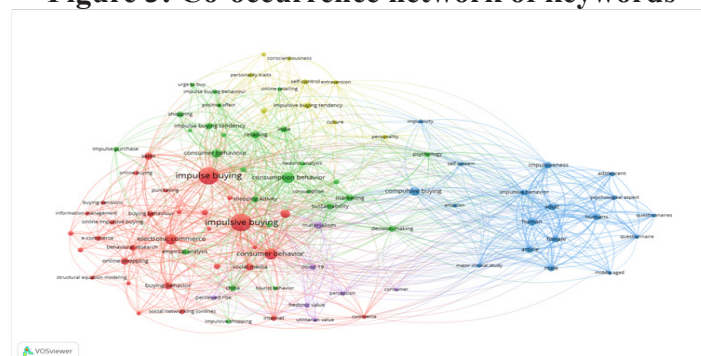
Source: Scopus database

The table provides information on the number of articles published in each year from 1982 to 2023. The table shows that there were no articles published from 1983 to 1994, except for a single article in 1982. The first significant increase in the number of articles published was in 1995, with one article being published, followed by one article per year until 1998. No articles were published in 1999. The number of articles published per year then fluctuated between 1 and 2, with two articles being published in 2000. The number of articles published increased to 6 in 2006 and then fluctuated between 2 and 5 until 2010.

From 2010, there was a significant increase in the num-

ber of articles published per year. The number of articles increased from 8 in 2010 to 10 in 2012, and then to 11 in 2014. From 2015 to 2018, the number of articles published fluctuated between 9 and 19. In 2019, there was a significant increase in the number of articles published, with 33 articles being published. This trend continued in 2020, with 39 articles being published, and 33 articles being published in 2021. In 2022, the number of articles published increased significantly to 56, and in 2023, it decreased to 22. Overall, the trend shows a significant increase in the number of articles published in recent years, with fluctuations in the number of articles published per year.

Figure 3: Co-occurrence network of keywords



Source: Scopus database elaborated with Vosviewer

The figure shows the nodes and clusters in a network analysis of the keywords often used in papers in the area of impulsive buying. The nodes are the individual concepts or ideas being studied, while the clusters represent groups of related concepts.

In this case, all the nodes appear to be related to the field of consumer behavior and retailing, with concepts such as “consumption behavior”, “impulse buying”, “consumer behavior”, “buying behavior”, “sales”, “marketing”, “retailing”, “shopping activity”, and “behavioral research” all appearing in the table. The top two keywords are “impulsive buying” and “impulse buying”, which occur 76 and 72 times, respectively. The table suggests that these concepts are all closely related, as they are grouped in the same cluster (cluster 1). This implies that research in this field tends to focus on these interrelated concepts and that they are often studied together to better understand consumer behavior and shopping patterns. The fact that all the nodes appear in the same cluster also suggests that there may be a high degree of overlap and interdependence between these concepts. For example, research on “impulse buying” may also involve the study of “shopping activity”, “sales”, and “marketing”. Overall, the table provides insight into the structure and interrelatedness

of concepts within a specific field of study and suggests that research in this area tends to focus on a core set of closely related ideas.

“Consumer behavior” and “consumption behavior” occur 29 and 27 times, respectively, indicating that the behavior of consumers is an important topic in the literature related to impulsive buying. “Electronic commerce” and “online shopping” occur 26 and 12 times, respectively, suggesting that the rise of e-commerce has affected impulsive buying behavior. “Compulsive buying” and “impulsive behavior” occur 18 and 9 times, respectively, indicating that there is some overlap between the concepts of compulsive and impulsive buying. “Sustainability” occurs 10 times, suggesting that researchers are interested in understanding how impulsive buying behavior may affect sustainability efforts. “China” and “India” occur 9 times each, suggesting that there is interest in studying impulsive buying behavior in these countries specifically. “Behavioral research” occurs 8 times, indicating that researchers are interested in understanding the underlying psychological mechanisms that drive impulsive buying behavior.

2. What are the most reputable sources for studying impulse buying in this field

Table 2: Most Relevant Sources

Sl. No	Sources	Articles
1	Journal of Retailing and Consumer Services	18
2	International Journal of Retail and Distribution Management	8
3	Sustainability (Switzerland)	8
4	Journal of Business Research	7
5	Asia Pacific Journal of Marketing and Logistics	6
6	Journal of International Consumer Marketing	6
7	Journal of Internet Commerce	6
8	Psychology and Marketing	6
9	British Food Journal	5
10	Journal of Distribution Science	5

Source: Scopus database

The table provides information on the number of articles published in different sources. The sources with the highest number of articles published are the “Journal of Retailing and Consumer Services” with 18 articles, followed by the “International Journal of Retail and Distribution Management” with 8 articles and “Sustainability (Switzerland)” with 8 articles. The “Journal of Business Research” had 7 articles published, making it the fourth highest source. The “Asia Pacific Journal of Market-

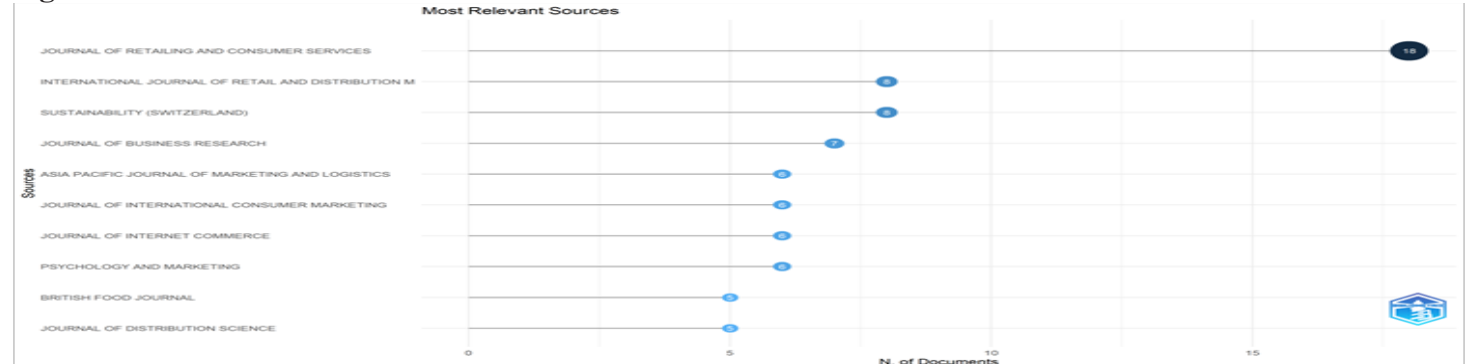
ing and Logistics,” “Journal of International Consumer Marketing,” “Journal of Internet Commerce,” and “Psychology and Marketing” all had 6 articles published, tying for the fifth position. The “British Food Journal” and the “Journal of Distribution Science” both had 5 articles published, which ties them in the sixth position. The data suggests that the “Journal of Retailing and Consumer Services” is the most popular source among the authors, followed by the “International Journal of

Retail and Distribution Management” and “Sustainability (Switzerland)”. These sources are the top three sources with the highest number of articles published.

Overall, the data reveal the sources that are the most

popular among the authors, and it shows the relative popularity of different sources in the field of retail and distribution management, consumer marketing, internet commerce, and food industry research.

Figure 4: Most relevant sources



Source: Scopus database elaborated with biblioshiny

3. Who are the most important, influential, and significant authors, organizations, and countries in the body of research on impulse buying in this field?

Table 3: Influential Authors, Institutions, and Countries in the Study Area

uthor	TP	TC	Organisation	TP	TC	Country	TP	TC
Potenza M.N.	2	1612	Boehringer Ingelheim (Canada) Ltd., Burlington, On, Canada	1	1055	United States	55	5571
Siderowf A.D.	2	1612	Boehringer Ingelheim Pharma Gmbh And Co. Kg, Ingelheim, Germany	1	1055	United Kingdom	28	2287
Weintraub D.	2	1612	Boehringer Ingelheim Pharmaceuticals Inc., Ridgefield, Ct, United States	1	1055	Germany	12	1502
Koester J.	1	1055	Duke University Medical Center, Durham, Nc, United States	1	1055	Canada	3	1097
Lang A.E.	1	1055	Philadelphia Veterans Affairs Medical Center, Philadelphia, Pa, United States	1	1055	India	53	981
Stacy M.	1	1055	University Of Cambridge, Cambridge, United Kingdom	1	1055	Taiwan	24	641
Voon V.	1	1055	University Of Pennsylvania School Of Medicine, Philadelphia, Pa, United States	1	1055	Australia	12	478
Whetteckey J.	1	1055	University Of Toronto, Toronto, On, Canada	1	1055	China	36	449
Wunderlich G.R.	1	1055	Yale University School Of Medicine, New Haven, Ct, United States	1	1055	Pakistan	11	379
Vohs K.D.	1	588	Department Of Advertising And Mass Communication, 111 Murphy Hall, University Of Minnesota, Minneapolis, Mn 55455, United States	1	588	South Korea	19	371

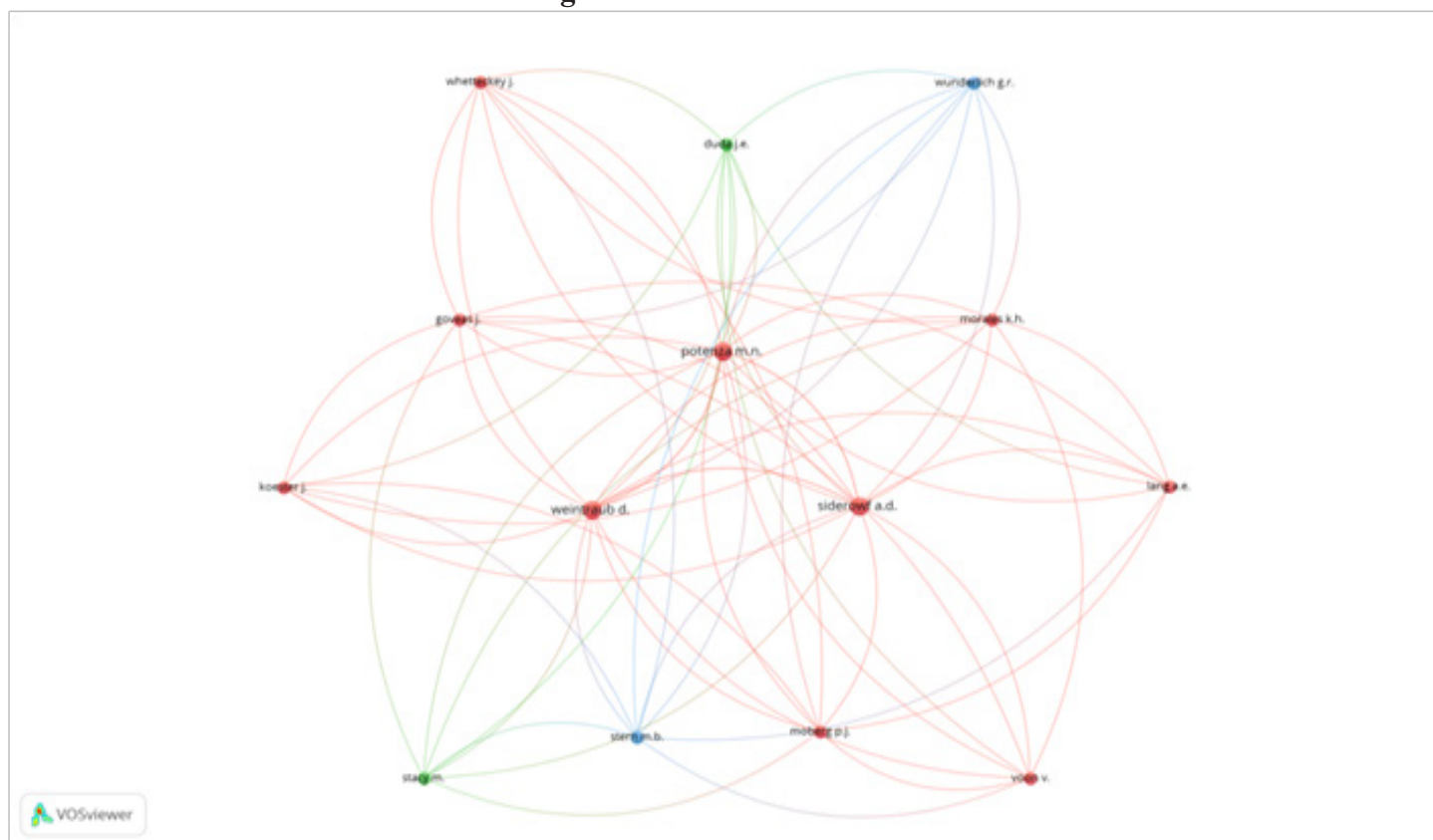
Source: Scopus database

Influential Authors

The table shows the publication and citation records of several authors in a particular field of study. The “total publication” column indicates the number of articles or publications each author has produced, while the “total citation” column indicates the total number of times those publications have been cited by other researchers. The first three authors listed - Potenza M.N., Siderowf A.D., and Weintraub D. - have each published two articles and have been cited a total of 1612 times. This suggests that they are highly respected and influential researchers in their field, as their work has been widely referenced and cited by other researchers. The next group of authors - Koester J., Lang A.E., Stacy M., Voon V., Whetteckey J., and Wunderlich G.R. - have

each published one article and have been cited a total of 1055 times. While their citation count is slightly lower than the previous group, it still suggests that their work has had a significant impact in the field. Finally, the last author - Vohs K.D. - has published one article and has been cited a total of 588 times. While this citation count is lower than the others, it still suggests that her work has been well-received and has made a valuable contribution to the field. Overall, the table provides insight into the impact and influence of these researchers in their field, as measured by their publication and citation records. It suggests that some researchers are more prolific or influential than others, but all have made valuable contributions to the field.

Figure 5: Influential authors



Source: Scopus database elaborated with Vosviewer

Influential Institutions

This table shows the organizations that have published research articles and the corresponding total number of publications and citations for each organization. The first three organizations listed are all part of the pharmaceutical company Boehringer Ingelheim, with one publication each and the same number of citations for each publication. The next five organizations listed have also published one article each and have the same number

of citations for each article. These organizations are Duke University Medical Center, Philadelphia Veterans Affairs Medical Center, University of Cambridge, University of Pennsylvania School of Medicine, and the University of Toronto. The final organization listed has published one article with a lower number of citations compared to the others in the list and is the Department of Advertising and Mass Communication at the University of Minnesota.

Figure 6: Influential Institutions



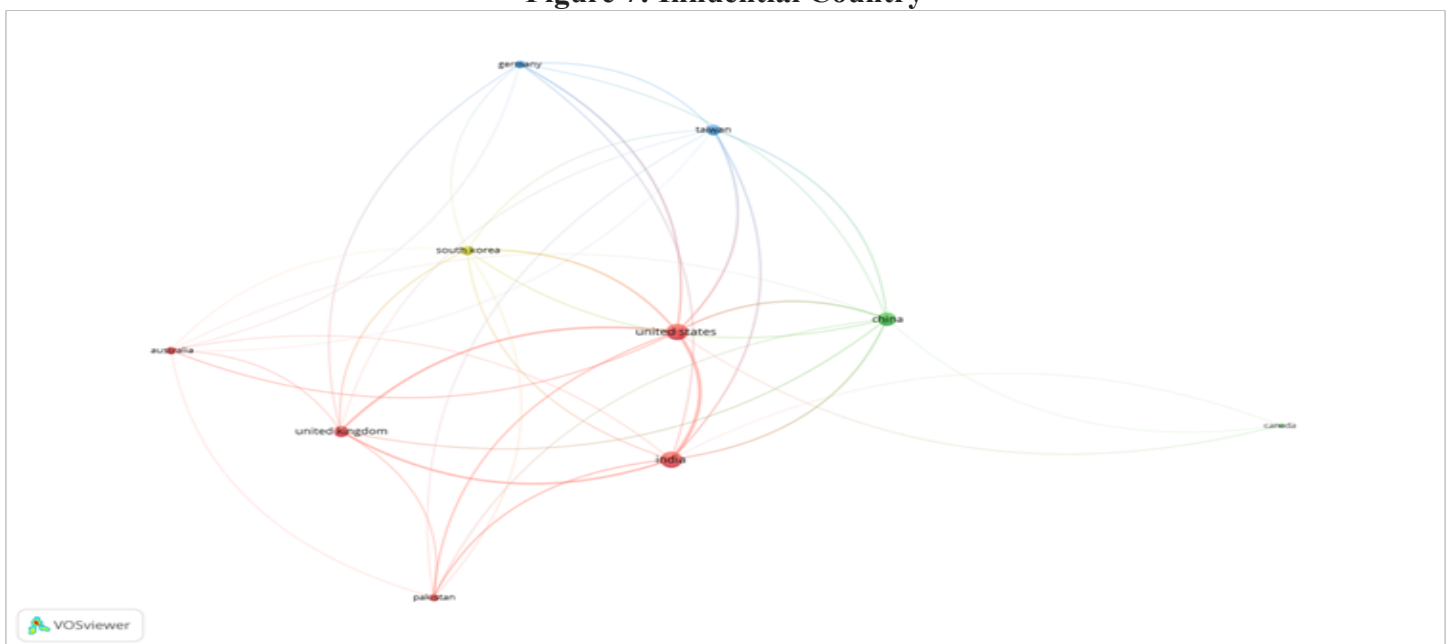
Source: Scopus database elaborated with Vosviewer

Influential Country

This table shows the total number of publications and citations for each country in the dataset. The data indicates that the United States has the highest number of publications and citations, with 55 publications and 5571 citations. The United Kingdom comes in second, with 28 publications and 2287 citations. Germany has the third-highest number of citations with 1502, followed by Canada with 1097. India has the highest num-

ber of publications with 53, while Taiwan has 24 publications and 641 citations. Australia has 12 publications and 478 citations, while China has 36 publications and 449 citations. Pakistan has 11 publications and 379 citations, and South Korea has 19 publications and 371 citations. Overall, the data suggests that the United States and the United Kingdom are the most productive countries in terms of research output and impact, while India and Taiwan are also significant contributors to the field.

Figure 7: Influential Country



Source: Scopus database elaborated with Vosviewer

4. What are the most influential co-authors and co-citation networks in the field of impulse buying among social media users?

Table 4: Influential Co-Authors

Author	TP	TC
Potenza M.N.	2	1612
Siderowf A.D.	2	1612
Weintraub D.	2	1612
Koester J.	1	1055
Lang A.E.	1	1055
Stacy M.	1	1055
Voon V.	1	1055
Whetteckey J.	1	1055
Wunderlich G.R.	1	1055
Faber R.J.	1	588

Source: Scopus database

This table lists the authors, their total publications (TP), and total citations (TC) in a given database or dataset. The authors are listed in descending order of their total citations. The first three authors, Potenza M.N., Siderowf A.D., and Weintraub D., have the same number of total publications and total citations, which indicates

that their research output has been highly cited in the given database or dataset. The remaining authors in the list have fewer total publications but still have a significant number of total citations. The author Faber R.J. has the least number of total citations among the authors listed.

Figure 8: Influential Co-Authors



Source: Scopus database elaborated with Vosviewer

Table 5: Co-citation Networks

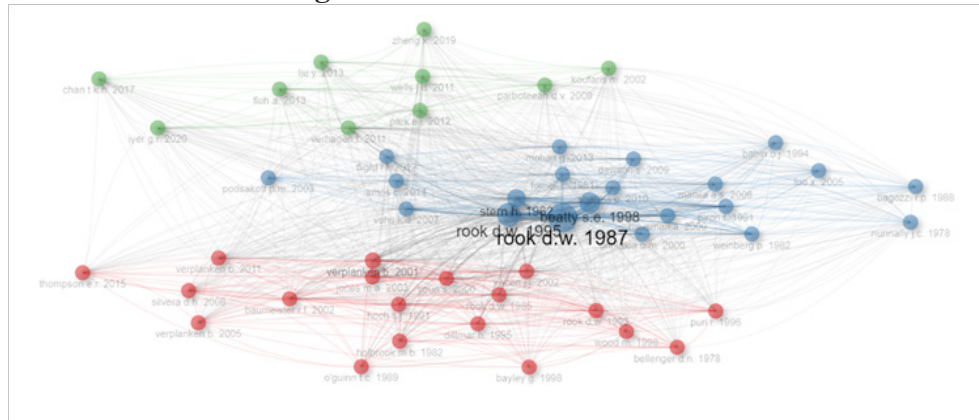
Node	Cluster
verhagen t. 2011	3
floh a. 2013	3
iyer g.r. 2020	3
liu y. 2013	3
parboteeah d.v. 2009	3
wells j.d. 2011	3
park e.j. 2012	3
koufaris m. 2002	3
chan t.k.h. 2017	3
zheng x. 2019	3

Source: Scopus database

This table appears to show a cluster analysis of authors, with each node representing an author and each cluster grouping together authors with similar characteristics or connections. The numbers next to each node indicate the cluster number to which the author belongs. In this particular analysis, there are three clusters, and all of the authors listed are assigned to cluster 3. This

suggests that these authors are connected in some way, possibly through their research interests or the journals they publish in. It's worth noting that the specific methodology used to conduct this analysis is not provided, so it's difficult to draw more detailed conclusions about the nature of the clusters or the relationships between authors.

Figure 9: Co-citation Networks



Source: Scopus database elaborated with Vosviewer

5. What are the current popular research topics in the area of impulse buying on social media platforms?

Table 6: Trending Topics

Item	Frequency
Consumption Behavior	26
Electronic Commerce	26
Adult	20
Impulse Buying	16
Human	14
Article	11
Humans	11
Adolescent	10
Retailing	10
Impulsive Behaviour	9
Impulsiveness	9
Decision Making	9
Shopping Activity	9
Behavioural Research	8

Source: Scopus database

The table lists items and their frequencies in a given dataset. Here's an interpretation of the items and their frequencies:

Consumption Behavior: This item appears 26 times in the dataset, indicating that the concept of how consumers behave when making purchasing decisions is a significant focus of the research.

Electronic Commerce: This item also appears 26 times,

suggesting that online shopping and e-commerce are important aspects of the research.

Adult: This item appears 20 times, suggesting that the research may focus on adult consumers rather than children or teenagers.

Impulse Buying: This item appears 16 times, indicating that the researchers are likely studying the phenomenon of impulsive buying behavior.

Human: This item appears 14 times, indicating that the researchers are studying consumer behavior from a human perspective, as opposed to studying animal behavior or artificial intelligence.

Article: This item appears 11 times, suggesting that the dataset may consist of articles or academic papers related to consumer behavior.

Humans: This item appears 11 times, indicating that the researchers are studying consumer behavior from a human perspective.

Adolescent: This item appears 10 times, indicating that the research may focus on how consumer behavior changes during adolescence.

Retailing: This item appears 10 times, suggesting that the research may focus on the retail industry and how it affects consumer behavior.

Impulsive Behavior: This item appears 9 times, indicating that the researchers may be studying various forms of impulsive behavior in addition to impulsive buying.

Impulsiveness: This item appears 9 times, further supporting the idea that the researchers are studying various forms of impulsive behavior.

Decision Making: This item appears 9 times, indicating that the researchers may be interested in how consumers make decisions when it comes to purchasing products or services.

Shopping Activity: This item appears 9 times, suggesting that the research may focus on consumer behavior related to various shopping activities.

Conclusions

Impulsive buying and consumer behavior are the most frequent keywords in the literature related to impulsive buying. The rise of e-commerce has impacted impulsive buying behavior, with electronic commerce and online shopping being frequently mentioned. Researchers are interested in studying differences in impulsive buying behavior between males and females and there is interest in studying impulsive buying behavior in specific countries, such as China and India. Sustainability is an important consideration in understanding how impulsive buying behavior may affect sustainable efforts. The researchers are interested in understanding the underlying psychological mechanisms that drive impulsive buying behavior. Understanding the broader psychological context of impulsive buying behavior is also an important area of research.

In conclusion, the bibliometric analysis of the antecedents of online impulsive buying behavior among social media users reveals several interesting findings. The study reveals that impulsive buying behavior is a wide-

ly researched topic, with a strong focus on the concepts of impulsive buying, consumer behavior, and electronic commerce. There is also a growing interest in understanding the impact of recent events such as COVID-19 and the role of sustainability in impulsive buying behavior. The study also highlights the importance of understanding the underlying psychological mechanisms that drive impulsive buying behavior, as indicated by the frequency of keywords such as behavioral research and psychology. Moreover, the study suggests that researchers are interested in studying the differences in impulsive buying behavior between males and females.

Overall, the findings of the study suggest that impulsive buying behavior among social media users is a complex phenomenon that is influenced by several factors. Understanding the antecedents of this behavior can help businesses and marketers develop effective strategies to encourage impulse buying while ensuring the sustainability of their business practices. Further research is needed to explore this area in more detail, including the specific factors that influence impulsive buying behavior among social media users and how these factors vary across different cultures and regions.

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