

Evaluating the Academic Trend of Impulse Buying Research on Scopus Publications from 1998 to 2022

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Abstract

This bibliometric review of research aims to synthesise research trends in the domain of 'impulse buying' over the past 25 years. This study utilised extensive bibliometric analysis of articles published in Scopus-indexed journals from 1998 to 2022. It found that research on impulse buying has increased, with over 80% of the relevant documents published since 2013, and most of it in the form of concept papers and empirical research. Despite the low number of publications relating to impulse buying as compared to the publications in other disciplines, it has potential directions for future research.

Keywords: Impulse Buying; Bibliometric Analysis; Scopus Database

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1.0 Introduction

Impulse buying has become the new normal for consumers since the start of the pandemic. Based on Slickdeals' latest survey of 2,000 US adults, revealed that 64% of them have increased their impulse spending habits in 2022. Currently, on average, a person spends \$314 per month on impulse buying, up from \$276 in 2021 and \$183 in 2020 (Tronier, 2022). The research found that the surveyed shopper admitted to having bought items on impulse, with the most spontaneous purchases being clothing (35%), food and groceries (30%), household items (29%), shoes (28%), and consumer technology (27%) (Slickdeals, 2022). Surprisingly, most shoppers who impulse buy have saved their money because, in their shopper's community, they help one another to find the best prices at any given time, helping them save their budget. This critical issue of impulse buying among consumers merits further study, especially to understand the trend of this irregular consumer behaviour through bibliometric analysis. Hence, this study aims to synthesise research trends on impulse buying over the past 25 years.

In recent years, consumer buying behaviour research has received massive attention among scholars, and yet it has proven that the number of results in this research area shows dramatic growth. One of the intensifying consumer issues that have been actively debated is impulse buying behaviour, which has affected consumers' financial planning globally. Unexpectedly, the research found that impulse buying tends to increase during inflation, presidential elections, and economic downturns, which later contribute to stronger economic growth (French & Koh, 2023). Hence, the objective of this study is to analyse the growth trajectory and geographic distribution of literature on impulse buying, determine topics in impulse buying research that have received the greatest attention in the literature, and identify the citation metrics from the retrieved documents.

2.0 Literature Review

Impulse buying is defined as an action that is unplanned spontaneous, and involves the purchase of items for which there was no previously identified need (Sohn & Ko, 2021). Impulsive behaviour is caused by an inability to evaluate its consequences and an irresistible urge to purchase (Rodrigues, Lopes & Varela, 2021). By acquiring and possessing material goods, consumers attempt to restore their degraded, uncertain, threatened selves. Despite being aware of the negative effects of non-intentional buying, there is a strong desire to satisfy consumer's pressing needs (Meena, 2018).

The history of impulse buying dates back to the year 1950, when researchers focused on products versus consumers and analysed different retail environments (Applebaum, 1951; Clover, 1950). Impulse buying has been studied from several perspectives, namely the effects of advertising on consumer behaviour, emotional resources, rational processes, persuasive communication, and the cognitive currents arising from the theory of social judgment (Malter et al., 2020).

Recent years have seen a burgeoning literature on impulse buying among researchers in terms of the influence of product's hedonic appeal, shopping enjoyment, and interactive advertising screen on impulse buying (Lord et al., 2023; Moes et al., 2022; Sharma, 2021). Some researchers measured the influence of livestreaming (i.e., online promotion) on impulsive consumption in the gastronomy industry (Yu et al., 2022) while others measured conscious and unconscious impulse buying during emergencies such as pandemics (COVID-19) (Nigam et al., 2022). However, Kursan Milaković and Ahmad (2023) investigate impulse buying among online users in two distinct countries and recommend that future research be conducted on various product categories. Consequently, these observations about the emergence of impulse buying as a field of study structure this bibliometric review of research.

Bibliometric analysis is known as "the application of mathematics and statistical methods to books and other media of communication" (Pritchard, 1969). Bibliometric studies have been used to evaluate the quantity and quality of published documents to observe the trend or pattern of a specific research area. Bibliometric analysis is a rigorous method for analysing large volumes of scientific data. The importance of bibliometric analysis is reflected in its utility for producing high research impact and handling large volumes of scientific data (Donthu et al., 2020).

This study employs this approach to provide a holistic perspective on impulse buying. In addition, academics interested in impulse buying literature can use this study as a reference in the future. The analysis spanning the past 25 years enables researchers to examine patterns of past studies based on historical data. As a result, it forecasted the visibility of topics and the future development of literature. For instance, previous researchers utilised bibliometric analysis within 25 years (i.e., from 1999 to 2021) to investigate sustainable consumption behaviour (Vergura et al., 2023) and within 46 years (i.e., from 1976 to 2022) to analyse business sustainability (Dima et al., 2022). In addition, researchers can analyse the critical issues related to impulse buying over the past 25 years based on the publication's details, such as authors, keyword frequency, citation analysis, and geographical distributions.

3.0 Methods

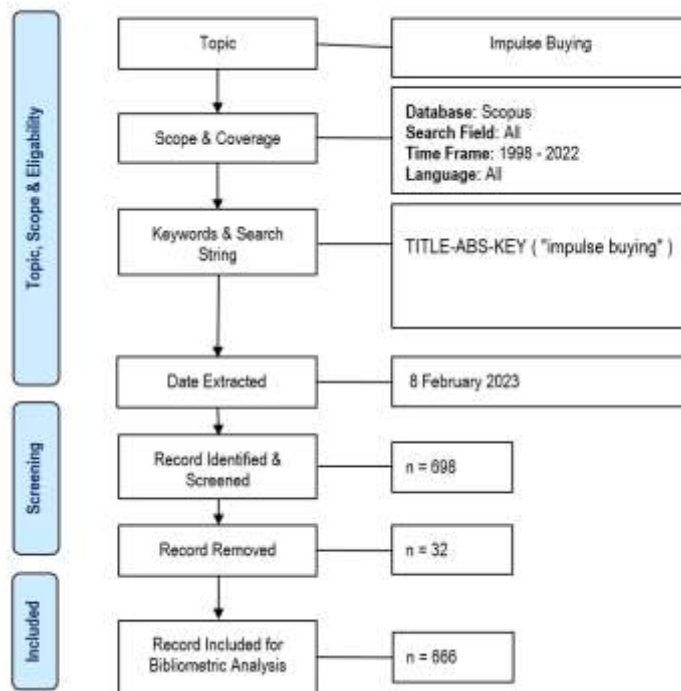


Fig. 1: PRISMA Flow Diagram
(Source: Moher, Leberati, Tetzlaff & Altman, 2009)

This study employs bibliometric analysis to examine the expansion and production of studies on impulsive buying behaviour. To achieve the objective of this study, data from the Scopus database was obtained. The Scopus index, which was chosen as the data repository,

was the source of the documents. Using empirical data, comparisons reveal that, outside of the medical and physical sciences, Scopus's coverage of sources is broader than Web of Science's (Hallinger & Kovačević, 2019). The review included journal articles, books, book chapters, and conference papers to provide comprehensive coverage of the topic. The Scopus search commenced without a start date, allowing the database to locate the earliest papers possible.

On February 8, 2023, the search query "impulse buying" was applied to the article title in the Scopus database. This search yielded a total of 698 documents for further examination. As part of the data sets, the data has been exported in CSV and RIS formats. To analyse the gathered documents, Microsoft Excel, VOSviewer, and Harzing's Publish and Perish software were utilised. The review adopted PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines for conducting systematic reviews of research. The search string "impulse buying" was entered into the Scopus search engine. This initial search yielded 698 documents (see Fig. 1).

After the time frame was applied, the database was reduced to 668 documents. Additional documents were excluded based on the document type. For example, retracted and undefined documents were eliminated at this stage. After the screening of documents was completed, the final database included 666 documents on impulse buying. The 'data' analysed for this study were bibliographic descriptions of the 666 Scopus-indexed documents. This 'meta-data' included the document authors' names, titles, publication dates, and author affiliations, as well as an abundance of citation information. Utilising descriptive statistics, trend analyses regarding the growth and geography of the impulse buying literature were conducted. Besides, we utilised VOSviewer software to synthesise patterns of knowledge production in impulse-buying literature.

4.0 Findings

To gain an overview of the research related to impulse buying, some general statistics on the data sets are presented. All the documents that met the search query were evaluated from the following aspects: documents and source types, the evolution of published studies, languages of documents, subject area, most active source titles, keywords analysis, most active countries for publication, and citation metrics.

4.1 Document and Source Types

Published documents from the data sets were analysed based on their document types and source types. Document types refer to the types of documents based on the originality of the documents such as conference proceedings, journal articles, or book series. In contrast, source type is the type of the source documents, whether it is a journal, conference paper, book chapter, book, or trade publication. This study found seven types of documents that have been published on impulse buying, including journal articles, conference papers, book chapters, reviews, conference reviews, books, and editorials (see Table 1). Out of 666 documents, 76.28% are published in journals, 14.71% at conferences, and 5.11% in book chapters.

Table 1. Document Type

Document Type	Total Publications (TP)	Percentage (%)
Article	508	76.28
Conference Paper	98	14.71
Book Chapter	34	5.11
Review	17	2.55
Conference Review	6	0.90
Book	2	0.30
Editorial	1	0.15
Total	666	100.00

Meanwhile, as presented in Table 2, the documents are classified into five different source types. The journals represent the highest type of source, with 524 documents (78.68%), followed by conference proceedings with 77 documents, representing 11.56% of the total publications.

Table 2. Source Type

Source Type	Total Publications (TP)	Percentage (%)
Journals	524	78.68
Conference Proceedings	77	11.56
Book Series	43	6.46
Books	15	2.25
Trade Publications	7	1.05
Total	666	100.00

4.2 Evolution of Published Studies

Examination of the documents based on the year of publication helps the researcher observe the pattern and popularity of the research subject over time. Research on impulse buying was first published in 1960. After the year 1960, the total number of publications on this topic seemed inconsistent until the year 1998, when it was published by Beatty and Ferrell (1998). After a two-year gap, even though the growth of publications was slow until 2009, the publication activities in this topic gained momentum from year to year. Besides, this bibliometric analysis used research productivity as a quantitative indicator, while citation rates and the Hirsch index (h-index) were used as qualitative indicators. Table 3 summarises the details of the total publications on impulse buying since 1998. The highest number of

publications in this area was in 2022, with the total of articles published since 1998 reaching 666. Similarly, in the graph form, Fig. 2 demonstrates the growth of publication activities on this subject from 1998 to 2022. Based on the pattern and growth of the number of publications on impulse buying, it has become a favourite topic among academia.

Table 3. Evolution of Published Studies

Year	TP	NCP	TC	C/P	C/CP	h	g
1998	5	5	1297	259.40	259.40	5	5
2000	2	2	582	291.00	291.00	2	2
2001	3	3	967	322.33	322.33	3	3
2002	2	2	529	264.50	264.50	2	2
2003	6	5	609	101.50	121.80	4	5
2004	4	3	214	53.50	71.33	3	3
2005	3	3	281	93.67	93.67	3	3
2006	9	7	545	60.56	77.86	7	7
2007	8	4	688	86.00	172.00	4	4
2008	5	4	365	73.00	91.25	4	4
2009	13	12	1029	79.15	85.75	11	12
2010	18	14	693	38.50	49.50	11	14
2011	21	20	1254	59.71	62.70	12	20
2012	17	16	900	52.94	56.25	12	16
2013	24	23	929	38.71	40.39	13	23
2014	32	28	842	26.31	30.07	17	28
2015	32	20	573	17.91	28.65	12	20
2016	46	36	1496	32.52	41.56	18	36
2017	37	28	792	21.41	28.29	12	28
2018	43	38	733	17.05	19.29	12	26
2019	53	42	746	14.08	17.76	15	26
2020	72	62	958	13.31	15.45	15	29
2021	98	72	791	8.07	10.99	14	25
2022	113	55	193	1.71	3.51	7	9
Total	666	504	18006	27.04	35.73	218	350

Notes: TP=total number of publications; NCP=number of cited publications; TC=total citations; C/P=average citations per publication; C/CP=average citations per cited publication; h=h-index; and g=g-index.

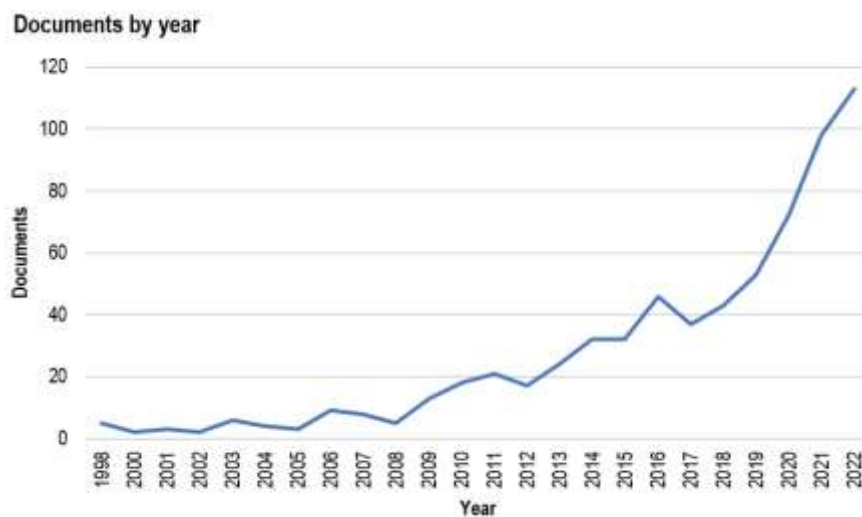


Fig. 2: Document by year

4.3 Languages of Documents

As presented in Table 4, English is the common language used in the gathered publications, representing 97.45% of the total documents. Interestingly, there were other languages used for some of the publications i.e., Portuguese, German, French, Chinese, Korean, and Spanish. However, Chinese, Korean, and Spanish were the lowest languages used for publications, with 0.15%.

Table 4. Languages of Documents

Language	Total Publications (TP)*	Percentage (%)
English	649	97.45
Portuguese	8	1.20
German	4	0.60
French	2	0.30
Chinese	1	0.15
Korean	1	0.15

Spanish	1	0.15
Total	666	100.00

4.4 Subject Area

This study next categorised the publications based on the subject area, as summarized in Table 5. Since 'impulse buying' is more focused on studies related to psychology, it can be found in business, management and accounting, and computer science fields, representing 35% and 15% of the total publications, respectively. The primary focus of impulse buying in business, management, and accounting is primarily on the behaviour of users or customers. Other significant contributing subject areas include social sciences, economics, econometrics and finance, engineering, decision sciences, and environmental sciences.

Table 5. Subject Area

Subject Area	Total Publications (TP)	Percentage (%)
Business, Management and Accounting	384	34.53
Computer Science	169	15.20
Social Sciences	128	11.51
Economics, Econometrics and Finance	101	9.08
Psychology	82	7.37
Engineering	77	6.92
Decision Sciences	53	4.77
Environmental Science	30	2.70
Arts and Humanities	23	2.07
Agricultural and Biological Sciences	22	1.98
Mathematics	22	1.98
Medicine	21	1.89

4.5 Most Active Source Titles

This study also presents the most active source title that has six or more publications on "impulse buying" (see Table 6). Scopus features two such citation indicators to measure a journal's impact: SNIP (Scopus Normalised Impact per Paper) and SJR (SCImago Journal Rank) (Huggett, 2013). Based on the information in this area, the most active source title, publisher, cite score, SJR 2021, and SNIP 2021 are reported in Table 6. It shows that Emerald Publishing and Elsevier are among the top publishers contributing to the publications on impulse buying, with 48 and 43 publications, respectively.

Table 6. Most Active Source Titles

Source Title	TP	TC	Publisher	Cite Score	SJR 2021	SNIP 2021
Journal of Retailing and Consumer Services	21	1016	Elsevier	11.4	2.261	2.893
Developments in Marketing Science	19	10	Springer Nature	0.1	N/A	N/A
Frontiers in Psychology	16	52	Frontiers Media S.A.	4.0	0.873	1.605
ACM International Conference Proceeding Series	12	46	Association for Computing Machinery	N/A	N/A	N/A
International Journal of Retail and Distribution Management	10	320	Emerald Publishing	6.1	0.964	1.525
Journal of Business Research	10	901	Elsevier	11.2	2.316	3.089
Sustainability Switzerland	9	111	Multidisciplinary Digital Publishing Institute (MDPI)	5.0	0.664	1.310
Asia Pacific Journal of Marketing and Logistics	8	272	Emerald Publishing	6.1	0.799	1.352
European Journal of Marketing	8	291	Emerald Publishing	6.6	1.483	1.723
Journal of Consumer Marketing	8	665	Emerald Publishing	3.4	0.654	1.011
Indian Journal of Marketing	7	24	Associated Management Consultants Private Limited	2.1	0.321	0.729
Internet Research	7	252	Emerald Publishing	10.1	1.618	2.186
Journal of Fashion Marketing and Management	7	536	Emerald Publishing	5.7	0.971	1.341
Computers in Human Behavior	6	430	Elsevier	14.9	2.174	3.234
International Journal of Consumer Studies	6	377	Wiley-Blackwell	7.0	0.986	1.902
International Journal of Information Management	6	715	Elsevier	28.8	4.584	5.416
Journal of Global Fashion Marketing	6	78	Taylor and Francis	4.5	1.05	1.290
Social Behavior and Personality	6	95	Society for Personality Research	1.8	0.384	0.652

Notes: TP=total number of publications; TC=total citations

4.6 Keywords Analysis

For the keyword analysis, this study first generated the word cloud for the author's keywords using WordSift. With a maximum of 100 words, and a scale setting, the result of the word cloud is presented in Fig. 3. The figure shows the top 100 words (or parts of keywords) used from the published article on impulse buying. The size of each word represents the total number of occurrences for the keywords. Despite the small size of other keywords, the words have been used to accommodate the topic of impulse buying research. It is important to highlight that all the words generated in Fig. 3 are the trending words used along with the impulse buying research. Hence, based on these keywords, researchers can predict future research on evaluating impulse buying.

Table 7. Top Keywords

Author Keywords	Total Publications (TP)	Percentage (%)
Impulse Buying	329	34.09
Consumer Behavior	81	8.39
Sales	66	6.84
Electronic Commerce	63	6.53
Impulse Buying Behavior	35	3.63
Consumption Behavior	33	3.42
Marketing	33	3.42
Retailing	30	3.11
Commerce	29	3.01
Impulse Buying Tendency	28	2.90
Buying Behavior	27	2.80
Consumer Behaviour	27	2.80
Online Impulse Buying	26	2.69
Surveys	26	2.69
Human	24	2.49
Online Shopping	24	2.49
Impulse Purchase	23	2.38
Social Networking (online)	23	2.38
Buying Behaviour	19	1.97
Impulsive Buying	19	1.97

4.7 Most Active Countries for Publications

This study also evaluates the number of publications by country based on the affiliation institution of the author. Overall, a total of 69 identified countries were involved in the publications on “impulse buying”. Table 8 shows the top active countries that contribute the minimum number of publications on impulse buying. The United States contributes the highest number of publications (121) representing 17.95% of the total publications on impulse buying, followed by China (16.02%), India (14.84%), Taiwan (8.31%), Indonesia (6.82%), South Korea (5.19%), the United Kingdom (5.04%), and Malaysia (4.15%). This result reveals that most developing countries have taken leading positions in impulse buying research compared to developed countries.

Table 8. Most active countries of publications

Country	No. of Publication	Percentage (%)
United States	121	17.95
China	108	16.02
India	100	14.84
Taiwan	56	8.31
Indonesia	46	6.82
South Korea	35	5.19
United Kingdom	34	5.04
Malaysia	28	4.15
Hong Kong	15	2.23
Portugal	15	2.23
Australia	14	2.08
Spain	14	2.08
Turkey	14	2.08
France	13	1.93
Iran	13	1.93
Singapore	13	1.93
Viet Nam	13	1.93
Brazil	11	1.63
Italy	11	1.63

4.8 Citation Metrics

Table 9. Citations Metrics

Metrics	Data
Publication years	1998-2022
Citation years	25 (1998-2022)
Papers	666
Citations	18006
Citations/year	720.24
Citations/paper	27.04
Authors/paper	2.82
h-index	70
g-index	121
Publication years	1998-2022

The software of Harzing’s Publish or Perish was utilised to find the citation metric for the retrieved data from the Scopus database. Table 9 summarises the citation metrics for the retrieved documents as of February 2023. Table 9 shows the total number of citations and the

average citation per year for all retrieved documents. As indicated, there were 18006 citations reported in 25 years (1998-2022) for 666 retrieved articles, with an average of 720.24 citations per year.

5.0 Discussion

Utilising bibliometric analysis, this study documented the emergence of literature on impulse buying over the past 25 years. In addition, the study uncovered key themes that define the meaning and scope of impulse buying behaviours. Based on the Scopus-indexed documents published between 1998 and 2022, our findings indicate a relatively modest pattern of growth from 1998 to 2012, followed by an explosion of research publications in later years. In fact, 83 percent of the records in our database were published after 2013. This finding supports the conclusion that this topic is a dynamic, rapidly changing knowledge base that can produce potentially significant findings over a relatively short period.

The results highlighted that English is the primary language that is used in writing 97.45% of the research papers and more than half of them (76.28%) are published in academic journals. The results also indicate that impulse buying publications spread significantly in many disciplines, such as business, management and accounting, computer science, social sciences, economics, econometrics and finance, and psychology. This shows that impulse buying is an important subject that needs further investigation and, more importantly, collaboration with the subject in many other different contexts. Determining the impact of different factors influencing impulse buying can influence profitability due to its complex and compelling purchase behaviour that speeds up the impulse buying decision.

6.0 Conclusion and Recommendations

In conclusion, this study demonstrates bibliometric analysis as a scientific method to reflect on the expansive fields of business research to provide new insights to evaluate the academic trend of impulse buying research. The results of the bibliometric analysis reveal a comprehensive picture of trending topics for discussing future trends of impulse buying through a data repository. Moreover, the growth trajectory of this literature suggests that it will more than double its size over the next decade.

The limitation of the study is that the data sources used are restricted to Scopus. Future studies can supplement other pertinent data sources such as the Web of Sciences, ScienceDirect, Google Scholar, and others to get a holistic view of this topic. Future studies can provide a more detailed and comprehensive analysis of the trend of impulse buying and formulate several specific contexts to facilitate the development of studies on impulse buying. Additionally, meta-analytical review approaches are also suitable to help future research achieve a better understanding and clearer vision of the results of the present study.

Acknowledgments

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Paper Contribution to Related Field of Study

This present study makes a significant contribution to the expanding literature and the advancement of business research management, particularly regarding the impulse buying trend through the Scopus database-indexed journals from 1998 to 2022.

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